

DREAM BIGGER. CLIMB HIGHER.



**Mountwest**  
Community & Technical College

**2014 - 2015  
CATALOG**

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## **Student's Responsibility**

It is the responsibility of the student to be aware of the information in this Catalog. The student also is responsible for keeping informed as additions, deletions and corrections are announced via various school media.

## **Disclaimer**

The provisions of this Catalog do not constitute a contract, expressed or implied, between any applicant or student and Mountwest Community & Technical College. The College reserves the right to change any of the provisions, schedules, programs, courses, rules, regulations or fees whenever the College authorities deem it expedient to do so.

Mountwest Community & Technical College is accredited by  
The Higher Learning Commission, North Central Association of Colleges and Schools  
30 North LaSalle Street, Suite 2400  
Chicago, IL 60602  
Toll-free: 1 (800) 621-7440

For additional information or information not covered in this catalog, please contact 1-866-N-ROLLED or (304) 696-6282.

## **EQUAL OPPORTUNITY/AFFIRMATIVE ACTION:**

It is the policy of Mountwest Community & Technical College to provide equal opportunities to all prospective and current members of the student body, faculty and staff on the basis of individual qualifications and merit without regard to race, color, sex, religion, age, handicap, national origin or sexual orientation.

This nondiscrimination policy also applies to all programs and activities covered under Title IX, which prohibits sex discrimination in higher education.

Mountwest strives to provide educational opportunities for minorities and women that reflect the interest, individual merit and availability of such individuals. The college ensures equality of opportunity and treatment in all areas related to student admissions, instruction, employment, placement accommodations, financial assistance programs and other services.

Mountwest also neither affiliates with nor grants recognition to any individual, group or organization having policies that discriminate on the basis of race, sex, religion, age, sexual orientation, disability, protected veteran status, or national origin. Further, the college is committed to the ideals of inclusion of students, faculty and staff and, whenever appropriate, will take affirmative steps to enhance diversity. Information on the implementation of the policy and/or the Title IX Amendment should be addressed to: Director of Human Resources, Employee Development and Payroll, Mountwest Community & Technical College, One Mountwest Way, Huntington, WV 25701 or call (304) 710-3501.

# ACADEMIC CALENDAR 2014-2015

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## Fall 2014

August 14, Thursday  
Last Day to Register for Fall Semester

August 18, Monday - August 21, Thursday  
Schedule Adjustment Only

August 25, Monday, 8 a.m.  
First Day of Classes

August 25, Monday - August 27, Wednesday  
Schedule Adjustment

August 28, Thursday  
“W” Withdrawal Period Begins

September 1, Monday  
Labor Day Holiday, College Closed

September 25, Thursday  
Last Day to Drop 1st 8 Weeks Courses

October 9, Thursday  
Application Deadline for December Graduation

October 14, Tuesday  
Mid-Semester, 1st 8 Weeks Courses End

October 15, Wednesday  
2nd 8 Weeks Courses Begin

October 20, Monday, Noon  
Deadline for Submitting Mid Term Grades

October 30, Thursday  
Last Day to Drop a Full Semester Individual Course

November 3, Monday - December 4, Thursday  
Complete Withdrawals Only

November 10, Monday - November 20, Thursday Advance  
Registration for Spring Semester for Currently Enrolled Students

November 13, Thursday  
Last Day to Drop 2nd 8 Weeks Courses

November 24, Monday - November 28,  
Thanksgiving/Fall Break, Classes Dismissed

November 27, Thursday – November 28  
Thanksgiving Holiday, College Closed

December 1, Monday  
Classes Resume

December 4, Thursday  
Last Day to Completely Withdraw for Fall Semester

December 8, Monday  
Exam Day

December 9, Tuesday  
Exam Day

December 10, Wednesday  
Exam Day

December 11, Thursday  
Exam Day

December 15, Monday Noon  
Final Grades due

December 23, Tuesday – January 1, 2015  
Winter Break, College Closed

# ACADEMIC CALENDAR 2014-2015

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## Spring 2015

January 5, 2015, Monday  
College Offices Open

January 5, Monday -- January 8, Thursday  
Registration/Schedule Adjustment

January 12, Monday  
Classes begin

January 12, Monday – January 14, Wednesday  
Schedule adjustment only

January 15, Thursday  
“W” period begins

January 19, Monday  
Martin Luther King, Jr. Holiday, College Closed

February 12, Thursday  
Last day to drop 1st eight week’s course

March 3, Tuesday  
Mid-Semester, 1st 8 Weeks Courses End

March 4, Thursday  
2nd 8 Weeks Courses Begin

March 9, Monday, Noon  
Deadline for Submitting Mid-Term Grades

March 12, Thursday  
Application Deadline for May Graduation

March 16, Monday - March 22,  
Spring Break, Classes Dismissed

March 23, Monday  
Classes Resume

March 26, Thursday  
Last Day to Drop a Full Semester Individual Course

March 30, Monday - April 30, Thursday  
Complete Withdrawals Only

March 30, Monday - April 2, Thursday  
Advance Registration for Currently  
Enrolled Students

April 6, Monday  
Advance Registration for Summer Semester;  
Admitted/Re-admitted Students

April 9, Thursday  
Last Day to Drop 2nd 8 Weeks Courses

April 13, Monday - April 23, Thursday  
Advance Registration for Fall Semester for Currently  
Enrolled Students

April 27, Monday  
Advanced Registration for Fall Semester begins;  
Admitted/Re-admitted Students

April 30, Thursday  
Last day of class

May 4, Monday  
Exam Day

May 5, Tuesday  
Exam Day

May 6, Wednesday  
Exam Day

May 7, Thursday  
Exam Day

May 8, Friday  
Official Graduation Date

May 11, Monday, Noon  
Deadline for Submitting Final Grades

# MISSION AND GOALS

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## MISSION

The mission of Mountwest Community & Technical College is to prepare students for careers, civic responsibility and life- long learning.

## VISION

Mountwest Community & Technical College will be a regional leader in learning-centered and future-focused education.

## VALUES

Higher education contributes to the welfare of individuals and improvement of society.

- All persons deserve the opportunity for the kind and level of education that will contribute positively to their lives and careers.
- Mountwest provides programs to meet the varied educational and workforce development needs of its students, and the community it serves.
- Quality is a goal for every effort of the college, and continuous improvement is expected and supported.
- Individuals who complete programs of the college have the right to expect to have the skills to enter a career, to enter the next level of education for which they have prepared, or to have enhanced the skills required for their work.
- Persons admitted to a higher education institution have the right to expect assistance in developing the skills required for success.
- All individuals have worth and are deserving of being treated with consideration, decency, and respect.

## GOALS

- Enhance student success through a learning-centered organization.
- Establish, maintain, and expand partnerships with education, business, industry, and agencies.
- Develop a skilled workforce to support the economic development of the community, region, and state.
- Measure outcomes and embrace a culture of continuous improvement to increase the value of the educational experience.

# PHILOSOPHY AND HISTORY

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## PHILOSOPHY

Mountwest Community & Technical College faculty are committed to providing students the skills and flexibility necessary to live successfully in a changing world and to prosper in a global society.

The general education philosophy at Mountwest Community & Technical College is to provide students with intellectual and critical skills for lifelong learning needed to meet the challenges of a diversified world. Students will be prepared to: communicate effectively using written skills; communicate effectively using oral skills; apply mathematics and basic scientific concepts for problem-solving activities; utilize technology competently; use critical-thinking skills; develop an awareness of ethical behavior; recognize the richness of diversity.

## HISTORY

Mountwest Community & Technical College was founded in 1975 as Marshall Community College, a separate college within Marshall University to better serve students by bringing together many of the University's two-year associate degree programs under one college.

Classes began in the fall of 1975 with a wide range of programs. From the outset, the college's mission has been to provide two-year associate degrees as well as provide continuing education and community service.

In 1991, the college name was changed to Marshall Community & Technical College to better reflect the technical nature of many of the programs offered.

On October 30, 2003, Marshall Community & Technical College became accredited as an independent institution by The Higher Learning Commission, North Central Association of Colleges and Schools.

On March 13, 2010 West Virginia Senate Bill 499 passed, allowing Marshall Community & Technical College to be renamed Mountwest Community & Technical College.

# GOVERNING BODIES/ADVISORY COMMITTEES

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## WEST VIRGINIA COUNCIL FOR COMMUNITY AND TECHNICAL COLLEGE EDUCATION

### Membership List

Clarence Pennington, Chairman  
Bob Brown, Vice Chairman  
William Baker, Secretary  
Dr. Kathy J. D'Antoni  
Bruce Berry  
Keith Burdette  
Christina Cameron  
John Panza  
Steve Roberts  
John Sorrenti  
John Walker

## MOUNTWEST COMMUNITY & TECHNICAL COLLEGE BOARD OF GOVERNORS

Jason Moses, Chairman  
Mark George, Vice Chairman  
Bob Bailey, Secretary  
Cathy Burns  
Jordan Chapman (student representative)  
Ruth Cline  
Thomas Gibson  
Jim Hale  
Mike Herron  
Susan Richardson  
Christopher Stevens (classified employee representative)  
Linda Vinson (faculty representative)

## MOUNTWEST COMMUNITY & TECHNICAL COLLEGE ADVISORY COMMITTEES

Mountwest Community & Technical College seeks the advice and counsel of residents of the community, employers, and educational representatives through the establishment of advisor committees.

Advisory committee members serve as advocates of necessary change to maintain current, quality career programs and supporting services for students in order to facilitate and enhance graduate employability in the surrounding community.

## MOUNTWEST COMMUNITY & TECHNICAL COLLEGE - ADVISORY COMMITTEES FOR THE 2014-2015 ACADEMIC YEAR

Administrative Technology  
American Sign Language  
Banking and Finance  
Biomedical Instrumentation Technology  
Board of Governors' Degree  
Criminal Justice  
Dental Assistant  
Dental Lab Technology  
Early Childhood Education  
Electronics Technology  
Engineering Design Technology  
General/Transfer Studies  
Health Information Technology  
Hospitality Management/Culinary Arts  
Information Technology  
Interior Design  
Legal Assisting  
Machinist Technology  
Management Technology  
Maritime Training  
Massage Therapy  
Medical Assistant  
Occupational Development  
Paramedic Science  
Pharmacy Technician  
Physical Therapist Assistant  
Police Science and Law Enforcement  
Public Library Technology  
Public Safety  
Radiologic Technology  
Respiratory Therapy Technology  
Technical Studies  
Transportation



# ACCREDITATION

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Mountwest Community & Technical College is accredited as an independent community college by The Higher Learning Commission of the North Central Association of Colleges and Schools. Copies of Mountwest Community & Technical College's regional and specialized accreditation reports, certifications, and licenses are available for review in the President's office.

## **North Central Association of Colleges and Schools The Higher Learning Commission**

30 N. LaSalle St., Suite 2400  
Chicago, IL 60602-2504  
P: (800) 621-7440 or (312) 263-0456  
[www.ncahigherlearningcommission.org](http://www.ncahigherlearningcommission.org)

The following programs have additional specialized accreditation as indicated:

## **Administrative Technology, Banking and Finance, Management Technology**

Accreditation Council Business Schools and Programs  
7007 College Blvd., Suite 20  
Overland Park, KS 66211  
P: (913) 339-9356  
[www.acbsp.org](http://www.acbsp.org)

## **Health Information Technology**

Commission on Accreditation for Health Informatics and  
Information Management Education  
233 N. Michigan Ave., Suite 2150  
Chicago, IL 60601-5800  
P: (312) 233-1129  
[www.cahiim.org](http://www.cahiim.org)

## **Medical Assistant**

Commission on Accreditation of Allied Health  
Education Programs  
1361 Park St. Clearwater, FL 33756  
P: (727) 210-2350  
[www.caahep.org](http://www.caahep.org)

## **Physical Therapist Assistant**

Commission on Accreditation in Physical Therapy Education  
1111 N. Fairfax St. Alexandria, VA 22314-1488  
P: (703) 706-3245 | [accreditation@apta.org](mailto:accreditation@apta.org)  
[www.capteonline.org](http://www.capteonline.org)

The following articulated programs are accredited through the hosting institutions:

## **Machinist Technology**

The National Institute for Metalworking Skills – NIMS  
10565 Fairfax Blvd., Suite 203  
Fairfax, VA 22030  
P: (703) 352-4971  
[www.nims-skills.org](http://www.nims-skills.org)

## **Massage Therapy**

Commission on Massage Therapy  
1007 Church St., Suite 302  
Evanston, IL 60201  
P: (847) 869-5039  
[www.comta.org](http://www.comta.org)

## **Paralegal**

Approved by the American Bar Association  
321 N. Clark St. Chicago, IL 60610  
P: (312) 988-5000  
[www.abanet.org](http://www.abanet.org)

## **Radiologic Technology**

Joint Review Committee on Education and  
Radiologic Technology  
20 N. Wacker Dr. Suite 2850  
Chicago, IL 60606-3182  
P: (312) 704-5300  
[www.jrcert.org](http://www.jrcert.org)

## **Respiratory Therapy**

Committee on Accreditation for Respiratory Care  
1248 Harwood Rd. Bedford, TX 76021-4244  
P: (817) 354-8519  
[www.coarc.com](http://www.coarc.com)

# GENERAL POLICIES

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## COPYRIGHT COMPLIANCE

Mountwest Community & Technical College complies with U.S. copyright law, which prohibits unauthorized duplication and use of copyrighted materials, including written, audio-visual, and computer software materials.

## EQUAL OPPORTUNITY / AFFIRMATIVE ACTION POLICY STATEMENT

It is the policy of Mountwest Community & Technical College to provide equal opportunities to all prospective and current members of the student body, faculty, and staff on the basis of individual qualifications and merit without regard to race, color, sex, religion, age, handicap, national origin, or sexual orientation

This nondiscrimination policy also applies to all programs and activities covered under Title IX, which prohibits sex discrimination in higher education.

Mountwest Community & Technical College strives to provide educational opportunities for minorities and women that reflect the interest, individual merit, and availability of such individuals. The college ensures equality of opportunity and treatment in all areas related to student admissions, instruction, employment, placement accommodations, financial assistance programs, and other services.

Mountwest Community & Technical College also neither affiliates with nor grants recognition to any individual, group, or organization having policies that discriminate on the basis of race, sex, religion, age, sexual orientation, disability, protected veteran status, or national origin. Further, the college is committed to the ideals of inclusion of students, faculty and staff and, whenever appropriate, will take affirmative steps to enhance diversity. Information on the implementation of the policy and/or the Title IX Amendment should be addressed to: Director of Human Resources, Employee Development and Payroll, Suite G12, Mountwest Community & Technical College, Huntington, West Virginia, 25701.

## LIABILITY POLICY

Mountwest Community & Technical College, as a state agency, cannot assume responsibility for loss of or damage to the personal property of students. Furthermore, the college cannot assume responsibility for personal injury to students.

## FAMILY EDUCATION RIGHTS AND PRIVACY ACT (FERPA)

The Family Educational Rights and Privacy Act (FERPA) (20 U.S.C. 1232g; 34 CFR Part 99) is a Federal law that protects the privacy of student education records. The law applies to all schools that receive funds under an applicable program of the U.S. Department of Education.

FERPA gives parents certain rights with respect to their children's education records. These rights transfer to the student when he or she reaches the age of 18 or attends a school beyond the high school level. Students to whom the rights have transferred are "eligible students."

- Parents or eligible students have the right to inspect and review the student's education records maintained by the school. Schools are not required to provide copies of records unless, for reasons such as great distance, it is impossible for parents or eligible students to review the records. Schools may charge a fee for copies.
- Parents or eligible students have the right to request that a school correct records which they believe to be inaccurate or misleading. If the school decides not to amend the record, the parent or eligible student then has the right to a formal hearing. After the hearing, if the school still decides not to amend the record, the parent or eligible student has the right to place a statement with the record setting forth his or her view about the contested information.
- Generally, schools must have written permission from the parent or eligible student in order to release any information from a student's education record. However, FERPA, allows schools to disclose those records, without consent, to the following parties under the following conditions (34 CFR 99.31):
- School officials with legitimate educational interest; Other schools to which a student is transferring;
- Specified officials for audit or evaluation purposes;
- Appropriate parties in connection with financial aid to a Student;
- Organizations conducting certain studies for or on behalf of the school;
- Accrediting organizations;
- To comply with a judicial order or lawfully issued subpoena;
- Appropriate officials in cases of health and safety
- Emergencies; and
- State and local authorities, within a juvenile justice system, pursuant to specific State law.

Schools may disclose, without consent, "directory" information such as a student's name, address, telephone number, date and place of birth, honors and awards, and

# GENERAL POLICIES

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dates of attendance. However, schools must tell parents and eligible students about directory information and allow parents and eligible students a reasonable amount of time to request that the school not disclose directory information about them. Schools must notify parents and eligible students annually of their rights under FERPA. The actual means of notification (special letter, inclusion in a PTA bulletin, student handbook, or newspaper article) is left to the discretion of each school.

For additional information or technical assistance, you may call (202) 260-3887 (voice). Individuals who use TDD may call the Federal Information Relay Service at (800) 877-8339. Or you may contact us at the following address:

Family Policy Compliance Office  
U.S. Department of Education  
400 Maryland Avenue, SW  
Washington, DC 20202-5920

## SEXUAL HARASSMENT POLICY

Sexual harassment, a form of sex discrimination, is illegal and against the policies of the college. Sexual harassment involves:

- Making unwelcome sexual advances or requests for sexual favors or other verbal or physical conduct of a sexual nature a condition of employment or education, or
- Making submission to or rejection of such conduct the basis for employment or educational decisions, or
- Creating an intimidating, offensive or hostile environment by such conduct.

Anyone who believes he or she has been the subject of sexual harassment should report the alleged conduct immediately to the Director of Human Resources, Employee Development and Payroll, Suite G12, One Mountwest Way, Huntington, WV 25701.

## WEATHER-RELATED AND/OR EMERGENCY CLOSINGS AND DELAYS

### Huntington Campus

Generally it is Mountwest Community & Technical College's procedure to maintain its normal schedule, even when conditions are inclement. However, this is not always possible. In those instances when it is necessary to alter the schedule in response to weather conditions, every effort will be made to notify all those affected, students, faculty, staff and the general public – as expeditiously and as comprehensively as possible in the following ways:

- Television stations in Huntington and Charleston will be notified.
- Radio stations in Huntington and Charleston will be asked to announce the delay or closing.
- Time permitting, newspapers in Huntington and Charleston will be notified. Often, however, decisions must be made after the deadlines of newspapers.
- Mountwest will communicate the specific details of the College closing through the Huntington campus voice mail system (304) 710-3052 as well

### Definitions

**College Closed:** All classes suspended and offices closed.

**Classes Canceled:** All classes suspended; offices open.

**Delay Code A:** Means delay in the opening of classes but no delay in the opening of offices. Delays will usually be in the range of one to two hours.

**Delay Code B:** Means a delay in the opening of classes and a delay in the opening of offices. Delays will usually be in the range of one to two hours.

Class operation under delays: Under both categories of delay, students should go to the class that would begin at the stated delay time or the class that would have convened within 30 minutes of the stated delay time. A two-hour delay means that classes that begin at 10:00 a.m. begin on time. Classes that begin at 9:30 a.m. meet at 10:00 a.m. and continue for the remaining period of that class. 8:00 and 9:00 classes are cancelled for that day.

### Clarification

Information about closing, cancellations, or delays will ordinarily be disseminated to area radio and television stations. These outlets may, however, publish the College's notification incorrectly. Therefore, the authoritative correct statement of the College's condition is stipulated to be the message on the College voice mail system (304) 710-3052 or the message available at the College response number (304) 710-3140.

Students taking classes at off campus sites, such as Career Centers, must contact the Career Center. Mountwest will adhere to their inclement weather schedule.

# STUDENT RIGHTS & RESPONSIBILITIES

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Mountwest supports freedom of speech, freedom of inquiry, freedom to dissent, freedom to assemble, and freedom to demonstrate in peaceful fashion. The College also supports the right of students to pursue their legitimate educational goals without interference. Accordingly, the College encourages and expects its community to conduct itself in accordance with the general society's standards of polite behavior, the College's specific rules and regulations, and all applicable laws of the local, state and federal government.

## I: ADMISSIONS AND ACCESS

The admissions policy of Mountwest is consistent with the purpose and role of an open-door higher education institution. Admission standards are based on the capacity of students to contribute to or profit from the particular educational programs they desire. The College makes clear to students the characteristics and expectations which it considers relevant to success in a chosen program. Admission to the College is not granted or denied on the basis of ethnic origin, race, religion, sex, sexual orientation, age, nationality, political belief or affiliation. Thus, within the limits of its facilities, Mountwest is open to all students who are qualified according to its admission standards.

## II: THE CLASSROOM ENVIRONMENT

Free and open discussion, speculation, and investigation are basic to the academic process. Student performance is evaluated solely on an academic basis, not on opinions or conduct in matters unrelated to academic matters.

Students are free to take reasonable exception to views presented in any course of study and to reserve judgment on matters of opinion, but they are responsible for learning the content of any course of study in which they are enrolled.

Students do have orderly procedures to follow in order to be protected against prejudiced or capricious academic evaluation. They, at the same time, are responsible for maintaining standards of academic performance established for each course in which they are enrolled.

An instructor may exclude from his/her course, any student who, in the instructor's judgment, has seriously impaired the ability of the class to achieve the objectives of the course, or who is guilty of offensive conduct toward the instructor or other members of the class. The student may appeal the instructor's action to the division dean who will, when necessary, detail the full grievance procedure to the student. (Copies of this procedure are available from division deans and other administrative offices.)

## III: STUDENT RECORDS

Students have a right to expect that institutional records will be safeguarded; that no information will be made available to unauthorized persons; that no information will be misused by College authorities; and information not pertinent to the students' role in the College not be recorded. Students will be given the opportunity to review the contents of their respective files upon written request and have the right to reply to any derogatory material. These responses become part of their files. Procedures for the retention of student files have been established that will safeguard the confidence in which they should be held.

## IV: STUDENT ORGANIZATIONS

It is recognized that students bring to the campus a variety of interests previously acquired and develop many new interests as members of the academic community. They are free to organize and join associations to promote their common interests.

Affiliation with an extramural organization does not of itself disqualify a student organization from institutional recognition.

Campus advisors are required for student organizations. Full details on campus procedures for clubs or organizations are available from the Office of Student Government.

It must be remembered that the College will disallow any association that threatens its openness, receptivity to free inquiry, and the overall learning process.

## V: FREEDOM OF INQUIRY AND EXPRESSION

Students and student organizations are free to examine and discuss all questions of interest to them, and to express opinions publicly and privately. They are free to support causes by orderly means which do not disrupt the regular and essential operation of the institution. At the same time, it will be made clear to the academic and the larger community that in their public expressions or demonstrations students or student organizations speak only for themselves.

Students are allowed to invite and to hear any person of their own choosing. Routine procedures required by the College before a guest speaker is invited to appear on campus are designed only to ensure that there is orderly scheduling of facilities and adequate preparation for the event, and that the occasion is conducted in a manner

# STUDENT RIGHTS & RESPONSIBILITIES

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appropriate to an academic community. Institutional control of campus facilities will not be used as a device of censorship.

It should be made clear to the academic and larger community that student sponsorship of guest speakers does not necessarily imply approval or endorsement of the views expressed, either by the sponsoring group or the College.

No student or authorized visitor is subject to any limitation or penalty solely for the expression of his /her views or for having assembled with others for such purpose. Peaceful picketing and other orderly demonstrations in public areas will not be interfered with. Public areas include sidewalks and parking lots but not areas such as lobbies, corridors, and rooms in buildings.

In order to afford maximum protection to the participants and to the institutional community, students or student groups will give the College administration reasonable advance notice of any planned assembly, picketing, or demonstration upon the grounds of the institution, its proposed locale, and intended purpose.

The peddling of newspapers or handbills which convey a point of view in the public areas of the College campus is protected by the First Amendment. Harassment or intimidation of members of the campus community by persons distributing literature supporting points of view or causes may require the removal of those persons from College property. It is recommended that any student group planning to distribute literature notify the College administration of its plans so that the administration is aware of the group activities. (If an off-campus group wishes to come on campus and distribute literature supporting a point of view or cause, it shall seek permission to do so from the College administration.)

## VI: INSTITUTIONAL AUTHORITY AND CIVIL PENALTIES

When activities of students result in violation of law or when students feel that their civil rights have been violated, institutional officials will be prepared to inform students of sources of legal counsel and may offer other assistance. Institutional authority will never be used merely to duplicate the function of general laws. Only where the institution's interests as an academic community are distinct and clearly involved will the special authority of the institution be asserted. The student who incidentally violates institutional regulations in the course of his/her off-campus activity, such as those relating to class attendance, will be subject

to no greater penalty than would normally be imposed. Institutional action will be independent of community pressure.

The College will take no action affecting a student's status while his/her case is before the courts, and awaiting final determination. Unless, such action is necessary to protect the safety of the College community. If the student is convicted, the College will attempt to support the intent of the courts. If the court places a student on probation, the College will cooperate with the court to determine the most desirable course of action for the student, the College, and society. Normally when an individual is returned to society, the intent of the court is to allow him/her to return to the position held before commission of the offense for which he/she was convicted. Thus, the College will normally allow such a student to remain in the institution or return to it unless there is evidence that his/her presence imposes a clear danger to other students, faculty, staff or guests of the College or to the orderly operation of the College.

## VII: STUDENT PROPERTY

Students and their property are not subject to search and seizure by College authorities except by officials designated by the College President, only when the immediate safety of the College community is threatened, and in accordance with state and federal laws.

# STUDENT CODE OF CONDUCT

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## STUDENT BEHAVIOR

The following prohibitions pertaining to student conduct are considered essential to the educational mission and community life of the College. In general, College jurisdiction and disciplinary sanctions will be applied to incidents and conduct, which occur on the College campus or at College-sponsored events or activities. However, jurisdiction and disciplinary sanctions may also be applied at the discretion of the College to conduct that occurs off campus and which adversely affects the College, the College community or the interests and mission of the College. Visitors on campus are also expected to abide by the prohibitions pertaining to student conduct and by all local, state and federal laws and ordinances. Visitors failing to do so may be asked to leave campus and may be declared Persona Non Grata.

- Behavior which disrupts the learning environment
- Use, possession, and/or distribution of weapons, firearms, Firecrackers, explosives and/or chemicals.
- Use or possession of illegal or controlled drugs and/or Alcohol, Gambling.
- Abusive and/or disorderly behavior. Deliberate destruction and/or abuse and misuse of College Property or facilities.
- Theft from an individual, organization or agency, and/or Division of the College.
- Assault and battery, threats of violence, and/or intimidation. Written, verbal, sexual and/or physical intimidation or harassment.
- Violations of the College's Acceptable Use policy for computer access and use.
- Failure to comply with reasonable requests of a College representative.
- Any conduct which violates the laws of the United States. The State of West Virginia, and/or Cabell County.

The above list of prohibitions is not a full listing of unacceptable behavior in a College community. Other unacceptable behavior may also result in disciplinary action from the Dean of Student Services or his/her designee.

Academic dishonesty (such as cheating and plagiarism) or classroom behavior considered detrimental to the teaching-learning process will be addressed by the College's academic offices. A full statement on student academic dishonesty appears in the current College Catalog.

## VIOLATION PENALTIES

The penalties for violation of student behavior and College conduct requirements are restitution, disciplinary warning, disciplinary probation, suspension and expulsion. These penalties do not preclude any legal action that may be taken

as a result of violations of federal, state, county and/or city laws.

- **Restitution** - In cases of damage, destruction, defacement, or theft of property, restitution is generally required.
- **Disciplinary Warning** - An official notice to the student that his or her behavior is in violation of the Student Code of Conduct or other College regulation. Further violations will result in more severe disciplinary action. A student under disciplinary warning must meet those conduct requirements that may be determined in his/her case.
- **Disciplinary Probation** - A disciplinary sanction informing the individual that his/her behavior is in serious violation of the Student Code of Conduct or other College regulation. During the probationary period, the student may be barred from participating in extracurricular activities, denied the use of certain College facilities, and/or assigned special duties. Any further violation during the probationary period may result in more severe action up to and including expulsion from the College.
- **Suspension** - A mandatory separation from the College for a specific period of time. Students who are suspended are barred from enrolling at or visiting Mountwest during the period of the suspension. Students who are suspended from the College and who continue to violate the Student Code of Conduct are subject to further disciplinary action (expulsion) during the period of the suspension at the discretion of the College.
- **Expulsion** - Termination of student status at Mountwest with no promise of future readmission. Students who are expelled are permanently barred from enrolling at or visiting Mountwest and from attending College-sponsored events. Violations of the Student Code of Conduct and other non-academic regulations are brought before the Vice President of Student Services (VPSS) for review. The VPSS will investigate the situation and make a decision regarding disciplinary action based on the outcome of the investigation. If the student wishes to appeal the VPSS's decision, see student grievance procedure.

In some instances, a student's behavior may be so egregious that immediate removal of the student from campus may be necessary to protect the campus environment. In the event that a student is immediately removed from campus, the VPSS will conduct an investigation as soon as possible after removal of the student from campus.

# STUDENT CODE OF CONDUCT

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## STUDENT ACADEMIC GRIEVANCE

The purpose of the grievance procedure is to provide students at the College access to due process for resolving any concerns relative to their student rights.

### Initial Resolution Process

1. The student must first present his/her grievance to the individual against whom the grievance exists.
2. If there is a program level grievance policy in place, the student must follow this procedure in seeking resolution. If presentation to Program Director is not applicable (e.g., a grievance filed against a non-program faculty member), then the grievance will be presented to the appropriate Chair.
3. If the grievance is not resolved at the program level and/or between the individuals involved, the student must notify all the concerned parties, in writing, that he or she is initiating the institutional grievance procedure (step two below). This action must be taken within 15 days of the original incident.

### Initiation of Institutional Academic Grievance Procedure

Step One – If the grievance is not resolved initially, the student shall present, in writing, the grievance to the appropriate Dean. If the grievance is directed against a Dean, the grievance shall be presented to that individual's supervisor. Notice of the institutional grievance must be given no later than 15 days of the original incident. Grievance notifications outside such time frames are subject to dismissal at the discretion of the Dean.

Step Two – Upon receipt of a formal grievance, the Dean shall hold a hearing, within 10 days of receiving written grievance and both the grievant and the individual against whom the grievance is directed will be given the opportunity to present and be heard. The Dean shall consider the merits of the grievance and either:

1. Dismiss the grievance at this point and provide the rationale for the decision in writing to all concerned parties within 10 days of the hearing, or
2. Refer the matter to the Vice President of Academic Affairs (VPAA) to convene a grievance committee.

Step Three – The VPAA will appoint a committee, within 10 days of receiving the Dean's referral, of neutral and objective individuals from the following representative groups: administrators, faculty members and students. The VPAA will designate a chair for the committee from among the appointees.

Step Four – Each committee member will receive a copy of the written grievance with the supporting statements and evidence. After receiving the written grievance, the committee chair will hold a hearing within 10 days of receipt and both the grievant and the individual against whom the grievance is directed will be given the opportunity to present and be heard. The grievant may have one advisor at the hearing; however, the advisor may not speak during the meeting. The Committee Chair shall be responsible for informing the VPAA and appropriate Dean (or appropriate supervisor) of the committee's recommendation and the rationale for the findings in writing within 10 days of the committee hearing.

Step Five – The VPAA shall then consider the committee recommendation and render a written ruling on the matter to the Dean (or appropriate supervisor). The Dean (or appropriate supervisor) shall inform both parties of the decision in writing by certified mail within 10 days of receipt of the committee recommendation. This notification concludes the grievance process.

**NOTE:** The grievant may withdraw his/her grievance at any phase of the process provided that all concerned parties are notified in writing. In all instances "days" refers to working days.

# ACADEMIC DEFINITIONS & PROCEDURES

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## ACADEMIC DISHONESTY POLICY

As described in the Mountwest Creed, Mountwest Community & Technical College, is an “Ethical Community reflecting honesty, integrity and fairness in both academic and extracurricular activities.”

Academic Dishonesty is something that will not be tolerated as these actions are fundamentally opposed to “assuring the integrity of the curriculum through the maintenance of rigorous standards and high expectations for student learning and performance” as described in the Mountwest’s Statement of Philosophy.

A student, by voluntarily accepting admission to the institution or enrolling in a class or course of study offered by Mountwest Community & Technical College accepts the academic requirements and criteria of the institution. It is the student’s responsibility to be aware of policies regulating academic conduct, including the definitions of academic dishonesty, the possible sanctions and the appeal process.

For the purposes of this policy, an academic exercise is defined as any assignment, whether graded or ungraded, that is given in an academic course or must be completed toward the completion of degree or certification requirements. This includes, but is not limited to: Exams, quizzes, papers, oral presentations, data gathering and analysis; practicums and creative work of any kind.

**Definitions of Academic Dishonesty:** Each instructor may modify the general definition of academic dishonesty to fit the immediate academic needs within that particular course of study, provided the instructor defines, in writing and preferably in the course syllabus, the details of any departure from the general definition.

**Cheating:** Any action which if known to the instructor in the course of study would be prohibited. This includes:

- The unauthorized use of any materials, notes, sources of information, study aids or tools during an academic exercise.
- The unauthorized assistance of a person other than the course instructor during an academic exercise.
- The unauthorized viewing of another person’s work during an academic exercise.
- The unauthorized securing of all or any part of assignments or examinations, in advance of submission by the instructor.

**Fabrication/Falsification:** The unauthorized invention or alteration of any information, citation, data or means of verification in an academic exercise, official correspondence or a university record.

**Plagiarism:** Submitting as one’s own work or creation any material or an idea wholly or in part created by another. This includes:

- Oral, written and graphical material
- Both published and unpublished work

It is the student’s responsibility to clearly distinguish his/her own work from that created by others. This includes the proper use of quotation marks, paraphrase and the citation of the original source. Students are responsible for both intentional and unintentional acts of plagiarism.

**Bribes/Favors/Threats:** Attempting to unfairly influence a course grade or the satisfaction of degree requirements through any of these actions is prohibited.

**Complicity:** Helping or attempting to help someone commit an act of academic dishonesty.

**Sanctions:** Sanctions for academic dishonesty may be imposed by the instructor of the course, the division dean, or the dean’s designee. Sanctions for academic dishonesty may be imposed even if a student withdraws from an individual course or from Mountwest entirely.

The instructor may impose the following sanctions:

- A lower or failing project/paper/test grade
- A lower final grade
- Failure of the course
- Exclusion from further participation in the class (including laboratories or clinical experiences)

The following sanctions may be recommended by the instructor but will need to be imposed by the division dean or his/her designee:

- Exclusion from an academic program
- Academic probation for up to one year
- Academic suspension for up to one year
- Dismissal from Mountwest

In those cases in which the offense is particularly flagrant or where there are other aggravating circumstances, additional, non-academic, sanctions may be pursued through the Office of Judicial Affairs.

A student will be informed in writing by the instructor or responsible office, of any charges and subsequent sanctions imposed for academic dishonesty. (See “Reporting” below.) Written notification of academic dishonesty charges (and the inclusion of confirmed charges/sanctions in a student’s records) is designed to inform a student of the potential



# ACADEMIC DEFINITIONS & PROCEDURES

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repercussions of repeat offenses and his/her rights of appeal.

If a student believes that charges of academic dishonesty have been erroneously levied, he/she should appeal such charges in accordance with the process outlined below (See “Appeals Process.”)

Sanctions for repeated academic dishonesty offenses will be imposed by the division dean, dean’s designee, or Dean of Student Services.

- A student’s record of academic dishonesty offenses will be maintained throughout his/her enrollment at Mountwest, and the period of time between offenses may have no impact on sanctions for repeated offenses.
- A student with a second academic dishonesty offense during his/her enrollment at Mountwest will be academically suspended for a period of time not to exceed one academic year (to include summer terms).
- A student with a third academic dishonesty offense during his/her enrollment at Mountwest will be dismissed from Mountwest.

**Reporting:** Any time an accusation of academic dishonesty is made, and a sanction imposed (or a sanction will be imposed with the submission of final grades), a notice should be sent to the Office of the Dean of Student Services within ten (10) days of the accusation.

Notice of an act of academic dishonesty will be reported to the Office of Student Services through the completion of an “Academic Dishonesty Report Form” (described below).

The “Academic Dishonesty Report Form” will include:  
Instructor’s Name  
Course Information (Term, Number, Section)  
Student’s Name  
Student’s Mountwest Community & Technical College Identification Number  
Brief Description of the Charge  
Date of Accusation  
Brief Description of the Sanction

Instructors are encouraged to give a copy of the “Academic Dishonesty Report Form” to a student accused of an offense. However, within ten (10) days of receipt of the “Academic Dishonesty Report Form” the appropriate dean will inform the student of the accusations made, the sanctions prescribed, the repercussions of repeat offenses, and his/her rights of appeal.

A copy of the report will go into the student’s college file.

Any subsequent actions taken (additional sanctions imposed, the lessening of sanctions, the withdrawal of accusations, the results of appeals, etc.) should be reported to the Office of the Dean of Student Services within ten (10) days of the action.

**Recording:** The Office of the Dean of Student Services will maintain a file of academic dishonesty incidents.

**Appeals for Academic Dishonesty:** See Student grievance procedures, page 19

## ACADEMIC FORGIVENESS POLICY

The academic forgiveness policy allows forgiveness of ‘D’ and ‘F’ grades for purposes of calculating the grade-point average (GPA) required for graduation and does not apply to GPA calculation for special academic recognition (such as graduating with honors) or to meet requirements for professional certification that may be within the province of licensure boards, external agencies, or the West Virginia Board of Education. This policy is designed to assist returning students who left college in poor academic standing. The policy may be implemented provided the following conditions are satisfied:

1. The student must not have been enrolled in college on a full-time basis during any semester or term in the last four consecutive years.
2. Only grades for courses taken at least four years prior to the request for academic forgiveness may be disregarded for graduation grade-point average computation.
3. To be eligible to apply for academic forgiveness, a student must be currently admitted to Mountwest Community & Technical College and enrolled.
4. Grades disregarded for graduation GPA computation remain on the student’s permanent transcript.
5. The student applies for academic forgiveness by submitting an application for “Academic Forgiveness” to the Mountwest Dean of Student Services. The application for academic forgiveness can be accepted, modified, or rejected upon submission. Upon request, a justification will be provided for any changes made to the application.
6. If the student applies for academic forgiveness, he/she must be aware that this is a Mountwest procedure that may not be recognized by other institutions of higher education in which the student may transfer.

# ACADEMIC DEFINITIONS & PROCEDURES

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To qualify for graduation, the student must satisfy all graduation requirements in effect at the time of acceptance into the program and successfully complete a minimum of 15 semester hours of college-level work at Mountwest with a minimum GPA of 2.00 on all work attempted after acceptance.

## ACADEMIC PROBATION AND SUSPENSION POLICY

**Academic Probation:** All students whose Overall or Mountwest GPA drops below a 2.0 will be placed on Academic Probation. Academic Probation is a period of restricted enrollment for a student. All probation students are subject to the following restrictions.

Students on probation must meet with the Dean of Student Services or a designated advisor before registering for classes to develop an Academic Improvement Plan to achieve good academic standing each term. This plan will be binding on the student.

Students on probation may take a maximum of 14 hours during the semester and should repeat courses under the D/F Repeat Rule to reduce deficiency points.

Students on probation must earn a 2.0 GPA or higher during every semester they are on probation. Failure to achieve a 2.0 semester GPA or higher while on Academic Probation will result in suspension.

- Students on probation are not allowed to register by MyMCTC.
- Students on probation must participate in the college's Retention Program.
- Other requirements may be imposed in the Academic Improvement Plan. The student is returned to Academic Good Standing when his/her overall GPA are 2.0 or higher.

**Academic Suspension:** is defined as a period in which a student cannot enroll in courses at Mountwest Community & Technical College. A student who has pre-registered and is subsequently suspended will have his/her registration automatically canceled.

Students who earn less than a 2.0 semester GPA while on Academic Probation or who accumulate or exceed the Quality Point Deficit for their GPA Hours (see Table One) will be suspended for one regular semester. (The summer terms do not count as a term of suspension.)

**Table One – Suspension Quality Point Deficit**

GPA Hours	0-25	26-57	58-89	90+
Quality Point Deficit	20	15	12	9

When a student returns to Mountwest Community & Technical College after any suspension, the student will be placed on probation and must follow all of the requirements of his/her Academic Improvement Plan. Failure to meet all of the requirements of the Academic Improvement Plan or exceeding the Quality Point Deficits listed in Table One will result in suspension. **A second suspension will be for a period of one calendar year. Third and subsequent suspensions will be for a period of two calendar years each.**

Reinstatement after a second or subsequent suspension is only by written petition to the Dean of Student Services. The petition must be in writing and provide evidence that the student can meet the requirements of his/her Academic Improvement Plan.

### Computing Quality Point Deficit

To compute Quality Point Deficit, both Overall and Mountwest, use the following formula:

$$\text{GPA Hours times } 2 = X;$$

$$X - \text{Quality Points} = \text{Quality Point Deficit.}$$

For example, a student with 48 GPA hours and 90 Quality points would have this academic profile:

$$48 \times 2 = 96$$

$$96 - 90 = 6 \quad (\text{a quality point deficit of } 6)$$

Students can use their Overall GPA information to figure their Overall Quality Point Deficit and their Mountwest Community & Technical College GPA information to figure out their Mountwest Quality Point Deficit.

## CLASS ATTENDANCE

It is Mountwest's view that each instructor evaluates the importance of student class attendance. In the course syllabus, the instructor must provide his/her requirements on class attendance, make-up work, and related matters. If a student is absent from class, the absence can be handled by an arrangement between the student and the instructor. The instructor must honor the college excused absences list by this requirement and allow the student an opportunity to catch-up/make-up work missed. This requirement excludes those academic endeavors that require the completion of a certain number of clock hours, as in clinical experiences, practice or internships. For those courses, the maximum number of absences will be determined by the program

# ACADEMIC DEFINITIONS & PROCEDURES

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coordinator. This requirement does not supersede program accreditation requirements.

## Definitions of Excused Absences

Excused absences fall into five categories:

### A. College-Sponsored Activities:

1. Academic activities including, but not limited to, performing arts, debate and individual events, honors classes, and division functions.
2. Other college activities, including student government and student organizations. The activity must have a clear educational mission and be closely linked to academic pursuits or to other official college functions.

### B. Student Illness or Critical Illness/Death in the Immediate Family\*

*\*"Immediate Family" is defined as a spouse/life partner, child, parent, legal guardian, sibling, grandparent or grandchild.*

1. **Student Illness or Injury:** Absences will be excused only for illnesses or injuries that prohibit students from participating in class.
2. **Critical Illness of Immediate Family Member:** Absences will be excused if the student documents that he/she had to provide needed care and/or support for a critically ill immediate family member.
3. **Death of an Immediate Family Member**

### C. Short-Term Military Obligation:

This is defined as absence as the result of military orders for a short-term period. **Note:** *Students subject to federal activation are covered by a separate policy. Please see the catalog for this policy.*

### D. Jury Duty or Subpoena for Court Appearance:

This applies to absences that are a result of official requests from a court of law.

### E. Religious Holidays:

This applies to major religious holidays.

## ACADEMIC STANDING

Students receive official notification of academic standing via the web at the end of the regular semester or summer session. Academic standing is defined by one of three categories:

- **Good Standing:** A student is in good standing when his/her cumulative Mountwest GPA is at least 2.0.
- **Academic Probation:** A student is placed on academic probation at the end of any regular semester or summer session when his/her cumulative Mountwest GPA is less than 2.0. The student will be notified by mail of probation status and that a hold has been placed on his/her registration activity. The student cannot register or make schedule changes on the web. All of his/her registration activity must take place in person with an advisor in the Mountwest Student Services Advising Center. Probation students also are limited in the number of credit hours they can take each semester and may be subject to financial aid loss.
- **Academic Suspension:** If a student exceeds the maximum quality point deficits in the cumulative Mountwest GPA hours at the end of any given semester, he/she will be suspended for the following semester. The Dean of Student Services notifies suspended students by US Postal Service and email that a suspension hold has been placed on their registration status and that their registration for the following semester has been cancelled excluding summer terms, when the suspension is for one semester.

**Assessment:** Mountwest has an ongoing assessment program that is rooted in the College's mission. The assessment process provides the college and programs with information regarding institutional effectiveness. All segments of the College community - faculty, staff, administration and students - are to be actively involved in this process.

**Assessment of Student Academic Achievement:** Of central importance is the assessment of student learning in the major and in general education.

Mountwest is committed to providing quality educational opportunities and experiences for every student. While grades are one measure of student performance, grades do not provide the institution with the necessary data to determine areas of the curriculum that are strong and areas that need improvement. Therefore, it is expected that students attending Mountwest will participate in periodic assessment activities as directed by the college to include specialized end of the program exams to benchmark knowledge against knowledge required to work in the field.

**Auditing Courses:** Audit students enroll only for purpose of refreshing or acquainting themselves with the material offered in the course. You can audit a course when there is space available in the class and the instructor authorizes your audit status. Audit students receive no academic credit. Enrollment for audit is limited to the regular registration period for the semester or term.

# ACADEMIC DEFINITIONS & PROCEDURES

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The student must enroll for the course as an Audit and must pay fees in the same way and at the same tuition rate as students enrolling for credit. Faculty members who wish to audit courses must secure approval of the instructor of the course and must enroll in the regular way. The instructor of the course will determine attendance and any other special requirements for audit students. It is the instructor's responsibility to discuss the requirements of the course with the auditor.

Students cannot change a registration from credit to audit or audit to credit after the close of the Schedule Adjustment Period at the beginning of a semester or summer term.

**Catalog of Record:** The catalog of record is the academic catalog that is in effect at the time a student declares a major. It identifies the graduation requirements students must meet to earn the degree. Once a student declares a major, the catalog of record remains the same, unless there is a break of enrollment of at least one year. The student must meet the graduation requirements in this catalog. Students can substitute courses no longer offered with the permission of their Academic Division Dean.

## Classification of Students

Classification of students is based on the number of college level credit hours earned as shown:

CLASSIFICATION	SEMESTER HOURS
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Freshman	0-25
Sophomore	26+

COURSE NUMBERS	LEVEL
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000-099	developmental (or pre-college)
100-199	freshman level
200-299	sophomore level

## SOURCES OF EQUIVALENT COLLEGE CREDIT

### College-Level Examination Program (CLEP)

The College Level Examination Program (CLEP) and DANTES exams enable students who can demonstrate knowledge and/or proficiency in certain fields to reduce the cost in time and money for pursuing a college education by successfully completing tests for credit. Intensive reading in a particular field, on-the-job experience, or adult education may prepare a student to earn college credit through tests. This would reduce the total amount of course work needed to complete degree programs. Scores on the test may also validate educational experience obtained at a non-accredited institution or through noncredit college courses.

Credit earned through exams does not automatically satisfy specific academic requirements. Since degree programs have different curriculum requirements and may use the scores in different ways, students should consult first with their Academic Dean on how the examinations would be used. For available CLEP/DANTES exams contact: Cory Payne, Main Building, Room 261; phone: (304) 710-3417; email: [payne28@mctc.edu](mailto:payne28@mctc.edu).

## Commencement/Graduation Dates

Mountwest observes one formal Commencement Exercise with three graduation dates during an academic year. The official graduation dates are:

- Last day of final examinations for the fall semester.
- Day of Commencement for the spring semester.
- Last day of the summer term.

Students will not be graduated on any dates other than those noted above. Students who are graduated at the end of the summer term or at the end of the fall term of an academic year are invited and highly encouraged to participate in the Spring Commencement Exercises.

## Credit by Examination

Credit by examination is available for certain courses. The awarding of credit is based upon the evaluation of specific criteria established by appropriate faculty. Proficiency examinations for credit will be given at various scheduled times.

To be eligible to take an exam, a student must be fully admitted. If not enrolled full-time, the student must pay a non-refundable fee of \$30 per proficiency exam attempted. Any other fees associated with this process are the responsibility of the student. Credit only ('CR' not a letter grade) will be recorded on the transcript for successful completion; no transcript record will be recorded for not passing the examination.

## Credit for Experiential Learning

Portfolio college credit will only be awarded for college level learning experiences that have occurred after high school. Students are eligible to apply for portfolio credit two years after high school graduation or two years after their high school class has graduated. To earn this credit the student must provide evidence of possessing equivalent knowledge, theory or industry skills demonstrated by the presentation of a portfolio, industry certifications, or diplomas and acceptance of these credentials by Mountwest.

# ACADEMIC DEFINITIONS & PROCEDURES

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## ACADEMIC DEFINITIONS

### Academic Residence Requirements

"In residence" means to be enrolled in Mountwest courses. Mountwest Community & Technical College Associate Degree and Certificate program students must earn at least 15 hours credit in residence. These 15 hours must be for college level course work and must be applicable to the degree program.

### Credit Hour

Generally a student earns one credit for each 15 hours of class contact. Classes normally meet 45 hours in a semester for 3 units of credit. Students should plan on two hours of preparation/study for each in-class hour. Laboratory classes require two or three hours of lab per week for each semester hour of credit.

### Course Delivery

- **Blended Course** is a course in which both credit and noncredit students are enrolled in the same section during any semester. Non-credit students are not required to submit and write papers or take exams. Noncredit students must register and pay associated fees for the class through Continuing Education.
- **Hybrid Course** has at least one face-to-face meeting with the entire class in a classroom setting. The majority of the course material and assignments are accomplished electronically.
- **Off-Campus Course** is a course that is offered off of the main college campus. Off-campus courses may have a special fee, see current fee chart.
- **On-Campus Course** is a course offered on Mountwest Community & Technical College's campus.
- **Online Course** is asynchronous and offered completely electronically with no face-to-face meetings.
- **Traditional Course** is when students and teacher meet in a designated location on a regular basis each week.

### D/F Repeat Rule (Repeating Courses)

Students have the opportunity to repeat any course in which they earned a grade of D or F during the period up to and including the semester in which they attempt their 60th hour. Any course taken during the semester or term in which the 60th attempted hour is taken also may be repeated under this rule. The repeat of a course taken within the first 60 attempted hours may be made any time before graduation.

The 60th attempted hour sets the limit for courses which

may be repeated and not the time by which the course must be repeated. A course may be repeated only once under this rule, and the repeat must be done prior to completion of the degree.

The second grade will replace the first in determining the student's GPA, hours attempted, and hours credited. The second grade is the grade that counts (excluding a W), even if it is a lower grade than the original one. The original grade remains on the transcript, but it is noted as a repeated course. Whenever a student plans to repeat a course under the D/F Repeat Rule, he/she must complete the D/F repeat form early in the semester in which the course is repeated. Forms are available in the Office of Student Services.

The D/F Repeat Rule applies only to graduation requirements and not to requirements for professional certification which may be within the province of licensure boards, external agencies, or the West Virginia Board of Education.

In other words, any course a student takes prior to attempting the 60th credit hour for which a grade of D/F was received can be repeated at any time prior to graduation. If a student originally took a course while a sophomore (26-57 hours), received a D, the course can be repeated.

The second grade replaces the first grade – not the better of the two grades. If the second grade is an F, then the F replaces the original grade of D.

If a student withdraws from a course for which he/she is D/F repeating, it does not count as the second grade – the course can be taken again for a final grade. Another D/F repeat form will need to be completed in the Office of Student Services to replace the form for the withdrawn course.

### Dean's List

Students registering for 12 or more hours of courses, for which they are receiving letter grades, and who, at the end of a semester, have a grade point average of 3.3 or above are considered honors students. The names of these students make up the "Dean's List."

### Degree Program

A degree program is a unified series of courses or learning experiences composed of at least 60 required credit hours that lead to an Associate of Arts, Associate of Science, or Associate of Applied Science degree.

### Developmental Courses

Developmental courses are credit/no-credit (CR/NC) recorded on the transcript counted as earned hours,

# ACADEMIC DEFINITIONS & PROCEDURES

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used to determine a student's classification and as hours attempted for financial aid. Credits earned for these courses cannot be used to satisfy graduation requirements.

## Grade Information and Regulations

Mountwest uses a 4.00 scale to express grade point averages. The Grade Point Average (GPA) is a numeric value calculated by dividing total quality points by total credit hours for courses in which a student earned a letter grade.

Grade Quality	Points Per Semester Hour
A (superior)	4
B (above average)	3
C (average)	2
D (below average)	1
F (failure)	0
I (incomplete)	0
CR (credit)	0
NC (no credit)	0
W (withdrawn)	0
AU (audit)	0

The GPA computed for graduation purposes is based on all of a student's work except:

- Courses with grades of W, I, CR/NC, and AU
- Courses repeated under the D/F Repeat Policy

## Graduation

Students must apply for graduation at the beginning of the semester or term in which they intend to complete graduation requirements, which include the following:

- Minimum of 60 credit hours excluding developmental hours
- Have a Mountwest GPA of 2.0 or higher
- Have earned a C or better in ENL 111 or equivalent
- Have a minimum of the last 15 college-level credit hours earned at Mountwest
- Complete any program specific additional requirements

The due dates for each graduation are listed in the current Schedule of Courses and also in the Academic Calendar section of the Mountwest Community & Technical College catalog as well as on the Web.

To apply, students must first go to the Mountwest cashier and pay the graduation fee. Next, students bring a copy of the receipt to the Student Services Advising Center and complete the Graduation Application.

## Honors Graduation (Associate Degree Only)

Associate degree candidates for graduation who have achieved special distinction in academic work are

recognized at Commencement. Their honor status is printed on their diploma. Honor status is determined by this scale for the final cumulative grade point average:

- With High Honors – 3.70 and above
- With Honors – 3.30 to 3.69

\*Honor calculations are not rounded.

## Honors Eligibility for Transfer Students (Associate Degree)

A transfer student must have earned at least 36 hours of work at Mountwest Community & Technical College, 32 of which must be applicable to an Associate degree program and must have attained honors for all work attempted at Mountwest.

Honors recognition at the May Commencement is based on academic standing prior to the spring term. If a student achieves honors standing as a result of the May grade run, the Dean of Student Services will report the proper honors level on the final graduation list. Honors will be posted on the degree record.

## Independent Study

Independent studies are tutorials, independent readings, research and other individualized activities designed to meet the special needs of students within their major. Independent studies are offered only at the discretion of the Division Dean.

## Internship, CO-OP, Practicum or Clinical

An internship, co-op, practicum or clinical is a supervised work experience completed by students at a site appropriate to the student's declared major. The student must have the approval and permission of the Program Coordinator in order to register for the course. A faculty member will serve as an internship/CO-OP/Practicum/Clinical coordinator and resource person for the students and will make site visits and provide career counseling. The internship, CO-OP, practicum or clinical also may include on-campus training seminars, workshops, and presentations by in-the-field professionals. Although the internship, CO-OP, practicum or clinical experience varies across divisions of the college, the outcome for each is to provide opportunities for the students to apply knowledge and skills gained in their coursework to a real-world environment.

## Laboratory Courses

Lab courses supplement classroom courses. They are organized activities involving the observation and verification of experiments and experimental techniques. Laboratory courses require two or three hours of lab per week for each semester hour of credit.

# ACADEMIC DEFINITIONS & PROCEDURES

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## **Major**

A major is a program of study requiring at least 24 semester credits for completion. All courses in the major must be taken for a grade except internships/practicum/CO-OP or clinical.

## **One-Year Certificate Program of Applied Science**

A one-year certificate program is a unified series of courses composed of a minimum 30 credit hours.

## **Semester Load**

To make normal progress toward graduation, students should complete approximately 32 to 34 semester hours during a calendar year, which includes Fall, Spring and Summer terms. If students want to take 19 or more credit hours during Fall or Spring term, or 7 or more hours during a regular Summer term, they must obtain permission from the Mountwest Community & Technical College Vice President of Student Services.

## **Special Topics**

Special Topics are courses that can be offered twice without formal approval.

## **Syllabus**

During the first week of semester classes (3 days of summer term), instructors must make available to each student a copy of the course requirements which includes at a minimum these items:

- A description of the general course content
- Course learning outcomes
- Approximate dates for major projects and exams
- Grading policy/assessment methods
- Attendance policy

The syllabus is not a legal contract.

## **Transcript**

Each Official Transcript costs \$8. The Office of the Registrar usually will process transcript requests within 24 to 48 hours of receipt. The request may take longer to process if it is received at the close of a semester or summer term. Students who default in the payment of any Mountwest financial obligation or have other obligations to Mountwest forfeit their right to a transcript until their obligations are resolved. Transcript requests should be sent directly to the Office of Student Services in the form of a letter, fax, or on the Transcript Request Form available in the office, or on the web. Students must sign their requests. Students can obtain unofficial transcripts at: [www.mctc.edu/myMCTC](http://www.mctc.edu/myMCTC), or in the Office of Student Services.

# STUDENT RESOURCES & SERVICES

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## ACADEMIC SKILLS CENTER

A highly qualified staff of instructors offer tutorial assistance to individuals and study groups in the Academic Skills Center (ASC), located in Mountwest Main building Room 103. The ASC operates as a learning center. In addition to working with teachers, students have computers and videos to assist in building academic skills and in refreshing existing skills.

ASC operating hours during the fall and spring semesters are: 8 a.m.-7 p.m. Monday through Thursday; 8 a.m.- Noon, Friday.

## WRITING CENTER

The writing experience is unique for every individual. Thus, the Mountwest Writing Center promotes the development of writing by engaging students in all aspects of the writing process through the use of individualized instructional sessions. These sessions allow students to acquire the strategies, techniques, and confidence necessary to engage effectively with a variety of writing topics and assignments.

Room 304 – Monday through Thursday 8 a.m. to 7 p.m.  
Room 103C – Friday 8:00 a.m. to Noon.

## ONE STOP CENTER

Professional counselors in the One Stop Center assist students in becoming well-informed and effective decision makers and planners who will gain maximum benefit from their educational experiences. Located on the first floor of the Mountwest building, the One Stop Center is a source of information on the wide array of available academic programs and on academic policies and procedures. The Advising Center serves Mountwest students with a particular focus on addressing the specific needs of freshmen, transfer students, students changing majors and students on academic probation or suspension.

The center's counselors can assist students with:

- assessment of abilities, interests and goals;
- coordination of career planning and academic progress;
- information about courses, programs, occupations, and the world of work;
- referrals to other campus resources;
- course scheduling and registration workshops.

The One Stop Center counselor must approve registration for classes until students have completed 24 hours of 100-level graded courses with at least a 2.0 GPA. Students can get their counselor's name or advising help by calling

(304) 710-3140 or visiting the One Stop Center. The One Stop Center is open Monday through Thursday from 7:30 a.m. to 7 p.m. and Friday from 7:30 a.m. to 4 p.m.

## DISABLED STUDENT SERVICES

The Disabled Student Services program works with students to individualize the type and level of services needed for educational and physical accessibility to achieve their academic goals and maintain as much independence as possible. Services are available to all students, whether they are full-time or part-time. Students are required to provide documentation of disabilities.

For more information, call Debbie Spencer at (304) 710-3368, or visit the Office of Student Services on the main campus.

## RESOURCE CENTER

Mountwest students can access computers in the Mountwest labs. Mountwest students have access to article databases through MyMCTC and through WVInfoDepot ([www.wvinfo depot.org](http://www.wvinfo depot.org)).

## PUBLIC SAFETY DEPARTMENT

Located in the Main Building, the Public Safety Department is directly responsible for the College's community and provides all services on an around-the-clock basis. By virtue of West Virginia State law, College Police Officers have the same responsibilities and authority as that of any other law enforcement officers in the state. Uniformed officers provide 24-hour patrol protection to the campus, adjacent University-owned facilities, and parking lots. All emergencies, criminal complaints, general requests for service, and public safety concerns can be reported directly to the Office of Public Safety in person.

The police dispatcher is available 24 hours a day by dialing 3499, or by using one of the emergency/service phones located throughout the campus.

## STUDENT HEALTH SERVICES

Student Health service is provided by the Department of Family and Community Medicine, a division of Joan C. Edwards School of Medicine and is open from 8:00 a.m. to 4:00 p.m. Monday through Friday. Summer hours vary. Health services will be provided from the first day to the last day of each fall, spring, and summer semester to full-time students who present current validated identification cards.



# STUDENT RESOURCES & SERVICES

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Part-time students may be required to pay fees for service. Services provided include: diagnosis and treatment by a physician, licensed practitioner or physician's assistant; limited routine laboratory procedure; and injections for allergies (if vaccines and dosage directions are provided by the physician of the patient and approved by the staff).

Student Health Services is located at Marshall Medical Center/Cabell-Huntington Hospital, 1600 Medical Center Drive, Suite 1500; (304) 691-1106.

## TUTORING SERVICES

The Academic Skills Center (ASC) brings together academic support services. The center provides students with programs and services to help them succeed in college and beyond. Faculty-recommended peer tutors are available to work individually with students on multiple subjects to elaborate on concepts and share strategies for success.

# CAMPUS ACTIVITIES

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## **PHI THETA KAPPA**

Mountwest maintains the Alpha Eta Upsilon Chapter of Phi Theta Kappa, an international honor society for two-year colleges. The chapter recognizes and encourages academic achievement by students and provides opportunities for individual growth and development through honors, leadership, and service programming. To be eligible for membership, students must be enrolled in Mountwest; must have completed at least 12 semester hours in coursework applicable to an associate degree; must achieve a grade point average of 3.5 and maintain a grade point average of 3.3; must have achieved academic excellence as judged by the faculty; and must be of good moral character and possess recognized qualities of leadership.

## **STUDENT GOVERNMENT ASSOCIATION**

The purpose of the Mountwest Student Government Association is to give students a voice, to make positive changes on campus and in the community, to create bonds within the student body, to form lifelong friendships and to unify the student body. Leadership and service learning experience are both gained by being a member of the SGA, which not only works for Mountwest students, but also the community. One may earn valuable service learning and leadership experience by being an active SGA member. The Mountwest Student Government Association sponsors and plans events and activities on campus, to create a cohesive learning community at Mountwest.

There are many active student clubs and organizations on campus such as the following:

The American Sign Language Club Phi Theta Kappa, Physical Therapy Association, the Multicultural Club, the Massage Therapy Club, the Mountwest Culinary Club, the Veterans Organization on campus, the Gastronomists Club and Leadership in Action.

# ACADEMIC PROGRAMS

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## GENERAL EDUCATION ASSESSMENT PORTFOLIO

A General Education Assessment Portfolio is a graduation requirement for all Mountwest graduates. The portfolio will be a compilation of coursework collected throughout the program of study and submitted as a requirement in the student's capstone course.

Each student will collect examples/samples of coursework from all courses throughout his or her program of study. The portfolio must document the student's mastery of the seven general education learning outcomes. The student will determine the method (either electronic or paper) of collecting assignments/artifacts that best demonstrate each of the following general education learning outcomes:

- communicate effectively using written skills;
- communicate effectively using oral skills;
- apply mathematics and basic scientific concepts for problem-solving activities;
- utilize technology competently;
- use critical-thinking skills;
- develop an awareness of ethical behavior;
- recognize the richness of diversity.

After completion of each assignment/artifact chosen for inclusion, the student will write a short reflection paper indicating:

- which learning outcome is demonstrated;
- how the learning outcome was achieved;
- how competency of the learning outcome will impact his/her future personal and career goals;
- any other comments that are pertinent to demonstrating achievement of the required general education learning outcome.

The completed assignment/artifact and reflection paper will be saved electronically/hardcopy for inclusion in the final portfolio. During the capstone course, the student will be asked to choose the assignments/artifacts and the accompanying reflection papers which best demonstrate the mastery of the general education learning outcomes.

For more information, contact Dr. Carol Perry, Executive Dean of Liberal Arts & Human Services, Main Building Room 329; phone, (304) 710-3434; e-mail, [perry@mctc.edu](mailto:perry@mctc.edu).

# ADMISSIONS POLICY

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## ADMISSIONS INFORMATION

For general information regarding Mountwest programs and policies please visit [www.mctc.edu](http://www.mctc.edu).

## ADMISSIONS POLICY

Mountwest adheres to an open admissions policy as outlined in Title 135 Procedural Rule, West Virginia Council for Community and Technical College Education, Series 23, Standards and Procedures for Undergraduate Admissions at Community and Technical Colleges. It is the intent of this policy that everyone shall have access to higher educational opportunities commensurate with their interests and abilities.

- Admission to community and technical colleges is open to any person age eighteen or older and able to benefit from study at the community college level.
- Those who possess a high school diploma or General Education Development (GED)/TASC equivalency. This is a requirement if you intend to apply for Federal Financial Aid.

### A. General Admissions Information

Applicants should contact the Mountwest Office of Admissions and Recruitment for application information. Applicants may also download an application for admission at [www.mctc.edu](http://www.mctc.edu) (Select either the online or printed version of admissions form for submission.) Applications should be mailed to:

Mountwest Community & Technical College  
Office of Admissions and Recruitment  
One Mountwest Way  
Huntington, WV 25701

An individual may enroll as a non-degree-seeking student to take courses for personal or professional enrichment.

Being admitted to Mountwest does not guarantee that applicants will be accepted into all associate or certificate programs. Some programs have additional admissions requirements. Programs with specific Admission Requirements are outlined in Section J.

To receive financial aid, an individual must be admitted as a degree-seeking student and have official high school transcripts or GED/TASC scores on file with the Mountwest Office of Admissions and Recruitment. Students entering college directly from high school are strongly encouraged to complete the ACT, SAT I or Compass assessment. For additional testing

information, contact the Office of Student Services; phone (304) 710-3140.

### B. Board Policy

Regular admission to Mountwest is open to any person who has a high school diploma or meets General Educational Development (GED)/TASC requirements.

- Persons not holding a high school diploma or GED/TASC who demonstrate an ability to benefit from postsecondary education may be admitted. Neither regular nor conditional admission shall ensure the entry of applicants into specific programs.
- High school transcripts or equivalent may be required to be on file for each incoming freshman who is registered in an undergraduate certificate or degree program, and who has graduated from high school within five years for financial aid purposes. Such transcripts shall be on file with the institution prior to eligibility for financial aid.
- Transfer students desiring to apply transfer credits must supply the institution with official transcripts reflecting all previous college work from a regionally accredited institution. Receipt of transcripts will not discriminate against admission.
- Control and administration of this admissions policy rests with the Mountwest Office of Student Services.

### C. Students Seeking Readmission

Students who have not attended Mountwest during the past 12 months are required to apply for readmission. The readmission form is available from the Office of Admissions and Recruitment or online at: [www.mctc.edu](http://www.mctc.edu) and must be printed, completed, and sent to the Mountwest Office of Admissions and Recruitment.

Mountwest Community & Technical College  
Office of Admissions and Recruitment  
One Mountwest Way  
Huntington, WV 25701

There is no fee for applying for readmission and the application is normally processed within 7 to 10 business days. However, if a student has attended another college since last attending Mountwest, the student must reapply as a transfer student as outlined in Section F.

### D. Transfer Policy

College level course credits earned at regionally accredited post-secondary institutions can be transferred to Mountwest. Transfer credit is subject to the approval of the Division Dean in which the student matriculates, and with the following provisions:

# ADMISSIONS POLICY

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- Mountwest must receive official transcripts of all college level work completed at other regionally accredited colleges before formal transfer credit will be awarded. Grades earned at other institutions will not be entered into the cumulative grade-point average (GPA) at Mountwest.
- Course in which a grade of “C” or higher is earned are transferable for credit if coursework is relevant to the student’s program at Mountwest with the approval of the Division Dean.
- Credits earned at foreign post-secondary institutions may also be transferred, subject to review and approval of the Dean of the Division in which the student matriculates. Students applying for foreign credit transfer must submit an official evaluation of foreign educational credentials from an accredited evaluation agency.
- Transfer students are required to complete their academic residency requirement prior to graduation.
- The transfer evaluation is based on the declared major of the student.

Students who transfer to Mountwest must complete at least their most recent 15 credit hours at Mountwest to obtain an associate degree, or their most recent 6 credit hours at Mountwest to obtain a certificate degree.

Mountwest reserves the right to suspend or expel any students who misrepresent the truth on any admissions document.

## **E. Early Entrance High School Students**

High school students may enroll in courses at Mountwest provided they meet course prerequisites and the following requirements:

- Complete a consent form signed by the high school principal or counselor and parent/guardian.
- Submit a completed Mountwest Admissions Application.
- Have a 2.0 grade point average on a 4.0 scale.
- Early admission students are not eligible for financial aid and may not reside on campus.
- Preliminary high school transcript

## **PROGRAMS WITH SPECIFIC ADMISSION REQUIREMENTS**

The following degree programs have either limited admissions or selective admission requirements. For more information about admission requirements contact the Dean of the program.

## **1. Allied Health and Life Sciences:**

### **A. Physical Therapist Assistant Program:**

Students seeking admission into the Physical Therapist Assistant Program at Mountwest may arrange an appointment with the program faculty prior to submitting the application packet. This is to ensure that students receive current information regarding the program admission requirements and the criteria for selection.

- Application packets are available after November 15 from the Career & Technical Division, Room 455.
- Application deadline is March 15.
- Applications are valid only for the noted academic year

### **B. Associate in Applied Science in**

#### **Radiologic Technology (Collins Career Center):**

Each year there are 10 to 15 applicants accepted into each program. Minimum requirements for consideration are:

- Completion of an application between January 1 and May 31 for classes beginning the following January.
- High school diploma or successful completion of the GED.
- Twelve (12) hours of general diagnostic radiographic shadowing completed at a qualifying medical institution.
- A “C” or better in the following Mountwest courses: MAT 145, SCI 110, AH 151, IT 101, ENL 111 and BIOL 257. A minimum of 15 hours must be credited by Mountwest to be granted the Associates Degree.
- Minimum ACT Composite, Math, and Science scores of 21 within the last 5 years.
- The WorkKeys test may be substituted for the ACT. Contact Collins Career Center at (740) 867-6641 to schedule the test.
- Additional points are awarded for the following:
  - College GPA of 2.5 or higher.
  - Completion of SCI 220 and/or SS 215 with a grade of “C” or better.

### **C. Associate in Applied Science**

#### **in Respiratory Therapy (Collins Career Center):**

The Respiratory Therapy Program has selective admissions each year. A pre-entrance (WorkKeys) exam or ACT score of 21 or higher, is required for acceptance into the program. Contact Collins Career Center at (740) 867-6641 to schedule the test.

# ADMISSIONS POLICY

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- The first 20-24 eligible applications received will be admitted into the program.

If admitted, students must complete 89 quarter hours of Respiratory Therapy courses at Collins Career Center. As part of the 89 quarter hours, the student will be required to complete clinical practice rotations at area healthcare facilities.

**NOTE: Applicants may be required to complete a criminal background check following program admission. As some clinical sites require this information prior to placement, failure to do so will limit the applicant's opportunities for clinical education and the type of learning experiences available.**

## 2. Liberal Arts and Human Services:

Associate in Applied Science in Technical Studies—Machinist Technology

Students must apply for admission to the Robert C. Byrd Institute for Advanced Flexible Manufacturing and pass a mathematics test for Machinist with a score of 70% or above. Successful candidates will be invited for a personal interview.

## 3. Off-Campus Programs:

Associate in Applied Science in Occupational Development: All options are available only to students who have completed the Department of Labor Apprenticeship program.

## APPLICATION PROCESS

Students applying for admission to Mountwest must submit a Mountwest admission application form available from the Office of Admissions and Recruitment or online at [www.mctc.edu](http://www.mctc.edu). All necessary supporting materials should be on file with the Mountwest Office of Admissions and Recruitment at least two weeks before the beginning of a semester or term. All materials submitted in support of an application for admission become the property of Mountwest. Materials will not be returned or released to third parties. Any student admitted on the basis of false and/or incomplete information is subject to immediate dismissal or other disciplinary action.

Requests for applications, and additional information can be found at [www.mctc.edu](http://www.mctc.edu).

Students with a high school diploma or General Education Development Certificate (GED) may apply for regular

admission to a one-year certificate and/or a two-year degree program at Mountwest Community & Technical College.

## Full- and Part-Time Students

A full-time student is someone who is enrolled in at least 12 credit hours during fall and spring term. Students carrying fewer than 12 hours during fall and spring terms are considered part-time regardless of past full-time enrollment. Full- or part-time status may affect eligibility for financial aid in many programs, so students should consult with the Office of Financial Aid for more information.

## Application Fees

There is no fee to apply to Mountwest. Transfer students must pay a \$20 transcript evaluation fee if credit is to be transferred. Fees paid to Mountwest are valid for one academic year (fall, spring and summer semesters) only. If a student does not attend that Academic year, the student must reapply and pay the admission fee again. All fees paid to Mountwest are nonrefundable.

## Compliance with Military Selective Service Act

State law provides that a male person who has attained the age of eighteen (18) years may not enroll in a state-supported institution of post-secondary education unless he is in compliance with the Military Selective Service Act (50 U.S. Code, Appendix 451, et. eq. and the amendments thereto). Also, a male person may not receive a loan, grant, scholarship, or other financial assistance for post-secondary higher education funded by state revenue, including federal funds or gifts and grants accepted by this state, or receive a student loan guaranteed by the state unless he is in compliance with the Military Selective Service Act.

## Orientation

Mountwest New Student Orientation programs are conducted prior to classes starting to help freshmen and transfer students learn more about Mountwest and to meet students, staff, faculty, and administrators. During the Orientation programs, students and parents will learn about campus services, extracurricular activities, and community life. All students are expected to attend this important first step into college life at Mountwest. For more information, call The Office of Admissions and Recruitment at (304) 710-3360.

## Placement Tests

All students will be required to take placement tests in English, reading, and mathematics to determine appropriate placement before registering for classes.

Mountwest offers placement tests during summer orientation and at other times announced throughout the

# ADMISSIONS POLICY

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academic year or by appointment in the Mountwest One Stop Center. To qualify for these placement exams, students must be fully admitted to Mountwest or currently enrolled in a secondary school with at least junior status. Students who have received an “NC,” “F,” or “W” in a developmental course are ineligible to attempt the placement exam for that dropped or failed course.

The placement tests cost \$10 each. Call Mountwest Office of Student Services at (304) 710-3140 for additional information.

# ADVISING INFORMATION

## PLACEMENT SCORES

	ACCUPLACER		ACT	SAT	COMPASS	
Math	Arithmetic	Elem Algebra			Pre-Algebra	Algebra
College Level	≥ 85	≥ 84	≥ 19	≥ 460	≥ 59	≥ 36
Dev (MAT 096)	36-84	23-84	12-18	290-459		
ABE	< 36	< 23	< 12			
Writing	Sentence	Writeplacer				
College Level	≥ 88	5-8	≥ 18	≥ 450	≥ 92	
Dev (ENL 095 – 3hr)		4	≥ 14	≥ 290	≥ 45	
Dev (ENL 095-5hr)		3	≥ 12	≥ 240	≥ 23	
ABE		<3	<12	<23	<23	
Reading	Reading Comp		Reading	Verbal	Reading	
College Level	≥ 79		≥ 17	≥ 420	≥ 30	
Dev (REA 098)	≥ 40		≥ 13	≥ 230	≥ 60	
ABE	<40		<13	<230	<60	

Developmental courses enable students to take subsequent college-level work. The hours and credit earned in developmental courses do not count toward the hours and grade point requirements for graduation; however, the courses count toward full-time status and eligibility for financial aid.

Mountwest's Academic Skills Center offers instruction by computer programs, videos, cassettes, programmed materials, and teacher assistance. Some developmental courses require a co-requisite course or supplemental visits to the Academic Skills Center as part of their standard course requirements. Academic Skills Center hours are 8 a.m. to 8 p.m. Monday - Thursday; 8 a.m. to 3 p.m. Friday; 9 a.m. to 1 p.m. Saturday, and 3 p.m. to 7 p.m. Sunday.



# SPECIAL ADMISSION INFORMATION

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## COLLEGE COURSES IN THE HIGH SCHOOL

If a student meets the following requirements and a Mountwest course is offered at his or her high school, he or she may earn college credit while in high school:

- Complete a consent form signed by the high school principal or counselor and parent/guardian.
- Submit a completed Mountwest Admissions Application.
- Have a 2.0 grade point average on a 4.0 scale.
- Early admission students are not eligible for financial aid and may not reside on campus.
- Preliminary high school transcript

## COLLEGE GRADUATES

Application procedures for college graduates seeking an associate degree:

An applicant who has attained a degree and who wishes to pursue an Associate degree at Mountwest must apply as a transfer student and submit official transcripts from all institutions attended if credit is to be transferred. (See Transfer section.) An associate degree requires students to fulfill the requirements of the degree.

## EDGE

EDGE stands for “Earn a Degree – Graduate Early” and it allows students to earn community and technical college credit for high school courses.

## RESIDENT ALIENS

Resident Aliens must submit a copy of a valid resident alien card and meet all relevant freshmen or transfer student admission requirements.

## TRANSIENT STUDENTS

### 1. Students Visiting Mountwest from Other Institutions

Students enrolled in a degree program at another collegiate-level institution during the previous year who would like to enroll at Mountwest for no more than two consecutive semesters may be admitted as transient students. Transient students must submit an application to the Mountwest Office of Admissions and Recruitment for each term in which they wish to enroll and have the Registrar at their home institution send a letter of good academic standing to the

Mountwest Office of Admissions and Recruitment for each term in which they wish to enroll.

### 2. Mountwest Students Who Wish to Visit Other Institutions

Current Mountwest students who wish to enroll at another institution must complete an advanced standing (transient approval) form prior to enrollment. The form may be obtained from Mountwest Registrar. If a student does not submit this form and attends another institution, he or she will be required to pay the Transcript Evaluation fee and may be required to reapply as a transfer student. Students who attend another institution for more than 2 semesters (excluding summer terms) must reapply as transfer students, even if prior transient approval has been granted. A student who completes an advanced standing (transient approval) form must submit a transcript from the host institution for all semesters attended. If the student did not actually attend the host institution for which approval was granted, that institution must provide documentation stating that the student was never enrolled there. Failure to provide these documents will result in a hold being placed on the student's record.

# ENROLLMENT CHECKLIST

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## Submit an Application for Admission

Complete and submit our Application for Admission or Apply Online. Your acceptance letter will include your student ID. Keep it secure!

Contact: Office of Student Services | Office #: 101 | 304-710-3060 or 866-676-5533 | admissions@mctc.edu

## Request Documents

Request your official high school transcript or a copy of your GED/TASC, AP scores, ACT/SAT or Compass scores, and any official college transcripts. Transcripts may not be faxed or hand-delivered. They must be mailed from the institution or organization. A \$20 fee will be assessed for college transcript evaluations.

Request all documents be sent to the Office of Admissions at Mountwest Community & Technical College, One Mountwest Way, Huntington, WV 25701.

Contact: Office of Student Services | Office #: 101 | 304-710-3060 or 866-676-5533 | admissions@mctc.edu

## Apply for Financial Aid

Apply for Financial Aid at [www.fafsa.ed.gov](http://www.fafsa.ed.gov). Our school code is 040414. First-time students must complete a Master Promissory Note and entrance counseling to receive loans.

Contact: Office of Financial Aid | Room 101 | 304-710-3370 or 866-676-5533 | ofa@mctc.edu

## Take the CAP Test

Schedule an appointment to take the Computerized Assessment of Proficiency, or CAP. All new students must take the CAP assessment unless they are transferring in a 100-level Math and English from an accredited college or have taken the ACT/SAT or Compass in the past five years.

Contact: The Beacon Room | Office #: 233 | 304-710-3360 or 304-710-3060 | beacon@mctc.edu

## Register for Classes

Make an appointment with a counselor to register for classes.

Contact: Office of Student Services | Office #: 101 | 304-710-3060 or 866-676-5533

## Register for Orientation

Register for Student Orientation. Orientation includes a tour of our campus and information about available student resources.

Contact: The Beacon Room | Office #: 233 | 304-710-3360 or 304-710-3060 | beacon@mctc.edu

## Print your Schedule

Print your course schedule. This can be viewed in your myMCTC account. Login into myMCTC, choose Student & Financial Aid Information, Registration, and Student Detail Schedule. Please note that online courses do indicate a class time; however, this is only for administrative purposes. Online classes do not have set class times.

## Confirm Financial Aid Award

Verify that your financial aid is ready for the start of classes. Award can be viewed through myMCTC.

Contact: Office of Financial Aid | Office #: 101 | 304-710-3370 or 866-676-5533 | ofa@mctc.edu

## Attend Orientation

Attend your Student Orientation. Orientation includes a tour of our campus, information about available student resources and opportunities to do the following:

- **Get your student ID & MCTC email account**  
Both items can be obtained at the IT Helpdesk, Room 108.
- **Set up your MCTC email account**  
To check your email, go to our New to Mountwest page to learn about how to log in to your new MCTC email account. This is one of the college's primary means of communication. Check it daily!
- **Sign up to receive alerts**  
Sign up for the MCTC Alert Group to receive immediate notifications on campus emergencies and closings through your myMCTC account.

Contact: The Beacon Room | Office #: 233 | 304-710-3360 or 304-710-3060 | beacon@mctc.edu

Contact: IT HelpDesk | Office #: 108 | 304-710-3470 | helpdesk@mctc.edu

Note: If you are unable to attend orientation please ensure these actions are done prior to the start of your first semester.

## Buy Your Books

Purchase or rent your textbooks at the Campus Bookstore. If you receive financial aid you may be eligible to receive a book voucher from the cashier's office to pay for your textbooks.

Contact: Mountwest Campus Bookstore | Office #: 102 | 304-710-3500

# ENROLLMENT CHECKLIST

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Contact: Cashier's Office | Office #: 101 | 304-710-3480 |  
cashier@mctc.edu

## **Pay Your Tuition**

Pay your tuition bill by the due date. Pay online or set up a payment plan through the Cashier's Office. You may pay in-person at the Cashier's Office by cash, check or money order. Debit/credit card payments are accepted online by logging into myMCTC.

Payments may also be mailed to Office of Business Services,  
ATTN: Cashier's Office, Mountwest Community & Technical  
College, PO Box 1539, Huntington, WV 25716-1539

Contact: Cashier's Office | Office #: 101 | 304-710-3480 |  
cashier@mctc.edu

## **Activate Your HigherOne Card**

If you are receiving financial aid you will receive a HigherOne card in the postal mail. After you receive your card, activate your it using the provided instructions, and select your refund preference to receive funds disbursed from Financial Aid.

Contact: Cashier's Office | Office #: 101 | 304-710-3480 |  
cashier@mctc.edu

## **Important Dates**

Check the Academic Calendar for important dates, print your final class schedule after all changes are complete through myMCTC and attend your classes!

# TUITION AND FEES

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## TUITION AND FEES

Mountwest and its governing board reserve the right to change fees and rates without prior notice. For current information regarding tuition and fees, please log onto the Mountwest Business Services Cashier's Office website at: [www.mctc.edu/administration/business\\_services/cashiers\\_office](http://www.mctc.edu/administration/business_services/cashiers_office).

## PAYMENT OF FEES

Tuition and fees are due and payable to the Mountwest Business Services Office cashiering area in accordance with the due dates shown on any student billing statement, along with any due dates posted in the Mountwest office and website. If the student does not pay tuition and fees on or before the due date, his or her registration may be subject to a late fee, canceled or the student may be subject to withdrawal from Mountwest. (See Withdrawal/Reinstatement Policy) All bills will be sent electronically to the student's Mountwest email address. It is the students' responsibility to know when tuition and fees are due and to pay them by that time.

Student deferred payment plans for tuition and fees will be offered for the fall and spring semester. All available financial aid for the term must be credited to the student's account prior to determining the amount available for deferral. Students must come in person to the Mountwest Business Services Cashier's Office to sign up for deferred payment plans prior to any official due date.

Students may pay tuition and fees in person or online at [www.mctc.edu/myMCTC](http://www.mctc.edu/myMCTC). Payments of cash and check only are accepted in person at the Mountwest Business Services Office cashiering area.

A student's registration is not complete until all tuition and fees are paid. Registration may be canceled if the bank does not honor the student's check or electronic check for payment of registration fees. A charge of \$25 will be assessed for each check returned unpaid by the bank.

A student who has a financial obligation to Mountwest cannot engage in any registration activity until the obligation is satisfied. Should the obligation remain unpaid and require assignment to a state-authorized collection agency, the student additionally will be responsible for all collection costs incurred by the institution.

## WITHDRAWAL/REINSTATEMENT POLICY FOR NONPAYMENT OF ENROLLMENT FEES

- Upon notice from the Mountwest Business Services Office, the Mountwest Registrar will initiate a complete withdrawal for a student not paying fees. The withdrawal will be classified as "Administrative –Nonpayment of Enrollment".
- If the student fulfills the financial obligation, the Mountwest Business Services Office will notify the Vice President of Student Services. The dean will have discretion to approve registration.
- A student who owes a financial obligation to Mountwest will not be permitted to enroll in subsequent semesters or terms until the obligation is paid.
- If a student disputes an administrative withdrawal, for financial obligations he/she may file an appeal with the Vice President of Student Services.

## REFUND PROCEDURES

Tuition and fees will be refunded during according to schedule. The schedule is below. For current information regarding refunding please log onto the Mountwest Business Services Cashier's Office website at: [www.mctc.edu/administration/business-services/cashiers-office/](http://www.mctc.edu/administration/business-services/cashiers-office/).

- Official complete withdrawals from all classes course Schedule.
- Students who are denied admission, declared academically ineligible to return, or are unable to return for medical reasons, may be refunded on a prorated basis.
- Refunds of tuition and fees to students called to armed services will be processed in accordance with military orders.
- When it becomes necessary to cancel a class by administrative and/or faculty action, a student is granted a full refund of the tuition and fee for the class canceled unless he or she registers in another course of like value in terms of semester hours. This action does not apply to disciplinary action or withdrawals due to nonpayment of financial obligations.
- A student who is required to withdraw from the institution for disciplinary reasons is not entitled to refunds.

# TUITION AND FEES

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## REFUND SCHEDULE

The following schedule for calculating refunds shall be adhered to for those students who withdraw from the institution via the official withdrawal process and are eligible to receive funds.

### **Academic Year (Fall and Spring)**

- **90% Refund** - Changes processed during the first and second week of classes.
- **70% Refund** - Changes processed during the third and fourth week of classes.
- **50% Refund** - Changes processed during the fifth and sixth weeks of classes.
- **No Refund** - Any changes beginning with the seventh week of classes.

### **Summer Term, Non-Traditional Periods and 8 Week Classes**

- **90% Refund** - Changes processed during the first three days of classes (up to 13% of the term)
- **70% Refund** - Changes processed during the fourth through sixth day of classes (from 14% to 25% of the term)
- **50% Refund** - Changes processed during the seventh through ninth day of classes (from 26% to 38% of the term)
- **No Refund** - Any changes processed after the tenth day of classes (after 38% of term complete)

Should the percentage calculation identify a partial day, the entire day will be included in the refund period. Mountwest Community & Technical College's governing board will reserve the right to change refund schedules without prior notice.

**IMPORTANT:** Please note that it is the student's responsibility to contact advising to drop courses in order to ensure they receive proper notice of withdrawal. Students who do not officially withdraw from courses according to procedures will be liable for fees incurred. Refunds if due will be processed.

The refund schedule is promulgated by Legislative Rule, Title 135, West Virginia Council for Community & Technical College Education, Series 32, Tuition and Fees, § 135-32-6, Refunds, and Mountwest Community & Technical College Institutional Board of Governors, Policy No. F - 7, Assessment

# TUITION AND FEES

## FALL 2014 - SUMMER 2015

	On-Campus Per Hour	Off-Campus Per Hour	On-Campus 12+ Hours						
<b>WV Resident</b>	\$146.70	\$156.70	\$1,760.40						
<b>Metro*</b>	\$254.00	\$264.00	\$3,048.00						
<b>Non-Resident</b>	\$372.75	\$382.75	\$4,473.00						
<p>*Metro area includes the following counties: In Ohio: Gallia, Jackson, Lawrence, Meigs, Pike and Scioto; In Kentucky: Carter, Elliot, Floyd, Greenup, and Johnson</p> <p>The following Kentucky Reciprocity counties are assessed at WV Resident rates: Boyd, Lawrence, Martin and Pike. Students living in these counties must coordinate with the Mountwest Financial Aid Office to guarantee their status for reciprocity rates.</p>									
<p><b>Additional fees may apply for specific programs and courses.</b> Please call Mountwest Business Services Cashier's Office for details.</p>									
<p><b>Registration fees:</b></p> <table><tr><td>Late Registration/Payment Fee</td><td>25.00</td></tr><tr><td>Online Course Fee</td><td>\$155.00/credit hour</td></tr><tr><td>Reinstatement Fee</td><td>\$25.00</td></tr></table>				Late Registration/Payment Fee	25.00	Online Course Fee	\$155.00/credit hour	Reinstatement Fee	\$25.00
Late Registration/Payment Fee	25.00								
Online Course Fee	\$155.00/credit hour								
Reinstatement Fee	\$25.00								
<p><b>Graduation fees:</b></p> <p>(non-refundable but if graduation requirements are not completed, the fee will carry over to subsequent graduation with no need to reapply)</p> <table><tr><td>Associate Degree</td><td>\$40.00</td></tr><tr><td>Diploma Replacement</td><td>\$20.00</td></tr></table>				Associate Degree	\$40.00	Diploma Replacement	\$20.00		
Associate Degree	\$40.00								
Diploma Replacement	\$20.00								

# TUITION AND FEES

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## FALL 2014 – REFUND SCHEDULE

Tuition refunds for students who officially withdraw through the Registrar's office will be made according to the following schedule for complete withdrawals only. Personal payment refunds will not be processed until 21 days after they are posted.

After the late registration/schedule adjustment period for a term closes, a student must completely withdraw from all registered courses in order to receive any refund of tuition and fees. The college will no longer refund the tuition and fees from individual classes dropped after the late registration/schedule adjustment period ends.

<b>FALL SEMESTER AUG 24 – DEC 11, 2014</b>	<b>Regular courses</b>	<b>1st 8 weeks courses</b>	<b>2nd 8 weeks courses</b>
100% tuition credit	Through Aug 24	Through Aug 24	Through Oct 14
90% tuition credit for complete withdrawals	Aug 25 – Sept 04	Aug 25 – Aug 28	Oct 15 – Oct 21
70% tuition credit for complete withdrawals	Sept 05 – Sept 18	Aug 29 – Sept 04	Oct 22 – Oct 28
50% tuition credit for complete withdrawals	Sept 19 – Oct 03	Sept 05 – Sept 18	Oct 29 – Nov 03

## SPRING 2015 – REFUND SCHEDULE

<b>SPRING SEMESTER JAN 12 – MAY 7, 2015</b>	<b>Regular courses</b>	<b>1st 8 weeks courses</b>	<b>2nd 8 weeks courses</b>
100% tuition credit	Through Jan 11	Through Jan 11	Through Mar 03
90% tuition credit for complete withdrawals	Jan 12 – Jan 22	Jan 12 – Jan 15	Mar 04 – Mar 09
70% tuition credit for complete withdrawals	Jan 23 – Feb 05	Jan 16 – Jan 22	Mar 10 – Mar 16
50% tuition credit for complete withdrawals	Feb 06 – Feb 19	Jan 23 – Feb 02	Mar 17 – Mar 26

## SUMMER 2015 – REFUND SCHEDULE

<b>SUMMER SESSIONS MAY 18 – JUL 23 2015</b>	<b>Summer A</b>	<b>Summer B</b>	<b>Summer C</b>
100% tuition credit	Through May 17	Through May 17	Through Jun 21
90% tuition credit for complete withdrawals	May 18 – May 21	May 18 – May 21	Jun 22 – Jun 25
70% tuition credit for complete withdrawals	May 22 – Jun 01	May 22 – May 25	Jun 26 – Jun 29
50% tuition credit for complete withdrawals	Jun 02 – Jun 11	May 26 – Jun 01	Jun 30 – Jul 06

\*The late registration/schedule adjustment period is defined as the first week of classes in the Fall and Spring semesters, and typically the first day of classes for each summer session. A class week starts on Monday and ends on Thursday. The next day (Friday) starts the next week of classes in a semester.

Mountwest Community & Technical College Institutional Board Of Governors  
Policy No. F - 7, Assessment, Collection, And Refund of Student Tuition And Fees

### 5 Refund Policy of Student Tuition and Fees

5.1 Except for students receiving Title IV financial assistance, students who officially withdraw during a semester in the academic year shall receive a refund of regular fees in accordance with the following schedule.

#### 5.1.1 Academic Year (Semester)

- |  |               |
|--|---------------|
| - During the first and second weeks 90% refund | (Mon-Thurs)   |
| - During the third and fourth weeks 70% refund | (Fri – Thurs) |
| - During the fifth and sixth weeks 50% refund  | (Fri – Thurs) |
| - Beginning with the seventh week No refund    | (Fri – Thurs) |

#### 5.1.2 Summer Terms and Nontraditional Periods

Refunds for summer sessions and nontraditional periods shall be established based upon the refund rate for the academic year and calculated using the following schedule

- During the first 13% of the term 90% refund
- From 14% to 25% of the term 70% refund
- From 26% to 38% of the term 50% refund
- After 38% of term is completed No refund

# TUITION AND FEES

## On-Campus Courses

### WV RESIDENT

WV Resident	1	2	3	4	5	6	7	8	9	10	11	12
Resident Total	146.70	293.40	440.10	586.80	733.50	880.20	1026.90	1173.60	1320.30	1467.00	1613.70	1760.40
Allied Health Total/Resident	153.37	306.74	460.11	613.48	766.85	920.22	1073.59	1226.96	1380.33	1533.70	1687.07	1840.40
Business Tech Total/Resident	150.03	300.06	450.10	600.13	750.16	900.20	1050.23	1200.26	1350.30	1500.33	1650.36	1800.40
Culinary Arts Total/Resident	155.45	310.90	466.35	621.80	777.25	932.70	1088.15	1243.60	1399.05	1554.50	1709.95	1865.40
Paralegal Total/Resident	150.95	301.90	452.85	603.80	754.75	905.70	1056.65	1207.60	1358.55	1509.50	1660.45	1810.40
Paramedic Science Fee/Resident	159.20	318.40	477.60	636.80	796.00	955.20	1114.40	1273.60	1432.80	1592.80	1751.20	1910.40

### NON-RESIDENT

Non-Resident	1	2	3	4	5	6	7	8	9	10	11	12
Non-Resident Total	372.75	745.50	1118.82	1491.20	1863.75	2236.50	2609.25	2982.00	3354.75	3727.50	4100.25	4473.00
Allied Health Total/Non-Resident	379.42	758.84	1138.26	1517.68	1897.10	2276.52	2655.94	3035.36	3414.78	3794.20	4173.62	4553.00
Business Tech Total/Non-Resident	376.08	752.16	1128.25	1504.33	1880.41	2256.50	2632.58	3008.66	3384.75	3760.83	4136.91	4513.00
Culinary Arts Total/Non-Resident	381.50	763.00	1144.50	1526.00	1907.50	2289.00	2670.50	3052.00	3433.50	3815.00	4196.50	4578.00
Paralegal Total/Non-Resident	377.00	754.00	1131.00	1508.00	1885.00	2262.00	2639.00	3016.00	3393.00	3770.00	4147.00	4523.00
Paramedic Science Fee/Non-Resident	385.25	770.50	1155.75	1541.00	1926.25	2311.50	2696.75	3082.00	3467.25	3852.50	4237.75	4623.00

### METRO

Metro	1	2	3	4	5	6	7	8	9	10	11	12
Metro Total	254.00	508.00	762.00	1016.00	1270.00	1524.00	1778.00	2032.00	2286.00	2540.00	2794.00	3048.00
Allied Health Total/Metro	260.67	521.34	782.01	1042.68	1303.35	1564.02	1824.69	2085.36	2346.03	2606.70	2867.37	3128.00
Business Tech Total/Metro	257.33	514.66	772.00	1029.33	1286.66	1544.00	1801.33	2058.66	2316.00	2573.33	2830.66	3088.00
Culinary Arts Total/Metro	262.75	525.50	788.25	1051.00	1313.75	1576.50	1839.25	2102.00	2364.75	2627.50	2890.25	3153.00
Paralegal Total/Metro	258.25	516.50	774.75	1033.00	1291.25	1549.50	1807.75	2066.00	2324.25	2582.50	2840.75	3098.00
Paramedic Science Total/Metro	266.50	533.00	799.50	1066.00	1332.50	1599.00	1865.50	2132.00	2398.50	2665.00	2931.50	3198.00

### E-COURSE\*

Metro	1	2	3	4	5	6	7	8	9	10	11	12
E-Course Total	155.00	310.00	465.00	620.00	775.00	930.00	1085.00	1240.00	1395.00	1550.00	1705.00	1860.00

\* E-Course rates are a per credit hour rate with no maximum hours. The information above for 1-12 hours is for an example, but E-Course fees are charged at the standard rate of \$155/credit hour for all credit hours of E-Courses.

\*\* Kentucky Reciprocity Counties assessed at WV Resident rates: Boyd, Lawrence, Martin and Pike. Students living in Kentucky Reciprocity counties must coordinate with Mountwest Financial Aid to guarantee their status for the Reciprocity rates.

Metro Area includes the following counties: Ohio - Gallia, Jackson, Lawrence, Meigs, Pike and Scioto

Kentucky - Carter, Elliot, Floyd, Greenup and Johnson

Please direct any questions to the Business Services Cashier's Office at: cashier@mctc.edu



# TUITION AND FEES

## Off-Campus Courses

### WV RESIDENT

WV Resident	1	2	3	4	5	6	7	8	9	10	11	12
Resident Total	156.70	313.40	470.10	626.80	783.50	940.20	1096.90	1253.60	1410.30	1567.00	1723.70	1880.40
Allied Health Total/Resident	163.37	326.74	490.11	653.48	816.85	980.22	1143.59	1306.96	1470.33	1633.70	1797.07	1960.40
Business Tech Total/Resident	160.03	320.06	480.10	640.13	800.16	960.20	1120.23	1280.26	1440.30	1600.33	1760.36	1920.40
Culinary Arts Total/Resident	165.45	330.90	496.35	661.80	827.25	992.70	1158.15	1323.60	1489.05	1654.50	1819.95	1985.40
Paralegal Total/Resident	160.95	321.90	482.85	643.80	804.75	965.70	1126.65	1287.60	1448.55	1609.50	1770.45	1930.40
Paramedic Science Fee/Resident	169.20	338.40	507.60	676.80	846.00	1015.20	1184.40	1353.60	1522.80	1692.00	1861.20	2030.40

### NON-RESIDENT

Non-Resident	1	2	3	4	5	6	7	8	9	10	11	12
Non-Resident Total	382.75	765.50	1148.25	1531.00	1913.75	2296.50	2679.25	3062.00	3444.75	3827.50	4210.25	4593.00
Allied Health Total/Non-Resident	389.42	778.84	1168.26	1557.68	1947.10	2336.52	2725.94	3115.36	3504.78	3894.20	4283.62	4673.00
Business Tech Total/Non-Resident	386.08	772.16	1158.25	1544.33	1930.41	2316.50	2702.58	3088.66	3474.75	3860.83	4246.91	4633.00
Culinary Arts Total/Non-Resident	391.50	783.00	1174.50	1566.00	1957.50	2349.00	2740.50	3132.00	3523.50	3915.00	4306.50	4698.00
Paralegal Total/Non-Resident	387.00	774.00	1161.00	1548.00	1935.00	2322.00	2709.00	3096.00	3483.00	3870.00	4257.00	4643.00
Paramedic Science Fee/Non-Resident	395.25	790.50	1185.75	1581.00	1976.25	2371.50	2766.75	3162.00	3557.25	3952.50	4347.75	4743.00

### METRO

Metro	1	2	3	4	5	6	7	8	9	10	11	12
Metro Total	264.00	528.00	792.00	1056.00	1320.00	1584.00	1848.00	2112.00	2376.00	2640.00	2904.00	3168.00
Allied Health Total/Metro	270.67	541.34	812.01	1082.68	1353.35	1624.02	1894.69	2165.36	2436.03	2706.70	2977.37	3248.00
Business Tech Total/Metro	267.33	534.66	802.00	1069.33	1336.66	1604.00	1871.33	2138.66	2406.00	2673.33	2940.66	3208.00
Culinary Arts Total/Metro	272.75	545.50	818.25	1091.00	1363.75	1636.50	1909.25	2182.00	2454.75	2727.50	3000.25	3273.00
Paralegal Total/Metro	268.25	536.50	804.75	1073.00	1341.25	1609.50	1877.75	2146.00	2414.25	2682.50	2950.75	3218.00
Paramedic Science Total/Metro	276.50	553.00	829.50	1106.00	1382.50	1659.00	1935.50	2212.00	2488.50	2765.00	3041.50	3318.00

### E-COURSE\*

Metro	1	2	3	4	5	6	7	8	9	10	11	12
E-Course Total	155.00	310.00	465.00	620.00	775.00	930.00	1085.00	1240.00	1395.00	1550.00	1705.00	1860.00

\* E-Course rates are a per credit hour rate with no maximum hours. The information above for 1-12 hours is for an example, but E-Course fees are charged at the standard rate of \$155/credit hour for all credit hours of E-Courses.

\*\* Kentucky Reciprocity Counties assessed at WV Resident rates: Boyd, Lawrence, Martin and Pike. Students living in Kentucky Reciprocity counties must coordinate with Mountwest Financial Aid to guarantee their status for the Reciprocity rates.

Metro Area includes the following counties: Ohio - Gallia, Jackson, Lawrence, Meigs, Pike and Scioto  
Kentucky - Carter, Elliot, Floyd, Greenup and Johnson

Please direct any questions to the Business Services Cashier's Office at: cashier@mctc.edu

# FINANCIAL AID

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## FIRST STEPS TO APPLY FOR FINANCIAL AID

A student must be admitted to Mountwest and enrolled as a regular student in an eligible program before he or she can receive any financial aid. To apply for needs-based financial aid, a student (and parent, if applicable) must complete a Free Application for Federal Student Aid (FAFSA) available online at [www.fafsa.ed.gov](http://www.fafsa.ed.gov). A student must submit the FAFSA to be considered for all available resources including institutional waivers, scholarships, grants, loans and student employment. A processing fee is not required for the FAFSA.

The FAFSA determines family ability to meet the cost of the student's education, which, in turn, determines "financial need." Electronically submit the FAFSA as soon after January 1 as possible to receive consideration for programs with limited funding. Application deadline for West Virginia Higher Education Grant Program is March 1.

The federal application processor will send an acknowledgment to the student and will submit the data to Mountwest upon student request. Mountwest's Title IV Institutional Code is 040414.

## NEEDS-BASED AID

*Types of financial assistance:*

**Grants/Scholarships** – Student assistance that does not have to be repaid, available from a number of sources.

**Work Study** – Employment opportunities for students with financial aid eligibility, based upon need and institutional funding.

**Loans** – Student assistance that must be repaid upon graduation or dropping at or below half-time enrollment.

## FINANCIAL ASSISTANCE PROGRAMS AT MOUNTWEST

**Federal Pell Grant** – available to full- and part-time students. Applicants must complete the FAFSA.

**Federal Supplemental Educational Opportunity Grant (SEOG)** – (available to full- and part-time students) priority is given to Pell Grant recipients. Applicants must complete the FAFSA.

**West Virginia Higher Education Grant Program** – (for full-time students who are West Virginia residents). Applicants must complete the FAFSA. Details are available on the West Virginia Higher Education Policy Commission Web site, [www.hepc.wvnet.edu](http://www.hepc.wvnet.edu).

**West Virginia Higher Education Adult Part-time Student (HEAPS) Grant Program** – Awarded to eligible part-time students taking no fewer than six hours or more than eleven semester hours and who have been West Virginia residents for 12 months immediately preceding the date of HEAPS Grant application. All applicants must complete the FAFSA. Details on HEAPS can be found at [www.hepc.wvnet.edu](http://www.hepc.wvnet.edu).

## FEDERAL WORK STUDY

Under the Federal Work Study, eligible students enrolled at least half-time can work part-time to earn money for educational purposes. Students earn at least the current federal minimum wage and can work until the total amount reaches a preset level. Applicants must complete FAFSA. Employment and/or positions are not guaranteed for all those who qualify or for all those who apply. Priority is given to students in on-campus, community service and literacy program positions. Mountwest has a separate application process as funds are limited. See Mountwest's Office of Financial Aid for details.

## FEDERAL STUDENT LOANS

**Federal Direct Stafford Subsidized Loan** – need-based loans (borrowed money that must be repaid, with interest, just like car loans and home mortgages) for students enrolled for at least six hours in a term. Applicant must complete the FAFSA and have unmet financial need. A variable interest rate is set annually, not to exceed 8.25%.

**Federal Direct Stafford Unsubsidized Loan** – for students enrolled for at least six credit hours who have not had their expenses met through other financial aid. Applicants must complete the FAFSA. Loan amounts, interest rates and repayment conditions are the same as for the Federal Direct Stafford Subsidized Loan. However, interest payments on this loan accrue from the time the loan is disbursed until it is paid in full.

All first-time borrowers are required complete an interactive Entrance counseling interview at [www.dl.ed.gov](http://www.dl.ed.gov). Entrance interviews are designed to familiarize the borrower with his or her rights and responsibilities. All first-time borrowers are required to complete a Master Promissory Note at [www.dlennote.ed.gov/emprn/index.jsp](http://www.dlennote.ed.gov/emprn/index.jsp)

Loan proceeds cannot be distributed a student completes these requirements.

Repayment begins six months after graduation or after enrollment drops to fewer than six hours. All borrowers are required to an interactive Exit counseling interview at [www.dl.ed.gov](http://www.dl.ed.gov).

# FINANCIAL AID

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## MAXIMUM ANNUAL LOAN AMOUNTS

<b>First Year, Dependent</b>	\$ 5,500
<i>No more than \$ 3,500 may be subsidized.</i>	
<b>First Year, Independent</b>	\$ 9,500
<i>No more than \$ 3,500 may be subsidized.</i>	
<b>Second Year, Dependent</b>	\$ 6,500
<i>No more than \$ 4,500 may be subsidized.</i>	
<b>Second Year, Independent</b>	\$ 10,500
<i>No more than \$ 4,500 may be subsidized.</i>	

## MAXIMUM TOTAL DEBT FROM STAFFORD LOANS

<b>Dependent Undergraduate</b>	\$ 31,000
<i>No more than \$ 23,000 may be subsidized.</i>	
<b>Independent Undergraduate</b>	\$ 57,500
<i>No more than \$ 23,000 may be subsidized.</i>	

**Federal Direct PLUS Loan** – for parents of dependent students. Loans are only for the expenses of education that other aid doesn't cover. Applicants must complete a Parent Loan Data Sheet. An applicant with an adverse credit history is denied per program regulations.

**Federal Work Study Program** – for qualified students who will be assigned jobs on campus and paid twice each month for work done. The student can work until the total amount reaches a preset level. Applicants must complete FAFSA and work-study application.

## STATE-SPONSORED TUITION WAIVERS AND SCHOLARSHIPS

**West Virginia PROMISE Scholarships** – The West Virginia PROMISE Scholarship Program is available to West Virginia high school graduates meeting eligibility standards. More details are available at [www.hepc.wvnet.edu](http://www.hepc.wvnet.edu) or by calling toll-free: 1-877-987-7664.

## TUITION WAIVERS AND SCHOLARSHIPS AT MOUNTWEST

Mountwest requires a separate, annual application for institutional funds including Tuition Waivers and Scholarships. Incoming freshmen and transfer students are not automatically considered for scholarship assistance based upon admission records.

**State-Mandated Tuition Waivers** – The State of West Virginia mandates tuition be waived for certain classifications of students. See Mountwest's Office of Financial Aid for specific requirements.

## METRO AREA FEES

**Kentucky** – Carter, Elliott, Floyd, Greenup and Johnson counties

**Ohio** – Gallia and Lawrence

**Reciprocity** – Boyd, Lawrence, Martin and Pike counties in Kentucky

\*Rates apply to persons residing in these counties

## SATISFACTORY ACADEMIC PROGRESS

Federal regulations require Mountwest to have a written policy for reviewing students' progress toward attaining their certificate or degree.

To continue to be eligible for FSA funds, a student must make satisfactory academic progress. Mountwest checks degree and certificate-seeking students' progress at the end of each academic term. Mountwest's SAP policy requires students to maintain a cumulative GPA of 2.00, complete at least 67% of all hours they attempt, and not exceed attempting 150% of the credit hours required for their credential. See Mountwest's Office of Financial Aid for a complete description.

## RETURN OF TITLE IV FUNDS

Federal regulations require Mountwest to have a written policy for the refund and repayment of federal aid received by students who withdraw during a term for which they receive payment. These policies are effective only if a student completely terminates enrollment (i.e., cancels his/her registration, withdraws, or is dismissed) or stops attending classes before completing 60% or more of the enrollment period.

Students planning to terminate enrollment at Mountwest must contact the Mountwest Registrar, to complete the appropriate paperwork. Adjustments to tuition and/or applicable institutional room/board charges resulting from official terminations are based on the effective date of termination and in accordance with the federally mandated calculation as specified in Section 484B of the Higher Education Act.

This law also specifies the order of return of Title IV funds to the programs from which they were awarded. The calculation is based on the period of enrollment completed. That percentage is computed by dividing the total number of calendar days in the term into the number of calendar days completed as of the date of student notification. The percentage of Title IV assistance to which the student is

# FINANCIAL AID

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entitled (has “earned”) is equal to this percentage of the term completed up to 60%. If the termination occurs after 60% of the term is completed, the percentage is equal to 100%.

The amount of Title IV aid which must be returned is based on the percentage of “unearned” aid. That percentage is computed by subtracting earned aid from 100%.

Mountwest is required to return the lesser of 1) the unearned aid percentage applied to institutional charges or 2) the unearned aid percentage applied to the total Title IV aid received.

The student is required to return the difference between the amount of unearned aid and the amount returned by the college. Mountwest will bill the student for the amount the student owes the Title IV programs and/or any amount due the college resulting from the return of Title IV funds used to cover college charges, including collection costs. If the student (or parent(s) in the case of PLUS loan) is required to return a portion or all of his or her loan proceeds, the calculated amount is to be repaid according to the loan's terms. Students must return only half the amount of grant funds calculated as a repayment due.

***Funds are returned to the following Title IV sources in order of priority:***

1. Unsubsidized Federal Direct Loans
2. Subsidized Federal Direct Loans
3. Federal Perkins Loans
4. Federal Direct PLUS Loans
5. Federal Pell Grants
6. Academic Competitiveness Grant
7. National Smart Grant
8. Federal SEOG

## IMPORTANT WEBSITES

Mountwest	<a href="http://www.mctc.edu">www.mctc.edu</a>
West Virginia Higher Education Policy Commission	<a href="http://www.hepc.wvnet.edu">www.hepc.wvnet.edu</a>
FAFSA	<a href="http://www.fafsa.ed.gov">www.fafsa.ed.gov</a>
PIN	<a href="http://www.pin.ed.gov">www.pin.ed.gov</a>
FSA Programs	<a href="http://www.FederalStudentAid.ed.gov">www.FederalStudentAid.ed.gov</a>
Direct Stafford Loans	<a href="http://www.ed.gov/DirectLoan">www.ed.gov/DirectLoan</a>

## IMPORTANT PHONE NUMBERS

Main	1 (866) 676-5533
Mountwest Student Services Office of Financial Aid	(304) 710-3140 1 (866) 676-5533
FSAIC ( <i>Federal Student Aid Information Center</i> )	1 (800) 433-3243
Direct Loan Direct Loan Servicing	1 (800) 848-0979
West Virginia Higher Education Policy Commission	1 (877) 987-7664

# MILITARY, VETERANS AND DEPENDENTS

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## COMPLIANCE WITH MILITARY SELECTIVE SERVICE ACT

State law provides that a male person who has attained the age of eighteen (18) years may not enroll in a state-supported institution of postsecondary education unless he is in compliance with the Military Selective Service Act (50 U.S. Code, Appendix 451, et. eq. and the amendments thereto). Also, a male person may not receive a loan, grant, scholarship, or other financial assistance for postsecondary higher education funded by state revenue, including federal funds or gifts and grants accepted by this state, or receive a student loan guaranteed by the state unless he is in compliance with the Military Selective Service Act.

## Service Members Opportunity Colleges

Mountwest Community and Technical College is an institutional member of Service Members Opportunity Colleges (SOC), a group of over 1800 colleges and universities providing postsecondary education to members of the military throughout the world. As an SOC member, Mountwest recognizes the unique nature of the military and has committed itself to easing the transfer of relevant course credits, providing flexible academic residency requirements, and crediting learning from appropriate military training and experiences.

## Training Credit

The Commission on Accreditation of Service Experiences of the American Council on Education has developed equivalence credit recommendations for educational experiences in the Armed Forces. This is credit in addition to that awarded for physical education. Veterans should contact the Military Programs Coordinator for evaluation of their armed services educational experiences and should submit the Joint Services Transcript (JST) or CCAF transcript by bringing a copy to the Office of Military Programs. JST transcript request forms are available in the Office of Military Programs or can be retrieved at the secure website <https://jst.doded.mil/official.html>.

## Residency

An individual who is on full-time active military service in another state or a foreign country or an employee of the federal government shall be classified as an in-state student for the purpose of payment of tuition and fees: Provided, that the person established a domicile in West Virginia prior to entrance into federal service, entered the federal service from West Virginia, and has at no time while in federal service claimed or established a domicile in another state. Sworn statements attesting to these conditions may be required. The spouse and dependent children of such individuals shall also be classified as in-state students for tuition and fee purposes. Dependents of deployed service members

shall be classified an in-state student for the purpose of payment of tuition and fees: Provided, the dependent applied to Mountwest during the period of the spouse's/parent's deployment and deployment orders are provided.

## Military, Veterans and Dependents

Persons assigned to full-time active military service in West Virginia and residing in the state shall be classified as in-state students for tuition and fee purposes. The spouse and dependent children of such individuals shall also be classified as in-state students for tuition and fee purposes.

Veterans participating in Vocational Rehabilitation (VOCREHAB) through the Department of Veterans Affairs shall be classified as an in-state student for the purpose of payment of tuition and fees only for the period of participation within the VOCREHAB program. Recruits entering any branch of the military and participating in the Military Recruit Concurrent Admissions Program shall be classified as an in-state student for the purpose of payment of tuition and fees. Recruiters from all branches of the military participating in the Recruiter Education Incentive Program shall be classified as an in-state student for the purpose of payment of tuition and fees.

## Called To or Volunteered for Active Duty

Service members called to or volunteering for active duty missions will be granted the following:

1. If the student meets  $\frac{3}{4}$  of the term, they will receive their grade as it stands on the  $\frac{3}{4}$  mark.
2. If the student does not reach the  $\frac{3}{4}$  point of the term, they will be backdated out of the term and all Tuition Assistance paid will be reimbursed to the entity that paid it.
3. Upon return from active duty, the student will be able to continue with their degree pursuit as if they had never left the institution.

## Contact Information

Richard Gross, Military Programs Coordinator  
Phone: (304) 710-3416  
Email: [gross1@mctc.edu](mailto:gross1@mctc.edu)

# WORKFORCE DEVELOPMENT

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## DEPARTMENT OF WORKFORCE DEVELOPMENT

The Department of Workforce Development offers a wide range of short-term, non-credit, skills training that can provide you or your family members with opportunities for professional development and personal enrichment. Call (304) 710-3512 for more information on these and other training programs offered through the Department of Workforce Development at Mountwest Community & Technical College. Or visit [www.mctc.edu](http://www.mctc.edu) for more information on current course schedules, costs, or a complete listing of professional development and personal enrichment classes.

**Get your career moving with skill set training through the Department of Workforce Development. Your success is our success!**

## Department of Workforce Development Overview

Mountwest Community & Technical College is the training provider of choice for professional development, industry-recognized training solutions, and personal enrichment. The Department of Workforce Development at Mountwest Community & Technical College connects businesses and workforce professionals to traditional and nontraditional training solutions that meet the continual change in economic conditions, technology, government mandates, and community needs.

## Customized Training

The Workforce Solutions Department provides customized training to business and industry. It proactively assists business in identifying organizational goals, training needs, and appropriate solutions to keep pace with changes. The Department also provides added value by assisting businesses in the identification of collaboration and grant opportunities through its involvement in local, statewide and national organizations dedicated to economic and workforce development. Staff of the Workforce Solutions Department design training programs that meet the specific working environment skill sets and knowledge needed by entrepreneurs, industry, agencies or professional organizations. The Department provides research capability, technical assistance, training and linkage to other resources and funding as needed. Services include assessment of training needs, identification of organizational goals, gaps that can be corrected by training, prioritization of training needs, and delivery and evaluation of training. Cost-effective training is provided by Mountwest Community & Technical College staff or contracted training specialists at a time and place convenient to the customer.

## Fluid Power Training Program

This is a 240 contact hour, 3 module training program that teaches students the basics of pneumatics and hydraulics in the industrial field. Fluid Power Module I, includes the Fundamentals of Hydraulics, Fluid Power Module II includes

the Fundamentals of Pneumatics, and Fluid Power Module III includes, Principles of Maintenance, Repair, and Hydraulics and Pneumatics: Troubleshooting. This course will be taught at the Spring Valley Academic Career Center. Cost is \$6,000 for all three modules.

## Electrical Training Program

A 240 contact hour, 3 module training program that teaches students the basics of electricity and electronics. Basic Electricity Module includes: Atomic structure and electron theory, electrical quantities, Ohm's Law, AC/DC circuit analysis, Alternating Current theory, and introduction to transformers. In the Motors and Generators Module students apply the material learned in Basic Electricity to study: AC polyphase motors, AC single phase motors, DC Machines, and transformer arrangements. The third module is Basic Electronics which allows students to move into multiple careers such as industrial electronics technicians, PLC techs, robotics maintenance specialists, or industrial process instrumentation technicians. The curriculum for this module includes: the diode, power supplies, transistors, IGBT's, integrated circuits, operational amplifiers, encoders and decoder, digital computer fundamentals. This course will be taught at the Spring Valley Academic Career Center. Cost is \$6,000 for all three modules.

For more information contact Dr. Harry Faulk or visit: [www.mctc.edu](http://www.mctc.edu).

## Industry-Recognized Skill Set Training and Certifications

The rapidly changing demands placed on business require continuous improvement and training to stay current and competitive in a global economy. The Workforce Solutions Department insures quality training by developing and implementing training solutions that meet local, state and national certification requirements of industry and government agencies. The following specific skill set training, preparatory classes, testing and assessments prepare individuals for occupational licensures and certifications required by local, state and national government agencies and industry.

## Inland Waterways Academy

The Inland Waterways Academy provides entry-level training and more than 20 U.S. Coast Guard-approved licensure-training programs for the inland maritime industry.

West Virginia Fast Track Jobs Programs – The Division of Workforce Development Fast Track Jobs Programs meet the requirements for 90 days or less training that leads to immediate, direct employment in industry. The programs are:

- Deckhand Basic Training
- Bank Teller Program
- Medical Billing and Coding Program

Other training programs can be developed as needed.

# WORKFORCE DEVELOPMENT

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## **Preparatory Classes**

Preparatory classes are taught at multiple locations for ACT, SAT, LSAT, GRE and other special personal and professional tests.

## **WORKFORCE SOLUTIONS**

### **Mission Statement**

The Workforce Solutions Department at Mountwest Community & Technical College extends credit and noncredit courses for professional improvement, workforce development and personal enrichment to the community and beyond.

The driving forces in today's ever-changing economy are information and technology. These forces are so dominant and the advancements so continuous that "lifelong learning" has become a requirement for continued employment, qualifying for promotions or just for personal enrichment. The Continuing Education Program offers a wide range of instructor-led professional development and enrichment workshops, classes and seminars at convenient times. Continuing education classes are offered at the Huntington, Mason County, Teays Valley and Charleston campuses and are formatted as short courses, seminars, conferences, and workshops. The Workforce Solutions staff facilitates the identification of desired performance levels expected of professionals in the workforce. Workforce Solutions partners with highly qualified instructors that implement training solutions that improve individual performance. Many of the professional development courses include earning credit toward one-year Certificate, two-year Associate Degrees or Continuing Education Units that may be required by professional associations. Personal enrichment courses are also offered.

### **Continuing Education Units**

The Workforce Solutions Department provides Continuing Education Units (CEU) Certificates for courses that meet the educational requirements required by government or industry organizations. Continuing Legal Education (CLE) units and other types of CEU's are provided to meet the educational requirements of associations and industries.

## **Preparatory Classes**

A wide range of classes is provided to help individuals prepare for entrance tests, licensures and exams required by industry, education and government agencies. Some examples are educational prep classes for ACT, SAT, LSAT and GRE entrance exams. Industry prep classes include WorkKeys, ASE, CDR and NMTCB. The Workforce Solutions Department strives to provide quality educational opportunities that meet the professional development and certification needs of entrepreneurs, industry, agencies or professional organizations, as well as the personal enrichment needs of individuals. For more information, call (304) 710-3512 or visit [www.mctc.edu](http://www.mctc.edu)





# Liberal Arts & Transfer Division



BOARD OF GOVERNORS  
GENERAL EDUCATION/TRANSFER  
ADVERTISING  
INTERNET JOURNALISM  
PUBLIC RELATIONS  
RADIO TELEVISION PRODUCTION MANAGEMENT  
AMERICAN SIGN LANGUAGE  
CHILD DEVELOPMENT SPECIALIST  
EARLY CHILDHOOD EDUCATION  
PUBLIC LIBRARY TECHNOLOGY

# GENERAL EDUCATION

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## BOARD OF GOVERNORS ASSOCIATE IN APPLIED SCIENCE

### **Program Description:**

The Board of Governors Associate in Applied Science Degree is designed to assist adult learners to meet occupational goals, employment requirements, establish professional credentials, or achieve personal goals. This degree provides Mountwest Community & Technical College a mechanism to deliver educational programs to nontraditional students desiring to complete their post-secondary education.

This program is available to nontraditional students who have graduated from high school two or more years prior to enrollment. For those students who earned their GED certificate, program application must be at least two years from the date their class would have graduated from high school.

This degree requires participants to complete a minimum of 12 credit hours from a regionally accredited institution of higher education of which three (3) credits hours must be earned at Mountwest Community & Technical College with a letter grade of "C" or higher .

Those students desiring to develop specific job skills may opt to earn their degree in an 'Area of Emphasis.' To be eligible for an 'Area of Emphasis' students must complete 15 credit hours of work in an approved occupational concentration . For more information on available 'Area of Emphasis' for this degree, contact the program coordinator at (304) 710-3414.

Students must meet all admission and performance standards. Credits earned through portfolios, military credits, challenge exams, special assessment of licensure/certifications, formal training programs; and CLEP and DANTES exams will be placed on the transcript the semester that the credits are evaluated and awarded. Students must have a GPA of 2 .0 or above to graduate.

The student who graduates with the Board of Governors Associate in Applied Science will possess:

- Ability to work collaboratively in groups
- Computer software skills
- Communication skills
- Critical thinking skill
- Job skills in an optional area of emphasis

The Board of Governors Associate in Applied Science will seamlessly articulate with the West Virginia Board of Regents Bachelor of Arts Degree and the Bachelor of Applied Science Degree.

# GENERAL EDUCATION

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## BOARD OF GOVERNORS ASSOCIATE IN APPLIED SCIENCE

MAJOR CODE - CG30

Component I: General Education Courses

Communications	3
Communications	3
Mathematics or Science	3
Mathematics or Science	3
Computer Literacy (EDGE)	3
Social Science or Humanities	3
Social Science or Humanities	3

Component II: General Electives 39

This component may consist of credit hours from the following options: Area of Emphasis; portfolio course (TS 101) credits, CLEP and DANTES exams, military credits, challenge exams, special assessment of licensure/certifications/formal training programs, transfer and residential course work, and capstone course .

**Hours required for graduation<sup>1, 2</sup>: 60**

### **Earn a Degree and Graduate Early (EDGE):**

This program provides students the opportunity to receive credit for their high school EDGE courses.

### **Contact Information:**

Jenna Parker • Room 255 • Phone: (304) 710-3414 or 1-866-N-ROLLED (1-866-676-5533) • E-mail: [parker54@mctc.edu](mailto:parker54@mctc.edu)  
Steven Brown, Dean • Room 229A • Phone: (304) 710-3393 or 1-866-N-ROLLED (1-866-676-5533)  
E-mail: [brown175@mctc.edu](mailto:brown175@mctc.edu)

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1. Graduation requires a minimum institutional cumulative grade point average of 2.0.
  2. At least twelve credits completed at regionally accredited institutions. The last fifteen credit hours must be completed at Mountwest Community & Technical College to establish an institutional GPA and academic residency.

# GENERAL EDUCATION

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## GENERAL/TRANSFER STUDIES ASSOCIATE IN APPLIED SCIENCE

### **Program Description:**

A degree in General/Transfer Studies can establish the foundation for a lifetime of continual learning and serve as the framework for a productive professional and personal life. This degree is for the student who:

- Is planning to earn a baccalaureate degree at a four-year institution
- Has educational needs not covered by more specific technical programs
- Finds access to the main campus for instruction physically challenging
- Is not ready to declare a major

The degree requires 61 credit hours of General Education core transferable courses and provides the student with a broad background in written and oral communication, humanities, social science, and sciences/mathematics.

### **Career Outlook:**

Many businesses and industries seek well-rounded employees whose maturity level, communication skills and decision-making skills are a step above those of traditional high school graduates. The Associate of Arts Degree in Transfer Studies provides graduates with enhanced work skills without requiring the larger commitment of time or money necessary for a bachelor's degree. This degree is ideal for currently employed high school graduates who need a college degree to advance in their positions.

### **Earn a Degree and Graduate Early (EDGE):**

This program provides students the opportunity to receive credit for their high school EDGE courses.

### **Contact Information:**

Linda Vinson • Room 325 • Phone: (304) 710-3454 or 1-866-N-ROLLED (1-866-676-5533) • E-mail: [vinson@mctc.edu](mailto:vinson@mctc.edu)

# GENERAL EDUCATION

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## GENERAL/TRANSFER STUDIES ASSOCIATE IN APPLIED SCIENCE

### MAJOR CODE - CG10

General Education Component (all of the following are required)

COL 101	New Student Seminar	3
COM 112	Oral Communication	3
COM 125	Interpersonal Communication	3
ENL 111	Written Communication	3
ENL 115	Written Communication II	3
HMN 235	Leadership Development Studies <sup>1</sup> (Capstone)	3
MAT 120	Applied Professional Mathematics	3
PSYC 200	General Psychology <sup>1</sup>	3
SS 210	Fundamentals of Sociology <sup>1</sup>	3

Humanities (choose a minimum of 6 hours from the following)

ART 101	Introduction to Visual Arts	3
ENL 201	Introduction to Literature	3
ENL 245	Elements of the Short Story <sup>5</sup>	3
HMN 120	Introduction to Theatre	3
MUSI 101	Introduction to Music	3

Mathematics (choose a minimum of 3 hours from the following)

MAT 145	Applications in Algebra <sup>4</sup>	3
MAT 205	Technical Calculus <sup>4</sup>	3

Natural Science (choose a minimum of 4 hours from the following)

BIOL 101/101L	General Biology with Laboratory <sup>1, 6</sup>	4
BIOL 260	Applied Human Anatomy <sup>7</sup>	4
BIOL 265	Applied Human Physiology <sup>8</sup>	4
SCI 110	Introductory Physics <sup>9</sup>	4
SCI 201	Integrated Science <sup>10</sup>	4

Social Science (choose a minimum of 9 hours from the following)

EC 102	Basic Economics	3
EC 201	Fundamentals of Microeconomics	3
EC 202	Fundamentals of Macroeconomics	3
GEO 155	Economic Geography <sup>1</sup>	3
GEO 250	Global Issues <sup>1</sup>	3
HIST 103	U.S. History to 1877 <sup>1</sup>	3
HIST 104	U.S. History since 1877 <sup>1</sup>	3
HIST 114	World History until 1500 <sup>1</sup>	3
HIST 115	World History since 1500 <sup>1</sup>	3
POLS 101	Introduction to American Government <sup>1</sup>	3
PSYC 215	Lifespan Psychology <sup>1</sup>	3
SS 201	Human Relations <sup>1</sup>	3

#### Other

COM 130	Mass Communication and Culture <sup>1</sup>	3
ENL 231	Business & Technical Writing <sup>3</sup>	3

The remaining 12 hours may be selected from any of the courses listed above. **Hours required for graduation: 61**

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1. BIOL 101, COM 125, COM 130, GEO 155, GEO 250, HIST 103, HIST 104, HIST 114, HIST 115, HMN 235, POLS 101, PSYC 215, and SS 201 have a prerequisite of REA 098 or placement in 100-level reading.
  2. ENL 111 has a prerequisite of ENL 095 or placement in 100-level English, and REA 098 or placement in 100-level reading.
  3. ENL 115 and ENL 231 have a prerequisite of ENL 111 or COM 111.
  4. MAT 120, MAT 145, and MAT 205 have a prerequisite of MAT 096, MAT 097, or placement in 100-level mathematics.
  5. ENL 201 and ENL 245 have a prerequisite of ENL 115.
  6. BIOL 101 and BIOL 101L are corequisites.
  7. BIOL 260 has a prerequisite of BIOL 257 or BIOL 258.
  8. BIOL 265 has a prerequisite of BIOL 257, BIOL 258 or BIOL 260.
  9. SCI 110 has a prerequisite of MAT 120, MAT 135, or MAT 145.
  10. SCI 201 has a prerequisite of MAT 145 or MAT 150.

# COMMUNICATION

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## ADVERTISING CONCENTRATION

### **Program Description:**

This program will provide graduates with an associate's degree that will lead to a bachelor's degree in Advertising. This major prepares students to create advertisements, plan and execute media buys, and complete campaigns. The advertising major trains students for agency work, including publicizing products and services for companies and organizations.

### **Career Outlook:**

Overall employment of advertising, marketing, promotions, public relations, and sales managers is expected to increase by 13 percent through 2018.

### **Salary Forecast:**

For the most current salary information please refer to the Bureau of Labor Statistics "Occupational Outlook Handbook" found at [www.bls.gov/ooh/](http://www.bls.gov/ooh/).

### **Employment Opportunities:**

- Advertising and promotions managers
- Marketing and sales managers
- Public relations managers

# COMMUNICATION

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## ADVERTISING CONCENTRATION

### MAJOR CODE - CG11

ART 101	Introduction to Visual Arts	3
COL 101	New Student Seminar	3
ENL 111	Written Communication <sup>1</sup>	3
HIST 103	U.S. History to 1877 <sup>2</sup>	3
MAT 120	Applied Professional Mathematics <sup>3</sup>	3
PSYC 200	General Psychology <sup>2</sup>	3
COM 112	Oral Communication	3
COM 130	Mass Communication <sup>2</sup>	3
BIOL 101/10	L General Biology with Lab <sup>2</sup>	4
ENL 115	Written Communication <sup>4</sup>	3
MK 130	Fundamentals of Marketing	3
ENL 201	Introduction to Literature <sup>5</sup>	3
HIST	History Elective (any U.S. History)	3
MK 210	Customer Service <sup>6</sup>	3
SCI 201	Integrated Science: Health, Law & Env. <sup>7</sup>	4
SPAN 101	Introductory Spanish <sup>8</sup>	3
COM 230	Principles of Public Relations <sup>2</sup>	3
EC 201	Fundamentals of Microeconomics	3
HMN 235	Leadership Dev. Studies <sup>9,10</sup>	3
MK 130	Fundamentals of Marketing	3
SPAN 102	Introductory Spanish II <sup>11</sup>	3

**Hours required for graduation: 65**

### Earn a Degree and Graduate Early (EDGE):

This program provides students the opportunity to receive credit for their high school EDGE courses.

### Contact Information:

Kendra Bolen • Room 313 • Phone: (304) 710-3445 or 1-866-N-ROLLED (1-866-676-5533) • E-mail: [burdell1@mctc.edu](mailto:burdell1@mctc.edu)

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1. ENL 111 has a prerequisite of ENL 095, or placement in 100-level English and REA 098, or placement in 100-level reading.
  2. COM 230, BIOL 101, and HIST 103 have a prerequisite of REA 098 or placement in 100-level reading.
  3. MAT 120 has a prerequisite of MAT 096 or placement in 100-level mathematics.
  4. ENL 115 has a prerequisite of ENL 111.
  5. ENL 201 has a prerequisite of ENL 115.
  6. MK 210 has a prerequisite of COM 112.
  7. SCI has a prerequisite of MAT 145, or MAT 120, or MAT 150.
  8. SPAN 101 has a prerequisite of ENL 095 or placement in 100-level English and REA 098, or placement 100-level reading.
  9. HMN 235 has a prerequisite of ENL 111, and REA 098 or placement in 100-level reading.
  10. HMN 235 is the capstone course for this program and should be taken during the student's final term.
  11. SPAN 102 has a prerequisite of SPAN 101.

# COMMUNICATION

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## INTERNET JOURNALISM CONCENTRATION

### **Program Description:**

The degree in Internet Journalism will provide the graduate with an associate's degree which will lead to a bachelor's degree in Online Journalism. This major prepares students by teaching web publishing, web design, and visual imaging.

### **Career Outlook:**

Job opportunities will be best for applicants in the expanding world of new media, such as online newspapers or magazines. Small local papers and news stations also will provide greater job prospects for potential reporters and news analysts. For beginning newspaper reporters, freelancing will supply more opportunities for employment as well.

### **Salary Forecast:**

For the most current salary information please refer to the Bureau of Labor Statistics "Occupational Outlook Handbook" found at [www.bls.gov/ooh/](http://www.bls.gov/ooh/).

### **Employment Opportunities:**

- News analysts
- Reporters
- Correspondents



# COMMUNICATION

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## INTERNET JOURNALISM CONCENTRATION

MAJOR CODE - CG12

ART 101	Introduction to Visual Arts	3
COL 101	New Student Seminar	3
EC 111	Fundamentals of Microeconomics	3
ENL 111	Written Communication <sup>1</sup>	3
MAT 120	Applied Professional Mathematics <sup>3</sup>	3
PSYC 200	General Psychology <sup>2</sup>	3
BIOL 101/101 L General Biology with Lab <sup>3</sup>		4
COM 112	Oral Communication	3
COM 130	Mass Communication and Culture <sup>3</sup>	3
ENL 115	Written Communication <sup>4</sup>	3
GEO 155	Economic Geography <sup>3</sup>	3
ENL 201 Introduction to Literature <sup>5</sup>		3
HIST 103	U .S. History to 1877 <sup>3</sup>	3
IT 101	Fundamentals of Computers	3
SCI 201	Integrated Science: Health, Law & Env. <sup>6</sup>	4
SPAN 101	Introductory Spanish I <sup>1</sup>	3
COM 230 Principles of Public Relations <sup>3</sup>		3
HIST	History Elective <sup>7</sup>	3
HMN 235	Leadership Dev. Studies <sup>8,9</sup>	3
IT 250	Intro to American Government <sup>3</sup>	3
SPAN 102	Introductory Spanish II <sup>11</sup>	3

**Hours required for graduation: 68**

### Earn a Degree and Graduate Early (EDGE):

This program provides students the opportunity to receive credit for their high school EDGE courses.

### Contact Information:

Kendra Bolen • Room 313 • Phone: (304) 710-3445 or 1-866-N-ROLLED (1-866-676-5533) • E-mail: [burdell1@mctc.edu](mailto:burdell1@mctc.edu)

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1. ENL 111, and SPAN 101 have a prerequisite of ENL 095, or placement in 100-level English and REA 098, or placement in 100-level reading.
  2. MAT 120 has a prerequisite of MAT 096 or placement in 100-level mathematics.
  3. BIOL 101, COM 130, COM 230, GEO 155, HIST 104, POLS 101, and PSYC 200 have a prerequisite of REA 098 or placement in 100-level reading.
  4. ENL 115 has a prerequisite of ENL 111.
  5. ENL 201 has a prerequisite of ENL 115.
  6. SCI 201 has a prerequisite of MAT 120, or MAT 145, or MAT 150.
  7. Student can choose from HIST 104, HIST 114, or HIST 115.
  8. HMN has a prerequisite of ENL 111 and REA 098, or placement in 100-level reading.
  9. HMN 235 is the capstone course for this program and should be taken during the student's final term.
  10. IT 250 has a prerequisite of IT 101 or IT 102.
  11. SPAN 102 has a prerequisite of SPAN 101.

# COMMUNICATION

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## PUBLIC RELATIONS CONCENTRATION

### **Program Description:**

This program will provide graduates with an associate's degree that will lead to a bachelor's degree in Public Relations. This major prepares students to prepare media releases, publications, and speeches and create campaigns. Graduates will be able to manage and counsel companies/organizations in building and improving their relations with their various publics.

### **Career Outlook:**

Employment of advertising, promotions, and marketing managers is expected to grow 14 percent from 2010 to 2020, as fast as the average for all occupations. Advertising, promotions and marketing will continue to be essential for organizations as they seek to maintain and expand their share of the market.

### **Salary Forecast:**

For the most current salary information please refer to the Bureau of Labor Statistics "Occupational Outlook Handbook" found at [www.bls.gov/ooh/](http://www.bls.gov/ooh/).

### **Employment Opportunities:**

- Advertising
- Promotions
- Marketing

# COMMUNICATION

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## PUBLIC RELATIONS CONCENTRATION

MAJOR CODE - CG13

ART 101	Introduction to Visual Arts	3
COL 101	New Student Seminar	3
ENL 111	Written Communication <sup>1</sup>	3
HIST 103	U.S. History to 1877 <sup>2</sup>	3
MAT 120	Applied Professional Mathematics <sup>3</sup>	3
PSYC 200	General Psychology <sup>2</sup>	3
BIOL 101/101 L General Biology with Lab <sup>2</sup>		4
COM 112	Oral Communication	3
COM 130	Mass Communication and Culture <sup>3</sup>	3
ENL 115	Written Communication <sup>4</sup>	3
MK 130	Fundamentals of Marketing	3
ENL 201 Introduction to Literature <sup>5</sup>		3
HIST	History Elective (any U.S. History)	3
MK 210	Customer Service <sup>6</sup>	3
SCI 201	Integrated Science: Health, Law & Env. <sup>7</sup>	4
SPAN 101	Introductory Spanish I <sup>8</sup>	3
COM 230 Principles of Public Relations <sup>2</sup>		3
EC 201	Fundamentals of Microeconomics	3
HMN 235	Leadership Dev. Studies <sup>8,9</sup>	3
MK 279	Advertising Merchant	3
SPAN 102	Introductory Spanish II <sup>11</sup>	3

**Hours required for graduation: 65**

### Earn a Degree and Graduate Early (EDGE):

This program provides students the opportunity to receive credit for their high school EDGE courses.

### Contact Information:

Kendra Bolen • Room 313 • Phone: (304) 710-3445 or 1-866-N-ROLLED (1-866-676-5533) • E-mail: [burdell1@mctc.edu](mailto:burdell1@mctc.edu)

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1. ENL 111 has a prerequisite of ENL 095, or placement in 100-level English and REA 098, or placement in 100-level reading.
  2. BIOL 101, HIST 104, COM 130, and PSYC 200 have a prerequisite of REA 098, or placement in 100-level reading.
  3. MAT 120 has a prerequisite of MAT 096, or placement in 100-level mathematics.
  4. ENL 115 has a prerequisite of ENL 111.
  5. ENL 201 has a prerequisite of ENL 115.
  6. MK 210 has a prerequisite of COM 112.
  7. SCI 201 has a prerequisite of MAT 145, or MAT 150, or MAT 120.
  8. SPAN 101 has a prerequisite of ENL 095, or placement in 100-level English.
  9. HMN 235 has a prerequisite of ENL 111 and REA 098, or placement in 100-level reading.
  10. HMN 235 is the capstone course for this program and should be taken during the student's final term.
  11. SPAN 102 has a prerequisite of SPAN 101.

# COMMUNICATION

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## RADIO/TELEVISION PRODUCTION MANAGEMENT

### **Program Description:**

This program will provide graduates with an associate's degree that will lead to a bachelor's degree in Radio/Television Production Management. The degree in Radio/Television Production Management will provide the graduate with an AA degree which will lead to a bachelor's degree in Radio/Television Production management. This major prepares students to manage radio and television broadcast operations. Students learn production, programming, and sales and management techniques.

### **Career Outlook:**

Employment is expected to grow about as fast as the average through 2018. But people seeking entry-level jobs as technicians in broadcasting are expected to face keen competition in major metropolitan areas. Prospects are expected to be better in the small cities and town.

### **Salary Forecast:**

For them most current salary information please refer to the Bureau of Labor Statistics "Occupational Outlook Handbook" found at [www.bls.gov/ooh/](http://www.bls.gov/ooh/).

### **Employment Opportunities:**

- Audio and video equipment technicians
- Broadcast technicians
- Sound engineering technicians
- Radio operations
- Electrical and electronics installers and repairers
- Engineering technicians
- Science technicians
- Communications equipment operators

# COMMUNICATION

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## RADIO/TELEVISION PRODUCTION MANAGEMENT

MAJOR CODE - CG14

AC 103	Introduction to Accounting <sup>1</sup>	3
ART 101	Introduction to Visual Arts	3
COL 101	New Student Seminar	3
ENL 111	Written Communication <sup>2</sup>	3
MAT 120	Applied Professional Mathematics <sup>3</sup>	3
PSYC 200	General Psychology <sup>1</sup>	3
AC 201	Financial Accounting 1 <sup>4</sup>	3
BIOL 101/101 L	General Biology with Lab <sup>1</sup>	4
COM 112	Oral Communication	3
COM 130	Mass Communication <sup>1</sup>	3
ENL 115	Written Communication <sup>5</sup>	3
ENL 201	Introduction to Literature <sup>6</sup>	3
HIST 103	U .S. History to 1877 <sup>1</sup>	3
MK 130	Fundamentals of Marketing	3
SCI 201	Integrated Science: Health, Law & Env. <sup>7</sup>	4
SPAN 101	Introductory Spanish I <sup>8</sup>	3
COM 230	Principles of Public Relations <sup>1</sup>	3
EC 201	Fundamentals of Microeconomics	3
POLS 101	Intro to Am. Gov. <sup>1</sup>	3
HMN 235	Leadership Dev. Studies <sup>9,10</sup>	3
SPAN 102	Introductory Spanish II <sup>11</sup>	3

**Hours required for graduation: 68**

### Earn a Degree and Graduate Early (EDGE):

This program provides students the opportunity to receive credit for their high school EDGE courses.

### Contact Information:

Kendra Bolen • Room 313 • Phone: (304) 710-3445 or 1-866-N-ROLLED (1-866-676-5533) • E-mail: [burdell1@mctc.edu](mailto:burdell1@mctc.edu)

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1. AC 103, PSYC 200, BIOL 101, COM 130, COM 230, and HIST 103 have a prerequisite of REA 098 or placement in 100-level reading.
  2. ENL 111 has a prerequisite of ENL 095, or placement in 100-level English, and REA 098 or placement in 100-level reading.
  3. MAT 120 has a prerequisite of MAT 096, or placement in 100-level mathematics.
  4. AC 201 has a prerequisite of AC 103
  5. ENL 115 has a prerequisite of ENL 111.
  6. ENL 201 has a prerequisite of ENL 115.
  7. SCI 220 has a prerequisite of MAT 145, or MAT 150, MAT 120.
  8. SPAN 101 has a prerequisite of ENL 095 and REA 098, or placement in 100-level reading.
  9. HMN has a prerequisite of ENL 111 and REA 098, or placement in 100-level reading.
  10. HMN 235 is the capstone course for this program and should be taken during the student's final term.
  11. SPAN 102 has a prerequisite of SPAN 101.

# HUMAN SERVICES & EDUCATION

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## AMERICAN SIGN LANGUAGE ASSOCIATE IN APPLIED SCIENCE

### Program Description:

This program is designed to give students a foundation in American Sign Language (ASL) and to acquaint them with basic issues of concern to the Deaf community. Furthermore, the program offers an opportunity to individuals already working in the Deaf community to increase their understanding of ASL and Deaf culture in order to strengthen their knowledge and their communication skills. Upon completion of the Associate of Applied Science Degree in American Sign Language, the graduate will be able to:

- Effectively communicate with Deaf individuals in an informal setting such as teaching, human services, or health care;
- Enhance their credentials for employment opportunities which do not require interpreter certification but do assign value to skills in ASL and knowledge of Deaf culture;
- Earn the academic qualifications for entry into advanced studies at universities offering sign language programs;
- Enter an interpreter training program, after which they may sit for a certification examination, sponsored by the national licensing organization.

### Career Outlook:

American Sign Language skills are needed by professionals in public and private agencies and educational settings serving the Deaf/Hard of Hearing People (e.g. teachers, counselors, consultants, therapists, specialists) by enhancing their ability to understand and communicate with the Deaf/Hard of Hearing People (<http://www.aslta.org/language/index.html>).

In addition, sign language interpreting is a rapidly expanding field. Schools, government agencies, and private businesses employ interpreters. Interpreters work in a variety of settings including medical, legal, religious, mental health, rehabilitation, performing arts, and business. Part-time, full-time, freelance and salaried positions are available in most metropolitan areas across the country.

### Salary Forecast:

For the most current salary information please refer to the Bureau of Labor Statistics "Occupational Outlook Handbook" found at [www.bls.gov/ooh/](http://www.bls.gov/ooh/).

### Employment Opportunities:

- Enter an Interpreter Training Program, after which they may sit for certification examination, sponsored by the national licensing organization.
- Seek employment with an early intervention program that serves Deaf and Hard of Hearing children.
- A background in ASL and Deaf Studies will be useful in absolutely every field of employment.

### Additional Information:

Other individuals that can benefit from this program are parents of Deaf/Hard of Hearing People children and young hearing children, early childhood teachers and child care providers, teacher, paraprofessionals, speech/language pathologists, counselors, interpreters, and medical professionals.

# HUMAN SERVICES & EDUCATION

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## AMERICAN SIGN LANGUAGE

### MAJOR CODE – CA50

ASL 101	American Sign Language <sup>1</sup>	3
ASL 101L	ASL Lab 1	1
ASL 105	American Deaf Community <sup>1</sup>	3
COL 101	New Student Seminar	2
ENL 111	Written Communication <sup>1</sup>	3
IT 101	Fundamentals of Computers	3
ASL 102	American Sign Language II <sup>2</sup>	3
ASL 102L	ASL Lab II	1
ASL 103	Fingerspelling	3
ASL 110	American Deaf Culture	3
PSYC 215	Lifespan Psychology <sup>1</sup>	3
COM 112/125	Oral Communication or Interpersonal Communication	3
ASL 201	American Sign Language III <sup>4</sup>	3
ASL 201L	ASL Lab III	
ASL 205	American Deaf Community History <sup>5</sup>	3
ASL 220	Resources for the Deaf Community	3
MAT 120	Applied Professional Mathematics	3
ASL 202	American Sign Language IV <sup>6</sup>	3
ASL 201L	ASL Lab IV	1
ASL 210	Deaf People in American History <sup>7</sup>	3
ASL 290	Applied Issues Concerning Deaf Community <sup>8</sup>	3

**Hours required for graduation: 62**

### Earn a Degree and Graduate Early (EDGE):

This program provides students the opportunity to receive credit for their high school EDGE courses.

### Contact Information:

Leigh-Ann Brewer • Room 319 • Phone: (304) 710-3451 or 1-866-N-ROLLED (1-866-676-5533)

E-mail: [brewer13@mctc.edu](mailto:brewer13@mctc.edu)

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1. ASL 101, ASL 105, ENL 111, PSYC 215, SS 201 and SS 210 have a prerequisite of REA 098, or placement in 100-level reading.
  2. ASL 102 has a prerequisite of ASL 101.
  3. ENL 115 has a prerequisite of COM 111, ENL 111, or ENG 101.
  4. ASL 201 has a prerequisite of ASL 101 and ASL 102.
  5. ASL 205 has a prerequisite of ASL 105.
  6. ASL 202 has prerequisites of ASL 101, ASL 102, and ASL 201.
  7. ASL 210 has prerequisites of ASL 105, ASL 110, and ASL 205.
  8. ASL 290 has prerequisites of ASL 101, ASL 102, ASL 105, ASL 110, ASL 115, ASL 201, ASL 205 and ASL 220.
  9. Students may complete the three credit requirement with a second 100-level mathematics course or select from the following: SCI 101, SCI 120 or SCI 201.

Please note that all students must receive a "C" or better in all program courses.

# HUMAN SERVICES & EDUCATION

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## CHILD DEVELOPMENT SPECIALIST ASSOCIATE IN APPLIED SCIENCE

### Program Description:

The Occupational Developmental Degree in Child Development Specialist is designed to meet two major needs:

- (1) To provide for cooperatively sponsored educational opportunities leading to the Associate in Applied Science degree for students in approved apprenticeship training programs;
- (2) To provide a mechanism for Mountwest Community & Technical College to deliver educational programs to individuals employed in the Child Development field.

The United States Department of Labor, Bureau of Apprenticeships and Training (BAT) identify eligible apprenticeships. Components of the program include the following: general education courses, classroom instruction in child development, and on-the-job training.

Occupational Development students must meet all admission and performance standards. Credits earned through either approved apprenticeship programs or through industry-based education and training programs will not be added to the students' collegiate transcripts until they have completed three program credit hours from Mountwest Community & Technical College and have obtained at least a 2.00 GPA.

The Occupational Development Degree in Child Development Specialist will prepare the student for employment in daycare centers, Head Start Programs, and other early childhood learning centers. The Child Development Specialist graduate will possess:

- Supervisory skills.
- Computer software skills.
- Relevant essential math skills.
- Written and oral communication skills.

### Career Outlook:

High replacement needs should create good job opportunities for childcare workers. Many childcare workers must be replaced each year as they leave the occupation to take other jobs, to meet family responsibilities, or for other reasons. Qualified persons who are interested in this work should have little trouble finding and keeping a job. Opportunities for nannies should be especially good, as many workers prefer not to work in other people's homes.

### Salary Forecast:

For the most current salary information please refer to the Bureau of Labor Statistics "Occupational Outlook Handbook" found at [www.bls.gov/ooh/](http://www.bls.gov/ooh/).

### Employment Opportunities:

- Child care
- Child care supervisor



# HUMAN SERVICES & EDUCATION

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## CHILD DEVELOPMENT SPECIALIST<sup>1,2</sup>

MAJOR CODE – C012

ENL 111	Written Communication <sup>3</sup>	3
COM 112	Oral Communication <sup>3</sup>	3
IT 101	Fundamentals of Computers (EDGE)	3
	General Education Elective	3
	Laboratory Science Course <sup>4</sup>	3-4
	Quantitative Skills Course <sup>4</sup>	3
	Social Science Course <sup>5</sup>	3
	Occupational Component Elective <sup>2</sup>	7
	Classroom Training in Child Development <sup>6</sup>	20

**Hours required for graduation: 60**

### Earn a Degree and Graduate Early (EDGE):

This program provides students the opportunity to receive credit for their high school EDGE courses.

### Contact Information:

Sarah Dick • Room 321 • Phone: (304) 710-3452 or 1-866-N-ROLLED (1-866-676-5533) • E-mail: [crouse@mctc.edu](mailto:crouse@mctc.edu)

1. Students may enter this program with no prior experience, but must complete approved Child Development Apprenticeship before being eligible for graduation.
2. Child Development Associate (CDA) may fulfill 12 credit hours of electives in Occupational Component Electives, otherwise contact advisor for selecting courses to fulfill this requirement.
3. Fulfills Mountwest General Education and State Communication Skills requirement for Occupational Development Degree. ENL 111 has a prerequisite of REA 098, or placement in 100-level reading.
4. Six total Quantitative Skills/Laboratory Science Experience credits are required for Occupational Development Degree and General Education Core. At least one college-level mathematics course must be selected from: MAT 115; MAT 145; or MAT 120. Students may complete the six credit requirement with a second college-level mathematics course or select a laboratory science course from the following: SCI 110; SCI 120; or SCI 201.
5. To fulfill Social Science Course requirements for Occupational Development and General Education Core Degree select from EC 102 SS 201, SS 210, PSYC 200, or PSYC 215.
6. Must provide documentation of West Virginia Department of Education and the Bureau of Apprenticeship and Training "Child Development Specialist" 1. completion to have credit recorded immediately prior to graduation.
7. Students must complete a minimum of 3 credit hours with Mountwest Community & Technical College to establish academic residency.
8. A letter must be received from employer to verify this employment.
9. Maximum of 2,400 contact hours of on-the-job training, converted to credit hours on a ratio of 200:1, can be counted toward the A .A .S . Degree.
10. A letter verifying completion of contact hours must be received by the Dean's Office, located in the Mountwest Community & Technical College Building, Room 321 prior to applying for graduation for credit to be awarded.

# HUMAN SERVICES & EDUCATION

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## EARLY CHILDHOOD EDUCATION ASSOCIATE IN APPLIED SCIENCE

### **Program Description:**

The Associate in Applied Science in Early Childhood Education degree consists of 61 credit hours and is approximately one half of the curriculum required for a Bachelor of Arts in Education. The degree is designed to allow the holder to serve in a support capacity including, but not limited to, facilitating instruction and direct or indirect supervision of pupils under the direction of an educator. This program is designed to allow a seamless transfer to the baccalaureate degree at Marshall University.

### **Career Description:**

Childcare workers nurture and care for children who have not yet entered formal schooling and also work with older children in before and after school situations. These workers play an important role in a child's development by caring for the child when parents are at work or away for other reasons. In addition to attending to children's basic needs, childcare workers organize activities that stimulate children's physical, emotional, intellectual, and social growth. They help children explore individual interests, develop talents and independence, build self-esteem, and learn how to get along with others.

As childcare workers gain experience, some may advance to supervisory or administrative positions in large childcare centers or preschools. Often, these positions require additional training, such as a bachelor's or master's degree. Other workers move on to work in resource and referral agencies, consulting with parents on available child services. A few workers become involved in policy or advocacy work related to child care and early childhood education. With a bachelor's degree, workers may become preschool teachers, become certified to teach in public or private schools, or even set up their own childcare businesses.

### **Career Outlook:**

High replacement needs should create good job opportunities for childcare workers. Qualified persons who are interested in this work should have little trouble finding and keeping a job. Employment of childcare workers is projected to increase about as fast as the average for all occupations through the year 2014. The number of women in the labor force of childbearing age and the number of children less than five years of age are both expected to rise over the next 10 years. There is also an increasing emphasis on early childhood education programs. There is likely to be a rise in private preschool enrollment as the value of formal education before kindergarten becomes more widely accepted.

### **Salary Forecast:**

For the most current salary information please refer to the Bureau of Labor Statistics "Occupational Outlook Handbook" found at [www.bls.gov/ooh/](http://www.bls.gov/ooh/).

### **Employment Opportunities:**

- Childcare workers
- Child day care services
- Preschool employment

# HUMAN SERVICES & EDUCATION

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## EARLY CHILDHOOD EDUCATION

### MAJOR CODE – CE30

COL 101	New Student Seminar	2
EDUC 101	Healthy Environments <sup>1,*</sup>	3
EDUC 105	Comp Instruction Technology in Classroom	3
EDUC 120	Foundations of Early Childhood <sup>2,*</sup>	3
ENL 111	Written Communication <sup>3</sup>	3
EME 101	CPR/First Aid*	1
COM 112	Oral Communication	3
EDUC 210	Observation Assess. of Young Children	3
EDUC 220	Infant & Toddler Development	3
EDUC 225	Development of Young Children <sup>4,*</sup>	3
EDUC 270	Level I Clinical Experience <sup>5</sup>	2
ENL 115	Written Communication II <sup>6</sup>	3
ART 101	Art Appreciation	3
EDUC 275	Level II Clinical Experience <sup>7</sup>	1
EDUC 295	Early Childhood Curriculum & Methods <sup>8</sup>	3
EME 105	First on Scene*	3
MAT 120	Applied Professional Mathematics <sup>9</sup>	3
PSYC 215	Lifespan Psychology <sup>1</sup>	3
EDUC 215	Child, Family, and Community	3
EDUC 261	The Exceptional Child <sup>10</sup>	3
EDUC 299	Capstone <sup>11</sup>	4
SCI 201	Integrated Science <sup>12</sup>	4

**Hours required for graduation: 62**

### Earn a Degree and Graduate Early (EDGE):

This program provides students the opportunity to receive credit for their high school EDGE courses.

### Contact Information:

Sarah Dick • Room 321 • Phone: (304) 710-3452 or 1-866-N-ROLLED (1-866-676-5533) • E-mail: [crouse@mctc.edu](mailto:crouse@mctc.edu)

1. EDUC 101 and PSYC 125 has a prerequisite of REA 098, or placement in 100-level reading.
2. EDUC 120 has a prerequisite of ENL 094 and/or 095, or placement in 100-level English.
3. ENL 111 has a prerequisite of ENL 095, or placement in 100-level English, and REA 098, or placement in 100-level reading.
4. EDUC 210, EDUC 215, EDUC 220, EDUC 225 have a prerequisite of ENL 111 and a grade of "C" or better in EDUC 120.
5. EDUC 225 has a corequisite of EDUC 270 and a prerequisite of EDUC 120 and ENL 111.
6. EDUC 270 has a corequisite of EDUC 225 or PSYC 215 for ACDS students.
7. ENL 115 has a prerequisite of ENL 111.
8. EDUC 230 has a prerequisite of ENL 111 & EDUC 225.
9. EDUC 275 has a corequisite of EDUC 295.
10. EDUC 295 has a prerequisite of ENL 111, and a grade of "C" or better in EDUC 225 and EDUC 275.
11. MAT 120 has a prerequisite of MAT 096, or MAT 097, or placement in 100-level math.
12. EDUC 261 has prerequisites of EDUC 225 and ENL 115.
13. EDUC 299 has a prerequisite of EDUC 295, and by permission.
14. SCI 201 has a prerequisite of MAT 145 or MAT 120.

\* Only students who began Apprenticeship Child Development Specialist classes fall 2002 or later will receive credit for these courses upon completion of their certificate.

# HUMAN SERVICES & EDUCATION

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## PUBLIC LIBRARY TECHNOLOGY ASSOCIATE IN APPLIED SCIENCE

### **Program Description:**

The Public Library Technology Program provides critical and comprehensive training for individuals interested in a career in libraries and covers topics such as cataloging and technical services, library technology, children's and adult programming and services, and collection development, in addition to the general education skills needed to work in a library environment. An increased use of electronic resources in libraries enables library technicians to perform tasks once performed by professional librarians. Because opportunities will be best for those with specialized postsecondary library training, the PLT Program prepares workers for current trends in the library field to meet more sophisticated information and computer literacy needs. This program is available 100% online so individuals in rural locations and around the country can take these courses without having to leave their libraries or their homes.

### **Career Outlook:**

Job opportunities are favorable as retirements among baby boomers between now and 2012 will impact a significant portion of the estimated 113,000 workers employed as library technicians nationally. In 2006, the US Department of Labor reported an estimated 8% increase in jobs available to library employees pursuing paraprofessional positions in public and academic library settings over the next decade. West Virginia employs over 450 individuals in this job category.

### **Salary Forecast:**

For the most current salary information please refer to the Bureau of Labor Statistics "Occupational Outlook Handbook" found at [www.bls.gov/ooh/](http://www.bls.gov/ooh/).

### **Program Admission Requirements:**

The college adheres to an open admissions policy which means applicants with a high school diploma or a GED are eligible for admission. Applicants with neither a high school diploma nor a GED may be admitted on a conditional basis.

### **Educational Opportunities:**

Once a student completes the Associate of Applied Science Transfer Studies Program, they can move into a bachelor's degree program, then progress to the Master's in Library Science program-the terminal credential required of most professional librarians. Median annual earnings of professional librarians holding an American Library Association accredited Master's in Library Science degree as of May 2006 were \$49,060. The middle 50 percent earned between \$39,250 and \$60,800. The lowest 10 percent earned less than \$30,930, and the highest 10 percent earned more than \$74,670.

Notes: All Public Library Technology classes are offered online and are included in the course schedule on a rotating basis; PLT courses are offered in an 8 week format unless otherwise specified; course substitutions or an independent study option can be made for PLT majors in lieu of some courses if they are not available; PLT course may be taken in any sequence unless a prerequisite is noted.

### **Employment Opportunities:**

- Library assistants
- Library technicians

# HUMAN SERVICES & EDUCATION

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## PUBLIC LIBRARY TECHNOLOGY<sup>2, 3, 4, 5, 6</sup>

### MAJOR CODE - CG1

COL 101	New Student Seminar	3
ENL 111	Written Communication <sup>1</sup>	3
IT 101	Fundamentals of Computers	3
PLT 100	Careers in Libraries	3
PLT 230	Pub Lib Reference & Young Adult	3
COM 112 or	Oral Communication	
COM 125	Interpersonal Communication	3
PLT 210	Public Library Cataloging	3
PLT 235	Advanced Reference Skills	3
PLT 250	Public Library Technology	3
SS/HMN	Approved Elective <sup>6</sup>	3
ENL 115	Written Communication II <sup>7</sup>	3
IT 107	Fundamentals of the Internet	3
PLT 255	Collection Development	3
PLT 275	Information Literacy	3
MAT 1XX	MAT (100 or above) Mathematics (MAT 145 is recommended as it will transfer to a four-year institution in WV)	3
ENL 2XX	ENL 200 Level Literature Course	3
PLT 299	Capstone Experience	3
PLT/IT	Elective <sup>8</sup>	3
PLT/IT	Elective <sup>8</sup>	3
PLT/IT	Elective <sup>8</sup>	3

**Hours required for graduation: 60**

### Earn a Degree and Graduate Early (EDGE):

This program provides students the opportunity to receive credit for their high school EDGE courses.

### Contact Information:

Zana Durst • Room 104A • Phone: (304) 710-3465 or 1-866-N-ROLLED (1-866-676-5533) • E-mail: [durstz@mctc.edu](mailto:durstz@mctc.edu)

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1. ENL 111 has a prerequisite of REA 098 or placement in 100-level reading.
  2. All PLT courses are offered only online and are included in the course schedule every semester (fall-spring-summer).
  2. PLT courses are offered in the eight-week format unless otherwise stated.
  3. The complete PLT A .A .S. Degree may be obtained online.
  4. Course substitutions or an independent study option will be made for PLT majors in lieu of PLT 215, 265 and 280 if they are not offered.
  5. Students may take PLT courses in any sequence except when prerequisites are listed.
  6. SS or HMN elective must be approved by advisor.
  7. ENL 115 Written Communication II or ENL 231 Technical Report Writing
  8. Three additional PLT or IT electives must be approved by advisor.



# Career & Technical Division



## **APPLIED SCIENCE TECHNOLOGY**

- Biomedical Instrumentation Technology
- Electronics Technology
- Engineering Design Technology
- Machinist/CNC Technology
- Occupational Development
- Technical Studies
- Welding Technology

## **BUSINESS TECHNOLOGY**

- Accounting/Management Technology
- Administrative Technology - Executive
- Administrative Technology - Legal
- Administrative Technology - Medical
- Banking & Finance
- Business Administration
- Call Center Supervision
- Industrial Management
- Interior Design

## **ALLIED HEALTH**

- Dental Assistant
- Dental Laboratory Technology
- Health Information Technology
- Health Science
- Massage Therapy
- Medical Assistant
- Paramedic Science
- Pharmacy Technician
- Physical Therapist Assistant
- Radiologic Technology
- Respiratory Therapy
- Surgical Technology
- Veterinary Technology

## **HOSPITALITY MANAGEMENT**

- Culinary Arts
- Hotel/Motel Lodging

## **INFORMATION TECHNOLOGY**

- Animation & Game Developer
- Geospatial Studies (GIS/GPS/RS)
- Graphic Design
- Network Systems Administration
- Network Systems Development (CCNA)
- Network Systems Security
- Web Development

## **LEGAL STUDIES**

- Criminal Justice
- Paralegal

## **TRANSPORTATION**

- Aviation
- Intelligent Transportation
- Intermodal Management Maritime
- Railway
- Roadway

# APPLIED SCIENCE TECHNOLOGY

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## BIOMEDICAL INSTRUMENTATION TECHNOLOGY ASSOCIATE IN APPLIED SCIENCE

### **Program Description:**

The Biomedical Instrumentation Technology Program provides the skills necessary to install, maintain, calibrate, and repair medical equipment in hospitals, doctors' offices, dental offices, and anywhere medical equipment is used. Graduates will be prepared for direct employment within a hospital, field service for a manufacturer, and third party field service technicians.

### **Career Outlook:**

The field expects a 31% growth nationally through the year 2020.

### **Salary Forecast:**

For the most current salary information please refer to the Bureau of Labor Statistics "Occupational Outlook Handbook" found at [www.bls.gov/ooh/](http://www.bls.gov/ooh/).

### **Employment Opportunities:**

- BMT I, II, III
- Maintenance technician
- Equipment specialist
- Process control technician
- Installation technician
- BMT supervisor



# APPLIED SCIENCE TECHNOLOGY

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## BIOMEDICAL INSTRUMENTATION TECHNOLOGY

### MAJOR CODE – CB30

AH 151	Medical Terminology <sup>1</sup> (EDGE)	3
ELT 111	Direct Current Circuit Analysis <sup>2,3</sup>	3
ELT 111L	Direct Current Electronics Lab	1
ENL 111	Written Communication <sup>4</sup>	3
IT 101	Fundamentals of Computers (EDGE)	3
MAT 145	Applications in Algebra <sup>5</sup>	3
BIOL 257	Introduction to Anatomy & Physiology (EDGE)	3
BMT 110	Safety in Healthcare	3
ELT 121	Alternating Current Circuit Analysis <sup>2</sup>	3
ELT 121L	Alternating Current Electronics Lab	1
IT 270	Computer Essentials & Applications <sup>6</sup>	4
MAT 215	Applied Discrete Mathematics <sup>7</sup>	3
IT 131	Introduction to Networking <sup>8</sup>	3
ELT 131	Analog Circuits <sup>2,9</sup>	3
ELT 131L	Analog Circuits Lab	1
ELT 211	Combinational Logic Circuits <sup>2,10</sup>	3
ELT 211L	Combinational Logic Circuits Lab	1
BMT 223	Biomedical Instrumentation	3
BMT 225	Biomedical Instrumentation II <sup>11</sup>	3
BMT 299	Biomedical Internship	3
COM 125	Interpersonal Communication	3
SCI 110	Introductory Physics <sup>7</sup>	4
	Social Science Elective <sup>12</sup>	3

**Hours required for graduation: 63**

### Earn a Degree and Graduate Early (EDGE):

This program provides students the opportunity to receive credit for their high school EDGE courses.

### Contact Information:

Michael Maxson Room 337 • Phone: (304) 710-3458 or 1-866-N-ROLLED (1-866-676-5533) • E-mail: maxson@mctc.edu

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1. AH 151 has a prerequisite of REA 098 or placement in 100-level reading.
  2. ELT 111, 121, 131, and 211 must be taken concurrently with their respective labs: ELT 111L, 121L, 131L, and 211L.
  3. ELT 111 has a prerequisite of MAT 145.
  4. ENL 111 has a prerequisite of ENL 095, or placement in 100-level English and REA 098, or placement in 100-level reading.
  5. MAT 145 has a prerequisite of MAT 096, or MAT 97, or placement 100-level mathematics.
  6. IT 270 has a prerequisite of IT 101.
  7. MAT 215 and SCI 110 have a prerequisite of MAT 145 or MAT 133.
  8. IT 131 has a prerequisite of IT 101.
  9. ELT 131 has a prerequisite ELT 111.
  10. ELT 211 has prerequisites of ELT 131 and MAT 215.
  11. BMT 225 has a prerequisite of BMT 223.
  12. Choose from EC, HIST, PSYC or SS 100-level or above

# APPLIED SCIENCE TECHNOLOGY

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## ELECTRONICS TECHNOLOGY ASSOCIATE IN APPLIED SCIENCE

### **Program Description:**

One of today's fastest growing careers is an electronics technician, a career that can provide not only a great salary and job security, but also exciting work in a field that is always growing and changing. This field has many opportunities including maintenance, design, service and sales in commercial, manufacturing and process industries.

The following industries employ electronic technicians: computer, consumer electronics, robotics, utility companies, healthcare, broadcast, manufacturing, aerospace, automotive, mining, office equipment, waste-treatment, and any other industries that use electrical/electronic systems.

### **Salary Forecast:**

For the most current salary information please refer to the Bureau of Labor Statistics "Occupational Outlook Handbook" found at [www.bls.gov/ooh/](http://www.bls.gov/ooh/).

### **Employment Opportunities:**

- Bench technician
- Design technician
- Process control technician
- Biomedical technician
- Maintenance technician
- Electronics trainers
- Electronics sales
- Installation technician

### **Tech Prep Affiliation:**

The Electronics Technology Program is aligned with the West Virginia Tech Prep Engineering/Technical cluster. This career track provides the opportunity for West Virginia students to acquire college credit while attending high school.

# APPLIED SCIENCE TECHNOLOGY

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## ELECTRONICS TECHNOLOGY

### MAJOR CODE – CE10

ELT 111	Direct Current Circuit Analysis <sup>1,9</sup>	4
ELT 111L	Direct Current Electronics Lab	2
ENL 111	Written Communication <sup>2</sup>	3
IT 101	Fundamentals of Computers (EDGE)	3
MAT 145	Applications in Algebra <sup>3</sup>	3
COM 112	Oral Communication	3
or		
COM 125	Interpersonal Communication	3
ELT 121	Alternating Current Circuit Analysis <sup>1,4</sup>	4
ELT 121L	Alternating Current Electronics Lab	2
MAT 215	Applied Discrete Mathematics <sup>5</sup>	3
SCI 110	Introductory to Physics <sup>5</sup>	4
ELT 131	Analog Circuits <sup>1,6</sup>	5
ELT 131L	Analog Circuits Lab	1
ELT 211	Combinational Logic Circuits <sup>1,7</sup>	5
ELT211L	Combinational Logic Circuits Lab	2
IT 270	Computer Essentials and Application <sup>8</sup>	4
ELT 222	Introduction to Microprocessor	4
ELT 299	Electronic Technology Internship	3
IT 131	Introduction to Networking <sup>10</sup>	4
	Social Science Elective <sup>11</sup>	3

**Hours required for graduation: 62**

### Earn a Degree and Graduate Early (EDGE):

This program provides students the opportunity to receive credit for their high school EDGE courses.

### Contact Information:

Mike Maxson • Room 337 • Phone: (304) 710-3458 or 1-866-N-ROLLED (1-866-676-5533) • E-mail: maxson@mctc.edu

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1. ELT 111, ELT 121, ELT 131 and ELT 211 must be taken concurrently with their respective labs: ELT 111L, ELT 121L, ELT 131L, and ELT 211L.
  2. ENL 111 has a prerequisite of ENL 095, or placement in 100-level English, and REA 098, or placement in 100-level reading.
  3. MAT 145 has a prerequisite of MAT 096, or MAT 097, or placement in 100-level math.
  4. ELT 121 has a prerequisite of ELT 111.
  5. MAT 215 and SCI 110 have a prerequisite of MAT 145.
  6. ELT 131 has a prerequisite of ELT 111.
  7. ELT 211 has a prerequisite of ELT 131 and MAT 215.
  8. IT 270 has a prerequisite of IT 101.
  9. ELT 111 has a prerequisite of MAT 145.
  10. IT 131 has a prerequisite of IT 101.
  11. Choose from EC, HIST, PSYC, SS at the 100-level or above.

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# APPLIED SCIENCE TECHNOLOGY

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## ENGINEERING DESIGN TECHNOLOGY ASSOCIATE IN APPLIED SCIENCE

### Program Description:

The objective of this degree is to provide individuals entry-level job skills required in several related professions, including engineering technicians, product design technicians (including state-of-the-art products for medicine, structures, etc.), printers, computer-aided design (CAD) technical specialists, computer modeling specialists, simulation specialists, graphic designers and digital artists. Particular engineering fields include manufacturing, mining, civil, biomedical, and marine engineering. CAD specialists have broad-based skills applicable to the architectural, engineering, design, entertainment, and medical fields. Graduates will have skills essential to architects, engineers, designers, manufacturers, realtors, bankers, printers, creators of computer and graphic simulations, and all digital art applications.

Students in this program will learn 2D and 3D CAD, 3D modeling, rendering, and animation for art, films, and television, product development, engineering process and control, including reverse engineering and prototype development, design processes, organizational design, and business development. Students will have the opportunity to become certified in AutoCAD and Inventor. For students considering a bachelor's degree in engineering, the offering of Statics, Mechanics of Materials, Calculus, and Physics allows students to take these courses in a community college environment.

New manufacturing, engineering, medical, and visual effect processes require the skills students will obtain using state-of-the-art computer programs and prototyping equipment. Students will have access to the most up-to-date Autodesk computer programs, including AutoCAD, Inventor, 3ds Max, Revit, and Maya, as well as the latest scanning and prototyping equipment, including a digital printer. Three-dimensional printing is no longer just a prototyping technique, but is now the latest manufacturing process. This process is expected to eventually replace all other manufacturing processes, and the Engineering Design Technology Program trains students in all aspects of this technique. An integrated curriculum, including classes on design and entrepreneurship, allows each graduating class the opportunity to identify, develop and create a prototype for a new product, from conception to construction.

Upon completion of the Engineering Design Technology Associate in Applied Science Degree, the graduate will be able to:

- Create 2D representations of objects,
- Create 3D representations of objects, and produce realistic representations of these objects through state-of-the-art rendering and animation techniques,
- Work in a group to conceptualize, design, and check the viability of a new product, and create a prototype of that product,
- Reverse engineer and create a prototype of an existing object,
- Check the efficiency of various engineering processes,
- Create photorealistic representations of any object, including 3D architectural designs, and
- Create a new business in West Virginia.

### Employment Opportunities:

Entry-level positions for which graduates will compete include:

- CAD operator
- CNC programmer
- CAM specialist
- Engineering designer
- Engineering technician
- Mechanical design engineer
- Mechanical drafter
- Product designer

# APPLIED SCIENCE TECHNOLOGY

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## ENGINEERING DESIGN TECHNOLOGY

### MAJOR CODE - CA60

ENL 111	Written Communication <sup>1</sup>	3
MAT 145	Applications in Algebra <sup>2</sup>	3
MFE 116	Manufacturing Processes	3
MFE 220	Computer Aided Design I	4
COM 112	Oral Communication	3
MAT 205	Calculus <sup>3</sup>	3
MFE 230	Computer Aided Design II	4
MFE 248	Statistical Process & Control	3
MFE 255	Rapid Prototyping Techniques <sup>4</sup>	3
MFE 240	Statics <sup>5</sup>	3
MFE 258	Intro to Visual Digitalization <sup>6</sup>	4
MFE 262	Engineering Design <sup>7</sup>	4
SCI 110	Introductory Physics <sup>8</sup>	4
MFE 103	Entrepreneurship in MFE	3
MFE 245	Mechanics of Materials	3
MFE 253	3D Scanning for Reverse Engineering	4
MFE 290	Manufacturing Capstone	3
SS 201	Human Relations <sup>9</sup>	3

**Hours required for graduation: 60**

### Contact Information:

Theodore Triplett • Room 251 • Phone: (304) 710-3428 or 1-866-N-ROLLED (1-866-676-5533) • E-mail: [triplett@mctc.edu](mailto:triplett@mctc.edu)

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1. ENL 111 has a prerequisite of ENL 095, or placement in 100-level English, and REA 098, or placement in 100-level reading.
  2. MAT 145 has a prerequisite of MAT 096, or MAT 097, or placement in 100-level math.
  3. MAT 205 has a prerequisite of MAT 146.
  4. MFE 255 has a prerequisite of MFE 230.
  5. MFE 240 has a prerequisite of MAT 205.
  6. MFE 258 has prerequisites of MFE 220 and MFE 230.
  7. MFE 262 has prerequisites of MFE 220 and MFE 230.
  8. SCI 110 has a prerequisite of MAT 125, MAT 135 or MAT 145.
  9. SS 201 has a prerequisite of REA 098, placement in 100-level reading.

# APPLIED SCIENCE TECHNOLOGY

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## MACHINIST/CNC TECHNOLOGY ASSOCIATE IN APPLIED SCIENCE

### **Program Description:**

The Machinist Program provides students the opportunity to prepare for entry level careers as machinists using conventional equipment and computer control equipment. The graduate will have completed fundamentals required for all machining careers – industrial safety, blueprint reading and precision measurement. Technical courses develop skills using conventional machines and using computerized manufacturing equipment. The associate degree program requires four semesters. However, the student may select to complete programs at the certificate level, two semesters, or at the skills set level. The course work in these two training levels is an integral part of the degree program. This program adheres to the standards of the National Institute for Metalworking Skills (NIMS).

### **Career Outlook:**

Despite projected slower than average employment growth, job opportunities for machinists should continue to be excellent. The number of workers obtaining the skills and knowledge necessary to fill machinist jobs is expected to be less than the number of job openings arising each year from employment growth and from the need to replace experienced machinists who transfer to other occupations or retire.

### **Salary Forecast:**

For the most current salary information please refer to the Bureau of Labor Statistics “Occupational Outlook Handbook” found at [www.bls.gov/ooh/](http://www.bls.gov/ooh/).

### **Program Admission Requirements:**

The Machinist Technology Program has admission and candidacy requirements in addition to the Mountwest Community & Technical College admission guidelines.

### **Tech Prep Affiliation:**

The Machinist Technology Program is aligned with the West Virginia Tech Prep Engineering/Technical cluster.

### **Employment Opportunities:**

Entry-level positions for which graduates will compete include:

- Manual machinist
- CNC machinist
- Industrial sales representative
- Auto plant
- Machinist shop
- Fabricator

# APPLIED SCIENCE TECHNOLOGY

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## MACHINIST/CNC TECHNOLOGY

MAJOR CODE - CT10 • CONCENTRATION CODE - CT15

MAT 135	Mathematics for Machinists	3
MT 105	Industrial Safety	2
MT 200	Blueprint Reading	3
MT 205	Precision Management	3
MT 121	Introduction to Machinery	3
IT 101	Fundamentals of Computers	3
MT 215	Metal Working Theory and Application	10
MT 233	NIMS Credentialing	6
EC 102	Basic Economics	3
MFE 220	Computer Aided Design I	4
MT 240	Statics for Technicians	3
MT 244	CNC Set up/Operation	4
COM 125	Interpersonal Communication	3
ENL 231	Technical Report Writing	3
MT 246	Computer Aided Manufacturing	4
MT 248	NIMS Credentialing/CNC Project	4

**Hours required for graduation: 61**

### Earn a Degree and Graduate Early (EDGE):

This program provides students the opportunity to receive credit for their high school EDGE courses.

### Contact Information:

Erica Gilkerson • RCBI • Phone (304) 781-1678 • Email: [egilkerson@rcbi.org](mailto:egilkerson@rcbi.org)

Steven Brown • Room 229 • Phone (304) 710-3393 or 1-866-N-ROLLED (1-866-676-5533) • E-mail: [brown175@mctc.edu](mailto:brown175@mctc.edu)

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# APPLIED SCIENCE TECHNOLOGY

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## OCCUPATIONAL DEVELOPMENT ASSOCIATE IN APPLIED SCIENCE

### Program Description:

The Occupational Developmental Degree is designed to meet two major needs:

1. To provide for cooperatively sponsored educational opportunities leading to the associate in applied science degree for students in an U.S. Department of Labor registered apprenticeship training programs.
2. To provide a mechanism for Mountwest Community & Technical College to deliver educational programs in a variety of occupational fields to businesses and industries having an immediate need for such programs.

The United States Department of Labor, Bureau of Apprenticeships and Training (BAT) identify eligible apprenticeship programs. Components of the degree program include the following: general education, classroom instruction, and on-the-job training.

Occupational Development students must meet all college admission and performance standards. Credits earned through either approved apprenticeship programs or through industry-based education and training programs will not be added to the students' collegiate transcripts until they have completed at a minimum three program credit hours from Mountwest Community & Technical College and have obtained at least a 2.00 GPA.

The student who graduates with the Associate in Applied Science Degree in Occupational Development will possess:

- Supervisory skills
- Computer software skills
- Relevant essential math skills
- Written and oral communication skills
- Trade skills
- Desire for lifelong learning

### Employment Opportunities:

- Work as a journeyman

### Program Admission Requirements:

The college adheres to an open admission policy which means applicants with a high school diploma or a GED are eligible for admission. Applicants with neither a high school diploma nor a GED may be admitted on a conditional basis.



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# APPLIED SCIENCE TECHNOLOGY

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## OCCUPATIONAL DEVELOPMENT<sup>1,2</sup>

### MAJOR CODE - C010

ENL 111	Written Communication <sup>3</sup>	3
COM	Communication <sup>4</sup>	3
IT 101	Fundamentals of Computers <sup>5</sup> (EDGE)	3
	General Education Elective <sup>6</sup>	3
	Quantitative Skills Course <sup>7</sup>	3
	Quantitative Skills/Science Course <sup>8</sup>	3
	Social Science Course <sup>9</sup>	3

### Classroom Instruction in the Occupation<sup>10</sup>

**Up to 40**

450-750 Classroom/Laboratory contact hours of Occupational Education converted to credit hours at the usual ratio of 15:1 classroom or 30:1 laboratory.

### On-The-Job Training in Occupation

**12**

Maximum of 2,400 contact hours of on-the-job training, converted to credit hours on a ratio of 200:1, can be counted toward the A.A.S. degree. A statement of the total number of contact hours experienced on the job by the student may be placed on the college record. This credit will be recorded immediately prior to graduation from the college.

**Hours required for graduation: 60**

### Earn a Degree and Graduate Early (EDGE):

This program provides students the opportunity to receive credit for their high school EDGE courses.

### Contact Information:

Jenna Parker • Room 255 • Phone (304) 710-3414 or 1-866-N-ROLLED (1-866-676-5533) • E-mail: [parker54@mctc.edu](mailto:parker54@mctc.edu)

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1. Student must be employed in an occupation and complete an U.S. Department of Labor registered apprenticeship program.
  2. Students must complete a minimum of 3 credit hours with Mountwest Community & Technical College to establish academic residency.
  3. ENL 111 has a prerequisite of REA 098, or placement in 100-level reading.
  4. Either COM 112, Oral Communication and COM 125, Interpersonal Communication fulfills Mountwest General Education and State Communication Skills requirements for Occupational Development Degree.
  5. IT 101 fulfills state General Education Elective Requirement for Occupational Development Degree and General Studies Core.
  6. Contact the program coordinator to select a course. The following courses fulfill General Education Electives requirement for Occupational Development and General Education Core Degree: any COM, any ENL, EC 102, any HIST, IT 107 or IT 150, any PSYC, or any SS courses.
  7. Three Quantitative Skills (Mathematics) credits are required to earn the Occupational Development Degree.
  8. Six total Quantitative Skills/Laboratory Science Experience credits are required to earn the Occupational Development Degree. Each graduate must successfully complete at least one college-level mathematics course. Students may complete the six credit requirement with a second college-level mathematics course or select a laboratory science course from the following: BIOL 101, SCI 110, SCI 120, SCI 201, or BIOL 257. Contact the program coordinator for acceptable other courses.
  9. To fulfill Social Science Course requirements for Occupational Developmental and General Education Core Degree, select from EC 102, any HIST, any PSYC or any SS courses.
  10. Must provide a copy of the U.S. Department of Labor Apprenticeship certificate to verify completion of the classroom portion of the apprenticeship instruction. College credit for the Apprenticeship instruction will be recorded immediately prior to graduation from college.
  11. A letter must be received from employer to verify this employment, contact the program coordinator to receive credit for the OJT.

# APPLIED SCIENCE TECHNOLOGY

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## TECHNICAL STUDIES ASSOCIATE IN APPLIED SCIENCE

### **Program Description:**

The Associate in Applied Science Degree Program in Technical Studies is designed to meet the following needs: to provide for cooperatively sponsored educational opportunities leading to associate degrees for employees/students participating in quality education and training programs sponsored by business, industry, labor, government or other educational agencies; to provide a timely and efficient mechanism for community and technical colleges to deliver educational programs in a variety of occupational fields to employers; to increase the abilities of employees to use technology effectively and responsibly; to increase abilities of employees to communicate information effectively through reading, writing, speaking, and listening; to develop employee's abilities to solve problems through reasoning, information, retrieval, and productive teamwork; to assist those employed in the workforce to understand that education is a life-long process.

### **Program Focus:**

Business, industry, labor, and government organizations interested in furthering the education and training of their employees/members constitute the target audience of this degree program. By providing a program of study designed to enhance and maintain employee knowledge and skills, it is expected that such individuals will enjoy greater job security and job flexibility while providing employers with more highly skilled and educated workforce. For those just entering the job market, the program of study will include the education and training needed to assure basic entry level skills for the specific technical/occupational field.

### **Program Admission Requirements:**

The college adheres to an open admission policy which means applicants with a high school diploma or a GED are eligible for admission. Applicants with neither a high school diploma nor a GED may be admitted on a conditional basis.

# APPLIED SCIENCE TECHNOLOGY

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## TECHNICAL STUDIES

### MAJOR CODE – CT20

#### **Component I:** General Education (6-11 Credit Hours)<sup>1</sup>

Communication Skills (at least one business or technical writing course)	6
Quantitative Skills/Laboratory Science/Experience (at least one college-level course must be in mathematics)	6
General Education Electives	9

#### **Component II:** Technical Core (Maximum of 39 credit hours)

Each program of study must include a general technical core that meets the goal of developing skills that may be applied to a variety of occupations or that may be specific to an occupation.

#### **Component II:** Technical/ Occupational Specialty (Maximum of 39 credit hours)

This component consists of a technical concentration specific to an occupational area, and should consist of at least 12 hours.

#### **Component III:** On-the-Job Training in the Occupation or Supervised Worksite-Based Learning (Maximum of 12 credit hours)

Maximum of 1,920 contact hours of on-the-job training, converted to credit hours on a ratio of 160:1, can be counted toward the A.A.S. Degree. A statement of the total number of contact hours experienced on the job by the student may be

### **Minimum hours required for graduation: 60**

#### **Earn a Degree and Graduate Early (EDGE):**

This program provides students the opportunity to receive credit for their high school EDGE courses.

#### **Contact Information:**

Steven Brown • Room 229A • Phone: (304) 710-3393 or 1-866-N-ROLLED (1-866-676-5533) •  
E-mail: brown175@mctc.edu

Erica Gilkerson • RCBI • Phone (304) 781-1678 • Email: egilkerson@rcbi.org

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1. Up to three additional hours of general education may be required, provided that it is added to the 60 credit hour minimum required for graduation.

# APPLIED SCIENCE TECHNOLOGY

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## WELDING TECHNOLOGY ASSOCIATE IN APPLIED SCIENCE

### Program Description:

The Welding Technology Program is an industry-driven, hands-on program that prepares individuals to meet the rigorous demands of the manufacturing sector. An element of the program enables students to earn an Associate in Applied Science degree in Technical Studies with a concentration in welding.

Components of the program include the following: general education, technical core, classroom and welding lab hands-on instruction in the occupational area as well as an on-the job internship.

The welding program delivers skills that an individual needs to be successful in industry. This is accomplished through a hands-on approach and intensive student instructor interaction. The best way to learn to weld is by actually welding. Therefore, the focus is put on work done outside the traditional classroom and in a shop setting, providing the student a true feel for the correct way to weld. A major subject is safety and this program teaches individuals how to protect themselves and their environment while completing the job. Students learn a variety of welding methods including TIG, MIG, and SMAW, as well as metal cutting techniques to ensure they have the necessary skills expected by employers. This program provides new welders a firm foundation to earn certification and thrive in the field.

Comprehensive full- and part-time programs are available, thus enabling current workforce members to improve their technical skills and develop professionally while helping their employers become more competitive.

### Career Outlook:

Employment is projected to experience little or no change over the next decade. Good job opportunities are expected for skilled welders because some employers are reporting difficulty finding qualified workers. About two out of three jobs in this occupation are in manufacturing industries.

### Salary Forecast:

For the most current salary information please refer to the Bureau of Labor Statistics "Occupational Outlook Handbook" found at [www.bls.gov/ooh/](http://www.bls.gov/ooh/).

### Program Admission Requirements:

The Welding Technology Program has admission and candidacy requirements in addition to the Mountwest Community & Technical College admission guidelines.

### Employment Opportunities:

Entry-level positions for which graduates will compete include:

1. General purpose machinery manufacturing
2. Agriculture, construction, and mining machinery manufacturing
3. Commercial and industrial machinery and equipment (excluding automotive and electronic) repair and maintenance
4. Architectural and structural metals manufacturing
5. Motor vehicle body and trailer manufacturing

# APPLIED SCIENCE TECHNOLOGY

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## WELDING TECHNOLOGY

### MAJOR CODE – CW10

MAT 135	Mathematics for Machinists	3
MT 105	Industrial Safety	2
WELD 110	Blueprint Reading for Welding	3
WELD 120	Shielded Metal Arc Welding (SMAW) <sup>1</sup>	6
WELD 120L	Shielded Metal Arc Welding Lab <sup>1</sup>	4
IT 101	Fundamentals of Computers	3
WELD 210	Stick Pipe Welding <sup>2</sup>	6
WELD 210L	Stick Pipe Welding Lab <sup>2</sup>	4
EC 102	Basic Economics	3
MFE 220	Computer Aided Design	4
WELD 121	Gas Metal/Flux Cored Welding	6
WELD 121L	Gas Metal/Flux Cored Welding Lab	4
COM 125	Interpersonal Communication <sup>3</sup>	3
ENL 231	Technical Report Writing	3
HMN 235	Leadership Studies <sup>2,4</sup>	3
WELD 299	Welding Theory	3

**Hours required for graduation: 60**

### Earn a Degree and Graduate Early (EDGE):

This program provides students the opportunity to receive credit for their high school EDGE courses.

### Contact Information:

Steven Brown • Room 229A • Phone: (304) 710-3393 or 1-866-N-ROLLED (1-866-676-5533) • E-mail: brown175@mctc.edu  
Erica Gilkerson • RCBI • Phone (304) 781-1678 • Email: egilkerson@rcbi.org

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1. WELD 120 and WELD 120L are co-requisites.
  2. WELD 210 and WELD 210L are co-requisites.
  3. COM 125 and HMN 235 have a prerequisite of REA 098 or placement in 100-level reading.
  4. HMN 235 is the capstone course for this program and should be taken during the student's final term.

# BUSINESS TECHNOLOGY

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## ACCOUNTING (MANAGEMENT TECHNOLOGY) ASSOCIATE IN APPLIED SCIENCE

### **Program Description:**

The increasing complexities of the business environment have created the need for individuals who possess a greater diversity of skills. Interpersonal, communication, analytical, decision-making, customer service, and computer skills are essential for success in business. Mountwest Community & Technical College's Management Technology Program provides these skills and prepares students for entry-level positions in organizations with career paths that eventually lead to supervisory and management positions. The program also prepares employed individuals for upward mobility within their organizations.

The Accounting Option prepares the student for a nonsupervisory position. This person performs a variety of complex clerical and entry level accounting activities applying accepted procedures to the preparation and maintenance of accounting and other records, and preparing financial, statistical, and/or technical reports to ensure accurate accounting records.

### **Career Outlook:**

Bookkeeping, accounting, and auditing clerks are an organization's financial record keepers. They update and maintain one or more accounting records, including those that tabulate expenditures, receipts, accounts payable and receivable, and profit and loss. They have a wide range of skills and knowledge from full-charge bookkeepers who can maintain an entire company's books to accounting clerks who handle specific accounts. All of these clerks make numerous computations each day and increasingly must be comfortable using computers to calculate and record data.

### **Employment Opportunities:**

Accounting paraprofessionals are qualified for numerous career opportunities such as accountant's assistants, accounting clerks, bookkeepers, banking support staff, finance support staff, and income tax preparation clerks. Having completed some college is becoming increasingly important for financial clerks, particularly for those occupations requiring knowledge of accounting. For occupations such as bookkeepers, accounting clerks, and procurement clerks, an associate's degree in business or accounting often is required.

### **Salary Forecast: State Average National Average**

For the most current salary information please refer to the Bureau of Labor Statistics "Occupational Outlook Handbook" found at [www.bls.gov/ooh/](http://www.bls.gov/ooh/).

### **Admission Requirements:**

The college adheres to an open admissions policy which means applicants with a high school diploma or a GED are eligible for admission. Applicants with neither a high school diploma nor a GED may be admitted on a conditional basis.

### **Accreditation:**

The Association of Collegiate Business Schools and Programs (ACBSP) accredited the Management Technology Degree Program. The ACBSP is the only nationally recognized organization that grants specialized accreditation to two and four-year college and university business programs.

# BUSINESS TECHNOLOGY

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## ACCOUNTING (MANAGEMENT TECHNOLOGY)

MAJOR CODE – CM10 • CONCENTRATION CODE - CM15

AC 103	Introduction to Accounting (EDGE) <sup>1</sup>	3
ENL 111	Written Communication <sup>2</sup>	3
IT 101	Fundamentals of Computers (EDGE)	3
MAT 145/115	Applications in Algebra <sup>4</sup> or Business Mathematics <sup>3</sup>	3
MG 101	Introduction to Business (EDGE) <sup>1</sup>	3
AC 201	Financial Accounting I <sup>5</sup>	3
COM 112/125	Oral Communication <sup>6</sup> or Interpersonal Communication <sup>6</sup>	3
EC 201	Fundamentals of Microeconomics <sup>1</sup>	3
IT 150	Applications to Spreadsheets (EDGE) <sup>7</sup>	3
MAT 210	Statistics for Business and Industry <sup>3</sup>	3
AC 210	Managerial Accounting <sup>8</sup>	3
AC 221	Computerized Accounting I <sup>9</sup>	3
EC 202	Fundamentals of Macroeconomics <sup>1</sup>	3
MG 202	Business Organization & Management <sup>10</sup>	3
MK 130	Fundamentals of Marketing <sup>1</sup>	3
AC 202	Financial Accounting II <sup>11</sup>	3
AC 234	Taxation <sup>12</sup>	3
FN 231	Business Finance <sup>12</sup>	3
MG 226	Commercial Papers & Transactions <sup>1</sup>	3
MG 296	Integrated Business Strategies <sup>14</sup>	3

**Hours required for graduation: 60**

### Earn a Degree and Graduate Early (EDGE):

This program provides students the opportunity to receive credit for their high school EDGE courses.

### Contact Information:

Gerald Doyle • Room 245 • Phone: (304) 710-3409 or 1-866-N-ROLLED (1-866-676-5533) • E-mail: doyle@mctc.edu

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1. AC 103, MG 101, EC 201, EC 202, MK 130 and MG 226 have a prerequisite of REA 098 or ACT Reading 18 or SAT Reading 421 or Accuplacer Reading 80.
  2. ENL 111 has a prerequisite of ENL 095, or placement in 100-level English and REA 098, or placement in 100-level reading.
  3. MAT 115 has a prerequisite of MAT 096, or placement in 100-level mathematics. Students pursuing the articulated baccalaureate degree should take MAT 145 instead of MAT 115.
  4. MAT 145 has a prerequisite of ACT 19, MAT 096, or Plac 100.
  5. AC 201 has a prerequisite of AC 103 or permission.
  6. COM 111 and COM 125 have a prerequisite of REA 098 or placement in 100-level reading. Students pursuing the articulated baccalaureate degree should take COM 112 instead of COM 125.
  7. IT 150 has a prerequisite of IT 101.
  8. AC 210 has a prerequisite of AC 103 or AC 108 or AC 201.
  9. AC 221 has a prerequisite of AC 103 or AC 108 or AC 201 and IT 101 or permission.
  10. MG 202 has a prerequisite of MG 101.
  11. AC 202 has a prerequisite of AC 201 or AC 108.
  12. AC 234 and FN 231 have a prerequisite of AC 201, or AC 103, or AC 108, or ACC 215
  13. MG 296 has a prerequisite of 45 credit hours completed in the program.

# BUSINESS TECHNOLOGY

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## ADMINISTRATIVE TECHNOLOGY - EXECUTIVE ASSOCIATE IN APPLIED SCIENCE

### Program Description:

The Administrative Technology—Executive Program maintains student learning as its main priority and is committed to excellence in a learning environment that emphasizes procedures in a business office, problem solving, and skilled use of computer business software applications to provide for workforce development, career preparation, and lifelong learning. The complexities of today's business offices have created the need for highly skilled employees who possess the knowledge and confidence necessary to handle a wide variety of administrative and office tasks. Upon completion of the Associate in Applied Science Degree in Administrative Technology—Executive option, the graduate will be able to demonstrate knowledge that is specific to a business office and gain real-life experience through placement in a business office internship.

### Career Description/Outlook:

Office automation and organizational restructuring have led office professionals to assume responsibilities once reserved for managerial and professional staff. Many secretaries and administrative assistants now provide training and orientation for new staff, conduct research on the Internet, and operate and troubleshoot new office technologies. However, the core responsibilities for secretaries and administrative assistants have remained much the same: performing and coordinating an office's administrative activities and storing, retrieving, and integrating information for dissemination to staff and clients.

Secretaries and administrative assistants held about 4.3 million jobs in 2008, ranking among the largest occupations in the U.S. economy. The state of West Virginia has classified the administrative technology field as being in "high demand" because the number of anticipated qualified employees is significantly lower than the number of expected job openings in the state. Projected employment of administrative assistants will vary by occupational specialty. Rapidly growing industries such as administrative/support services and professional/technical services will continue to generate most new job opportunities through 2016. In addition to those resulting from growth, numerous job openings will result from the need to replace workers who transfer to other occupations or leave this very large occupation for other reasons each year. The United States Bureau of Labor Statistics indicates that opportunities should be best for applicants with extensive knowledge of software applications.

### Salary Forecast:

For the most current salary information please refer to the Bureau of Labor Statistics "Occupational Outlook Handbook" found at [www.bls.gov/ooh/](http://www.bls.gov/ooh/).

### Employment Opportunities:

- Administrative assistant
- Administrative secretary
- Executive assistant
- Executive secretary
- Administrative support
- Worker supervisors
- Worker managers
- School secretaries
- Administrative support in colleges and universities

### Accreditation:

The Association of Collegiate Business Schools and Programs (ACBSP) accredits the Administrative Technology—Executive Program. The ACBSP is the only nationally recognized organization that grants specialized accreditation to two and four-year college and university business programs.



# BUSINESS TECHNOLOGY

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## ADMINISTRATIVE TECHNOLOGY - EXECUTIVE

MAJOR CODE - CO20 • CONCENTRATION CODE - CO25

AT 136	Comprehensive Word Processing (EDGE) <sup>1</sup>	3
ENL 111	Written Communication <sup>2</sup>	3
IT 101	Fundamentals of Computers	3
MAT	Math Elective <sup>3</sup>	3
MG 101	Introduction to Business (EDGE) <sup>1</sup>	3
AT 114	Keyboarding II <sup>4</sup>	3
AT 160	Intro to Presentation Software (EDGE) <sup>1</sup>	3
AC 103	Introduction to Accounting <sup>1</sup>	3
COM 112/125	Oral Communication or Interpersonal Communication <sup>1</sup>	3 3
IT 150	Applications to Spreadsheets (EDGE) <sup>5</sup>	3
AT 104	Records Management <sup>1</sup>	3
AT 240	Comprehensive Transcription/Dictation <sup>6</sup>	3
AT 255	Desktop Publishing (EDGE) <sup>1</sup>	3
AT 265	Administrative Office Procedures <sup>7</sup> (EDGE)	3
MG 202	Business Organization & Management <sup>8</sup>	3
AT 261	Integrated Document Formatting <sup>6</sup>	3
AT 290	Internship <sup>9</sup>	3
ENL 231	Technical Report Writing <sup>2</sup>	3
	Elective <sup>11</sup>	3
	General Education Elective <sup>11</sup>	3

**Hours required for graduation: 60**

### Contact Information:

Wylma Skean • Room 223 • Phone: (304) 710-3406 or 1-866-N-ROLLED (1-866-676-5533) • E-mail: [skean@mctc.edu](mailto:skean@mctc.edu)

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1. MG 101 has a prerequisite of REA 098 or ACT Reading 18 or SAT Reading 421 or Accuplacer Reading 80.
  2. ENL 111 and ENL 231 has a prerequisite of ENL 095, or placement in 100-level English, and REA 098, or placement in 100-level reading.
  3. Choose from any MAT 100-level or above.
  4. Students must demonstrate a minimum of 35 wpm with 5 or fewer errors before they can enroll in AT 114. AT 114 has a prerequisite of AT 136 or permission.
  5. IT 150 has a prerequisite of IT 101.
  6. AT 240 and AT 261 have a prerequisite of AT 114.
  7. AT 265 has a prerequisite of AT 136.
  8. MG 202 has a prerequisite of MG 101 or permission.
  9. AT 290 has a prerequisite of completion of 45 program credit hours or permission.
  10. Choose from any 100-level or above course. COM 112 is recommended.
  11. Choose from any COM, ENL, HMN, MAT, PSYC, SS 100-level or above.

# BUSINESS TECHNOLOGY

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## ADMINISTRATIVE TECHNOLOGY – LEGAL ASSOCIATE IN APPLIED SCIENCE

### Program Description:

The Administrative Technology—Legal Program is committed to excellence in a learning environment that emphasizes procedures in a legal office, problem solving, and skilled use of computer business software applications to provide for workforce development, career preparation, and lifelong learning. The increasing complexities of today's legal office have created the need for highly skilled employees who possess the knowledge and confidence necessary to handle a wide variety of administrative and legal office tasks. Upon completion of the Associate in Applied Science Degree in Administrative Technology—Legal option, the graduate will be able to demonstrate knowledge that is specific to the legal office and gain real-life experience through placement in a legal office internship.

### Career Description/Outlook:

Legal administrative assistants are responsible for a variety of administrative and clerical duties necessary to run a legal office effectively. They serve as information managers for the office, plan and schedule meetings and appointments, organize and maintain paper and electronic files, manage projects, and provide information by using the telephone, postal mail, and e-mail as well as handle travel arrangements. Legal administrative assistants perform highly specialized work requiring knowledge of legal terminology and procedures. Duties may include preparing correspondence and legal papers such as summonses, complaints, motions, responses, and subpoenas under the supervision of an attorney or paralegal. They also may review legal journals and assist in other ways with legal research.

Secretaries and administrative assistants held about 4.3 million jobs in 2008, ranking among the largest occupations in the U.S. economy. The state of West Virginia has classified the administrative assistant field as being in “high demand” because the number of anticipated qualified employees is significantly lower than the number of expected job openings in the state. Projected employment of administrative assistants will vary by occupational specialty. Employment growth in the legal services industry should lead to average growth for legal administrative assistants through 2016. In addition to those resulting from growth, numerous job openings will result from the need to replace workers who transfer to other occupations.

Developments in office technology are certain to continue, and they will bring about further changes in the work of secretaries and administrative assistants. However, many secretarial and administrative duties are of a personal, interactive nature and not easily automated. Responsibilities such as planning conferences, working with clients, and instructing staff require tact and communication skills. Because technology cannot substitute for these personal skills, secretaries and administrative assistants will continue to play a key role in most organizations.

### Salary Forecast:

For the most current salary information please refer to the Bureau of Labor Statistics “Occupational Outlook Handbook” found at [www.bls.gov/ooh/](http://www.bls.gov/ooh/).

### Accreditation:

The Association of Collegiate Business Schools and Programs (ACBSP) accredit the Administrative Technology Medical Degree program. The ACBSP is the only nationally recognized organization that grants specialized accreditation to two and four-year college and university business programs.

### Employment Opportunities:

- Administrative assistant
- Administrative secretary
- Executive assistant
- Executive secretary
- Secretary/receptionist
- County court system
- Law firms
- Law offices

# BUSINESS TECHNOLOGY

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## ADMINISTRATIVE TECHNOLOGY – LEGAL

MAJOR CODE – CO20 • CONCENTRATION CODE - CO26

AT 136	Comprehensive Word Processing (EDGE) <sup>1</sup>	3
ENL 111	Written Communication <sup>2</sup>	3
LAW 101	General Law I <sup>1</sup>	3
MAT	Math Elective <sup>3</sup>	3
MG 101	Introduction to Business (EDGE) <sup>1</sup>	3
AT 104	Records Management <sup>1</sup>	3
AT 114	Keyboarding II (EDGE) <sup>4</sup>	3
AC 103	Intro to Accounting <sup>1</sup> (EDGE)	3
COM 125	Interpersonal Communication	3
	Social Science/Humanities Elective <sup>5</sup>	3
AT 240	Comprehensive Transcription/Dictation <sup>6</sup>	3
AT 255	Desktop Publishing (EDGE)	3
AT 265	Administrative Office Procedures (EDGE) <sup>7</sup>	3
LAW 102	General Law II <sup>8</sup>	3
LAW 213	Computer Applications to the Law Office <sup>7</sup>	3
AT 261	Integrated Document Formatting <sup>6</sup>	3
AT 290	Internship <sup>9</sup>	3
ENL 231	Technical Report Writing <sup>3</sup>	3
	General Education Requirement <sup>10</sup>	3
	Elective <sup>11</sup>	3

**Hours required for graduation: 60**

### Earn a Degree and Graduate Early (EDGE):

This program provides students the opportunity to receive credit for their high school EDGE courses.

### Contact Information:

Wylma Skean • Room 223 • Phone: (304) 710-3406 or 1-866-N-ROLLED (1-866-676-5533) • E-mail: [skean@mctc.edu](mailto:skean@mctc.edu)

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1. AT 136, AC 103, LAW 101, MG 101 and AT 104 have a prerequisite of REA 098, or ACT Reading 18, or SAT Reading 421, or Accuplacer Reading of 80.
  2. ENL 111 and ENL 231 have a prerequisite of ENL 095, or placement in 100-level English and REA 098, or placement in 100-level reading.
  3. Choose from any MAT 100-level course or above.
  4. Students must demonstrate a minimum 35 wpm with 5 or fewer errors before they can enroll in AT 114. AT 114 has a prerequisite of AT 136 or permission.
  5. Choose from ART, EC, HIST, HMN, MUSI, PSYC, SPAN, SS 100-level or above.
  6. AT 240 and AT 261 have a prerequisite of AT 114.
  7. AT 265 and LAW 213 have a prerequisite of AT 136.
  8. LAW 102 has a prerequisite of LAW 101.
  9. AT 290 has a prerequisite of completion of 45 program credit hours or permission.
  10. Choose from any COM, ENL, HMN, MAT, PSYC, SS 100-level or above.
  11. Choose from any 100-level or above course to meet program completion requirement of 60 minimum total credits.

# BUSINESS TECHNOLOGY

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## ADMINISTRATIVE TECHNOLOGY – MEDICAL ASSOCIATE IN APPLIED SCIENCE

### Program Description:

The Administrative Technology—Medical Program is committed to excellence in a learning environment that emphasizes procedures in a medical office, problem solving, and skilled use of computer business software applications to provide for workforce development, career preparation, and lifelong learning. The complexities of today's medical office have created the need for highly skilled employees who possess the knowledge and confidence necessary to handle a wide variety of administrative and medical office tasks. Upon completion of the Associate in Applied Science Degree in Administrative Technology—Medical option, the graduate will be able to demonstrate knowledge that is specific to the medical office and gain real-life experience through placement in a medical office internship.

### Career Description/Outlook:

Medical administrative assistants are responsible for a variety of administrative and clerical duties necessary to run a medical office effectively. They serve as information managers for the office; schedule and notify patients; code patients' visits; bill insurance; process deductibles; plan and schedule meetings and appointments; organize and maintain paper and electronic files; and provide information to patients, physicians, insurance companies, and others by using the telephone, postal mail, e-mail; and may handle travel arrangements. Specific job duties vary with experience and titles. Medical administrative assistants perform highly specialized work requiring knowledge of medical terminology and procedures. They transcribe dictation, prepare correspondence, and assist physicians or medical scientists with reports, speeches, articles, and conference proceedings. They also record simple medical histories, arrange for patients to be hospitalized, and order supplies. Medical administrative assistants need to be familiar with insurance rules, billing practices, hospital or laboratory procedures, and HIPAA.

Secretaries and administrative assistants held about 4.3 million jobs in 2008, ranking among the largest occupations in the U.S. economy. The state of West Virginia has classified the administrative assistant field as being in "high demand" because the number of anticipated qualified employees is significantly lower than the number of expected job openings in the state. Employment growth in the health care services industries should lead to faster than average growth for medical administrative assistants through 2016. Numerous job openings will result from the need to replace workers who transfer to other occupations or leave this very large occupation for other reasons each year. Projected employment of medical administrative assistants will vary by occupational specialty.

### Salary Forecast:

The U.S. Bureau of Labor Statistics states that the medical secretaries earned median annual wages of \$29,680 in May 2008. The middle 50 percent earned between \$24,530 and \$36,090. The lowest 10 percent earned less than \$20,870, and the highest 10 percent earned more than \$42,660.

### Employment Opportunities:

- Administrative assistant
- Administrative secretary
- Executive assistant
- Physicians' offices
- Executive secretary
- Secretary/receptionist
- Clinics
- Rehabilitation facilities
- Hospitals
- Medical schools
- Nursing homes

### Accreditation:

The Association of Collegiate Business Schools and Programs (ACBSP) accredit the Administrative Technology Medical Degree Program. The ACBSP is the only nationally recognized organization that grants specialized accreditation to two and four-year college and university business programs.

# BUSINESS TECHNOLOGY

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## ADMINISTRATIVE TECHNOLOGY - MEDICAL

MAJOR CODE – CO20 • CONCENTRATION CODE - CO27

AH 151	Medical Terminology (EDGE)	3
AT 136	Comprehensive Word Processing <sup>1</sup> (EDGE)	3
ENL 111	Written Communication <sup>2</sup>	3
IT 150	Applications to Spreadsheets <sup>3</sup> (EDGE)	3
MAT	Math Elective <sup>4</sup>	3
AC 103	Introduction to Accounting <sup>1</sup>	3
AT 104	Records Management <sup>1</sup>	3
AT 114	Keyboarding II <sup>5</sup> (EDGE)	3
BIOL 257	Intro to Anatomy & Physiology (EDGE)	3
COM 125	Interpersonal Communication <sup>1</sup>	3
AH 204	Legal and Ethical Issues in Health Organizations	3
AH 240	Comprehensive Transcription/Dictation <sup>6</sup>	3
AT 265	Administrative Office Procedures <sup>7</sup> (EDGE)	3
MA 204	Physician's Office Medical Coding	3
	Social Science Elective <sup>9</sup>	3
AH 216	Pharmacology <sup>9</sup>	3
AT 261	Integrated Document Formatting <sup>10</sup>	3
AT 290	Internship <sup>12</sup>	3
MA 205	Medical Office Claims Procedures	3
	Elective <sup>12</sup>	3

**Hours required for graduation: 60**

### Earn a Degree and Graduate Early (EDGE):

This program provides students the opportunity to receive credit for their high school EDGE courses.

### Contact Information:

Wylma Skean • Room 223 • Phone: (304) 710-3406 or 1-866-N-ROLLED (1-866-676-5533) • E-mail: [skean@mctc.edu](mailto:skean@mctc.edu)

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1. AC 103, AT 104, AT 136 and COM 125 have a prerequisite of REA 098, or ACT Reading 18, or SAT Reading 421, or Accuplacer Reading of 180.
  2. ENL 111 and ENL 231 have a prerequisite of ENL 095, or placement in 100-level English and REA 098, or placement in 100-level reading.
  3. IT 150 has a prerequisite of IT 101.
  4. Choose from any MAT 100-level or above.
  5. Students must demonstrate a minimum of 35 wpm with 5 or fewer errors before they can enroll in AT 114. AT 114 has a prerequisite of AT 136 or permission.
  6. AT 240 has prerequisite of AT 114.
  7. AT 265 has a prerequisite of AT 136.
  8. Choose from ART, EC, HIST, HUMN, MUSI, PSYC, SPAN, SS 100-level or above.
  9. AH 216 have a prerequisite of AH 151.
  10. AT 261 has a prerequisite of AT 114.
  11. AT 290 has a prerequisite of completion of 45 program credit hours or permission.
  12. Choose from any 100-level course.

# BUSINESS TECHNOLOGY

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## BANKING AND FINANCE ASSOCIATE IN APPLIED SCIENCE

### Program Description:

The increasing complexities of the banking and financial environment have created the need for individuals who possess a greater diversity of skills. Interpersonal, communication, analytical, decision making, customer service, and computer skills are essential for success in banking and finance. Mountwest Community & Technical College Banking and Finance Program provides these skills and a background in subject matter relevant to institutions such as commercial banks, savings banks, credit unions, mortgage banks, and other financial institutions. The program is designed for students seeking careers with financial institutions, and for those individuals already working for financial institutions who desire career advancement.

Upon completion of the Associate of Applied Science Degree in Banking and Finance, the graduate will be able to:

- understand banking and finance terminology
- apply knowledge of business computer software to financial institution activities
- apply relevant mathematical skills to financial institution activities
- demonstrate a working knowledge of ethical, legal, and social skills that relate to the banking and finance environment
- make decisions after gathering and analyzing information
- prepare and present written and oral business communication

### Career Outlook:

Wage and salary employment in banking is projected to increase four percent (4%) between 2006 and 2014, compared with the 16 percent (16%) growth projected for the economy as a whole. The combined effects of technology, deregulation, mergers, and population growth will continue to affect total employment growth and the mix of occupations in the banking industry. Overall declines in office and administrative support occupations will be offset by growth in professional, managerial, and sales occupations. The Banking and Finance Program is operated in cooperation with the American Institute of Banking (AIB). Students employed by a bank or savings and loan can also receive certificates from the AIB.

### Salary Forecast:

For the most current salary information please refer to the Bureau of Labor Statistics "Occupational Outlook Handbook" found at [www.bls.gov/ooh/](http://www.bls.gov/ooh/).

### Program Admission Requirements:

The college adheres to an open admissions policy which means applicants with a high school diploma or a GED are eligible for admission. Applicants with neither a high school diploma nor a GED may be admitted on a conditional basis.

### Employment Opportunities:

- |                                  |                           |                                 |
|----------------------------------|---------------------------|---------------------------------|
| • Beginning personal banker      | • Marketing assistant     | • Commercial loan assistant     |
| • Management trainee             | • Collections assistant   | • Credit evaluation assistant   |
| • Vault teller                   | • Teller supervisor       | • Commercial banks, savings and |
| • Trust administrative assistant | • Consumer loan assistant | loans, credit unions and        |
|                                  |                           | mortgage bank                   |

### Accreditation:

The Association of Collegiate Business Schools and Programs (ACBSP) accredit the Banking and Finance Degree Program. The ACBSP is the only nationally recognized organization that grants specialized accreditation to two and four-year college and university business programs.

# BUSINESS TECHNOLOGY

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## BANKING AND FINANCE

### MAJOR CODE – CB10

AC 103	Introduction to Accounting (EDGE) <sup>1</sup>	3
ENL 111	Written Communication <sup>2</sup>	3
FN 151	Principles of Bank Operations <sup>1</sup>	3
IT 101	Fundamentals of Computers (EDGE)	3
MAT 115/145	Business Mathematics <sup>3</sup> or Applications in Algebra <sup>3</sup>	3
AC 201	Financial Accounting <sup>4</sup>	3
COM 112/125	Oral Communication <sup>1</sup> or Interpersonal Communication <sup>1</sup>	3
EC 201	Fundamentals of Microeconomics <sup>1</sup>	3
IT 150	Applications to Spreadsheets <sup>5</sup> (EDGE)	3
MAT 210	Statistics for Business and Industry <sup>6</sup>	3
AC 210	Managerial Accounting <sup>7</sup>	3
AC 221	Computerized Accounting I <sup>8</sup>	3
EC 202	Fundamentals of Macroeconomics <sup>1</sup>	3
MG 202	Business Organization & Management <sup>9</sup>	3
MK 130	Fundamentals of Marketing <sup>1</sup>	3
FN 231	Business Finance <sup>10</sup>	3
MG 226	Commercial Papers & Transactions <sup>1</sup>	3
MG 296	Integrated Business Strategies <sup>11</sup>	3
	Banking/Finance Elective <sup>12</sup>	3
	Banking/Finance Elective <sup>12</sup>	3

**Hours required for graduation: 60**

### Earn a Degree and Graduate Early (EDGE):

This program provides students the opportunity to receive credit for their high school EDGE courses.

### Contact Information:

Rick Brown • Room 243 • Phone: (304) 710-3408 or 1-866-N-ROLLED (1-866-676-5533) • E-mail: brownr@mctc.edu

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1. AC 103, COM 112, COM 125, EC 201, EC 202, FN 151, MG 226 and MK 130 has a prerequisite of REA 098 or placement in 100-level reading.
  2. ENL 111 has a prerequisite of ENL 095, or placement in 100-level English, and REA 098, or placement in 100-level reading.
  3. MAT 115 and MAT 145 have a prerequisite of MAT 096, or MAT 097, or placement in 100-level mathematics. Students pursuing the articulated baccalaureate degree must take MAT 145 instead of MAT 115.
  4. AC 201 has a prerequisite of AC 103 or permission.
  5. IT 150 has a prerequisite of IT 101.
  6. MAT 210 has a prerequisite of MAT 115, or MAT 145, or MAT 120.
  7. AC 210 has a prerequisite of AC 201.
  8. AC 221 has prerequisites of AC 103, or AC 108, and IT 101.
  9. MG 202 has a prerequisite of MG 101 or FN 151.
  10. FN 231 has a prerequisite of AC 103, or AC 108, or AC 201.
  11. MG 296 has a prerequisite of 45 credit hours completed in the program.
  12. The following are recommended electives: AC 201, AC 234, FN 141, FN 163, FN 248, FN 250, FN 251, FN 252, FN 254, FN 258, and FN 259.

# BUSINESS TECHNOLOGY

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## BUSINESS ADMINISTRATION - MANAGEMENT TECHNOLOGY ASSOCIATE IN APPLIED SCIENCE

### Program Description:

The increasing complexities of the business environment have created the need for individuals who possess a greater diversity of skills. Interpersonal, communication, analytical, decision-making, customer service, and computer skills are essential for success in business. Mountwest Community and Technical College's Management Technology Program provides these skills and prepares students for entry-level positions in organizations with career paths that eventually lead to supervisory and management positions. The program also prepares employed individuals for upward mobility within their organization.

The flexibility of the Management Technology curriculum allows students to tailor a course of study to meet their own career goals and interests. The Business Administration Option is designed to train students who seek supervisory positions in a retail environment. Upon completion of the Associate in Applied Science Degree in Management Technology, the graduate will be able to:

- Demonstrate fundamental supervisory skills
- Apply knowledge of business computer software to business activities
- Apply relevant mathematical skills to business activities
- Demonstrate a working knowledge of ethical, legal, and social skills that relate to the business environment
- Make decisions after gathering and analyzing information
- Prepare and present written and oral communication
- Demonstrate knowledge specific to the specialized option

### Career Outlook:

The Business Administration Option provides an avenue for immediate employment and for advancement to upper levels of management. Employers seek graduates for positions ranging from business manager and sales representative to production supervisor and project planner. Graduates of the program obtain positions in manufacturing, retailing, construction, financial institutions, government and a host of other fields. Students also find this major to be of value in preparation for law school.

### Salary Forecast:

For the most current salary information please refer to the Bureau of Labor Statistics "Occupational Outlook Handbook" found at [www.bls.gov/ooh/](http://www.bls.gov/ooh/).

### Admission Requirements:

The college adheres to an open admissions policy which means applicants with a high school diploma or a GED are eligible for admission. Applicants with neither a high school diploma nor a GED may be admitted on a conditional basis.

### Accreditation:

The Association of Collegiate Business Schools and Programs (ACBSP) accredit the Management Technology Degree Program. The ACBSP is the only nationally recognized organization that grants specialized accreditation to two and four-year college and university business programs.



# BUSINESS TECHNOLOGY

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## BUSINESS ADMINISTRATION - MANAGEMENT TECHNOLOGY

MAJOR CODE - CM10 • CONCENTRATION CODE - CM16

AC 103	Introduction to Accounting (EDGE) <sup>1</sup>	3
ENL 111	Written Communication <sup>2</sup>	3
IT 101	Fundamentals of Computers (EDGE)	3
MAT 115/145	Business Mathematics <sup>3</sup> or Applications to Algebra <sup>4</sup>	3
MG 101	Introduction to Business (EDGE) <sup>1</sup>	3
AC 201	Financial Accounting <sup>5</sup>	3
AT 104	Records Management <sup>1</sup>	3
COM 112/125	Oral Communication <sup>5</sup> or Interpersonal Communication	3
EC 201	Fundamentals of Microeconomics <sup>1</sup>	3
MAT 210	Statistics for Business and Industry <sup>7</sup>	3
AC 210	Managerial Accounting <sup>8</sup>	3
AC 221	Computerized Accounting I <sup>9</sup>	3
EC 202	Fundamentals of Macroeconomics <sup>1</sup>	3
MG 202	Business Organization & Management <sup>10</sup>	3
MK 130	Fundamentals of Marketing <sup>1</sup>	3
AC 234	Taxation <sup>11</sup>	3
FN 231	Business Finance <sup>11</sup>	3
MG 181	Retailing <sup>1</sup>	3
MG 226	Commercial Papers & Transactions <sup>1</sup>	3
MG 296	Integrated Business Strategies <sup>12</sup>	3

**Hours required for graduation: 60**

### Earn a Degree and Graduate Early (EDGE):

This program provides students the opportunity to receive credit for their high school EDGE courses.

### Contact Information:

Rick Brown • Room 243 • Phone: (304) 710-3408 or 1-866-N-ROLLED (1-866-676-5533) • E-mail: brownr@mctc.edu

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1. AC 103, MG 101, AT 104, EC 201, EC 202, MK 130, MG 181, and MG 226 have a prerequisite of REA 098, or ACT Reading 18, or SAT Reading 421, or Accuplacer Reading 80.
  2. ENL 111 has a prerequisite of ENL 095, or placement in 100-level English and REA 098, or placement in 100-level reading.
  3. MAT 115 has a prerequisite of MAT 096, or MAT 097, or placement in 100-level math. Students pursuing the articulated baccalaureate degree should take MAT 145 instead of MAT 115.
  4. MAT 145 has a prerequisite of ACI 19, or MAT 096, or Plac 100.
  5. AC 201 has a prerequisite of AC 103 or permission.
  6. COM 111 and COM 125 have a prerequisite of REA 098 or placement in 100-level reading. Students pursuing the articulated baccalaureate degree should take COM 112 instead of COM 125.
  7. MAT 210 has a prerequisite of MAT 115, MAT 145, or MAT 120.
  8. AC 210 has a prerequisite of AC 103 or AC 108 or AC 201.
  9. AC 221 has a prerequisite of AC 103 or AC 108 or AC 201, and IT 101 or permission.
  10. MG 202 has a prerequisite of MG 101.
  11. AC 234 and FN 231 have a prerequisite of AC 103, or AC 108, or AC 201, or AC 215.
  12. MG 296 has a prerequisite of 45 credit hours completed in the program.

# **BUSINESS TECHNOLOGY**

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## **CALL CENTER SUPERVISION - MANAGEMENT TECHNOLOGY ASSOCIATE IN APPLIED SCIENCE**

### **Program Description:**

The increasing complexities of the business environment have created the need for individuals who possess a greater diversity of skills. Interpersonal, communication, analytical, decision-making, customer service, and computer skills are essential for success in business. Mountwest Community & Technical College's Management Technology Program provides these skills and prepares students for entry-level positions in organizations with career paths that eventually lead to supervisory and management positions. The program also prepares employed individuals for upward mobility within their organization.

The flexibility of the Management Technology curriculum allows students to tailor a course of study to meet their own career goals and interests. The Call Center Management Program is designed to train students who seek management positions in a call center or the teleservice industry. Students completing these courses will be proficient in all facets of communication and will tailor their communication skills to the call center environment.

This program provides students with a deeper knowledge of current contact center management topics, operations and practices. Courses focus on the analytical skills to determine the needs of the call center industry and problem-solving skills to apply management to meet those requirements. Emphasis is placed on communication, teamwork, ethics, and the skills for managing diversity within the contact center industry. Upon completion of the Associate in Applied Science Degree in Management Technology, the graduate will be able to:

- Demonstrate fundamental supervisory skills
- Apply knowledge of business computer software to business activities
- Apply relevant mathematical skills to business activities
- Demonstrate a working knowledge of ethical, legal, and social skills that relate to the business environment
- Make decisions after gathering and analyzing information
- Prepare and present written and oral communication
- Demonstrate knowledge specific to the specialized option

### **Career Outlook:**

According to the Bureau of Labor Statistics, West Virginia has the highest number of individuals per capita employed in the call center and teleservice industry in the United States. The need for qualified supervisors should continue to grow in the future.

### **Employment Opportunities:**

The Call Center Supervision Option offers employees of call center and teleservice industries the skills and knowledge they will need to move into supervisory positions. The Call Center Supervisor in Management Technology Program is open to students who are already employed at a call center or teleservice industry and want to prepare for the opportunity for advancement.

### **Salary Forecast:**

For the most current salary information please refer to the Bureau of Labor Statistics "Occupational Outlook Handbook" found at [www.bls.gov/ooh/](http://www.bls.gov/ooh/).

### **Admission Requirements:**

The college adheres to an open admission policy which means applicants with a high school diploma or a GED are eligible for admission. Applicants with neither a high school diploma nor a GED may be admitted on a conditional basis. Students admitted to the program must be employed in a call center or teleservice industry by the start of the third semester.

# BUSINESS TECHNOLOGY

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## CALL CENTER SUPERVISION - MANAGEMENT TECHNOLOGY

MAJOR CODE - CM10 • CONCENTRATION CODE - CM17

AC 103	Introduction to Accounting (EDGE) <sup>1</sup>	3
ENL 111	Written Communication <sup>2</sup>	3
IT 101	Fundamentals of Computers (EDGE)	3
MAT 115	Business Mathematics <sup>3</sup>	3
MG 101	Introduction to Business (EDGE) <sup>1</sup>	3
COM 112/125	Oral Communication <sup>4</sup> or Interpersonal Communication <sup>4</sup>	3
MAT 210	Statistics for Business and Industry <sup>5</sup>	3
MG 105	Introduction to Workplace Training <sup>1</sup>	3
MG 233	Personnel Management <sup>6</sup>	3
	Social Science Elective <sup>7</sup>	3
ENL 115/231	Written Communication II <sup>8</sup> or Technical Report Writing <sup>8</sup>	3
MG 202	Business Organization & Management <sup>6</sup>	3
MG 205	Call Center Environment/Technology <sup>9</sup>	3
MG 207	Managing Call Center Data <sup>10</sup>	3
	Recommended Elective <sup>11</sup>	3
MG 203	Managing Call Center Teams <sup>12</sup>	3
LAW 250	Employment Law <sup>13</sup>	3
MG 209	Occupational Safety <sup>1</sup>	3
MG 299	Cooperative Work Experience <sup>14</sup>	3
	Recommended Elective <sup>11</sup>	3

**Hours required for graduation: 60**

### Earn a Degree and Graduate Early (EDGE):

This program provides students the opportunity to receive credit for their high school EDGE courses.

### Contact Information:

Rick Brown • Room 243 • Phone: (304) 710-3408 or 1-866-N-ROLLED (1-866-676-5533) • E-mail: brownr@mctc.edu

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1. AC 103, MG 101, MG 105 and MG 209 have a prerequisite of REA 098, or ACT Reading 18, or SAT Reading 421, or Accuplacer Reading 80.
  2. ENL 111 has a prerequisite of ENL 095, or placement in 100-level English, and REA 098, or placement in 100-level reading.
  3. MAT 115 has a prerequisite of MAT 096, or MAT 097, or placement in 100-level math.
  4. COM 111 and COM 125 have a prerequisite of REA 098 or placement in 100-level reading.
  5. MAT 210 has a prerequisite of MAT 115, MAT 145, or MAT 120.
  6. MG 202 and MG 233 have a prerequisite of MG 101.
  7. Choose from EC, HIST, PSYC, SS 100-level or above.
  8. ENL 115 and ENL 231 has a prerequisite of ENL 111.
  9. MG 205 has a prerequisite of IT 101.
  10. MG 207 has a prerequisite of MAT 210.
  11. Recommended electives: AC 221, AC 222, FN 141, FN 151, IT 107, IT 115, IT 120, IT 150, ISM 133, LAW 101, AT 136, AT 160, AT 255 and other courses recommended by a program advisor.
  12. MG 203 has a prerequisite of MG 202 or SS 201.
  13. LAW 250 has a prerequisite of LAW 101 or MG 233.
  14. MG 299 has a prerequisite of permission by division director or program coordinator.

# BUSINESS TECHNOLOGY

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## INDUSTRIAL MANAGEMENT - MANAGEMENT TECHNOLOGY ASSOCIATE IN APPLIED SCIENCE

### Program Description:

The increasing complexities of the business environment have created the need for individuals who possess a greater diversity of skills. Interpersonal, communication, analytical, decision-making, customer service, and computer skills are essential for success in business. Mountwest Community & Technical College's Management Technology Program provides these skills and prepares students for entry-level positions in organizations with career paths that eventually lead to supervisory and management positions. The program also prepares employed individuals for upward mobility within their organization.

The Industrial Management Technology option is specifically designed to provide students with the skills necessary to be successful in a position of supervisory leadership. Students can benefit from this program by becoming qualified for advancement into a supervisory position or a position of greater responsibility and influence. Upon completion of the Associate in Applied Science Degree in Management Technology, the graduate will be able to:

- Demonstrate fundamental supervisory skills
- Apply knowledge of business computer software to business activities
- Apply relevant mathematical skills to business activities
- Demonstrate a working knowledge of ethical, legal, and social skills that relate to the business environment
- Make decisions after gathering and analyzing information
- Prepare and present written and oral communication
- Demonstrate knowledge specific to their specialized option

### Career Outlook:

Employment of industrial production managers is expected to grow more slowly than the average for all occupations through 2012. However, a number of job openings will stem from the need to replace workers who transfer to other occupations or leave the labor force. Projected job growth varies by industry.

### Employment Opportunities:

This option offers employment opportunities in various types of profit and nonprofit businesses and organizations as management trainees. The focus is on manufacturing establishments.

### Admission Requirements:

The college adheres to an open admissions policy, which means applicants with the high school diploma or a GED are eligible for admission. Applicants with neither a high school diploma nor a GED may be admitted on a conditional basis.

### Salary Forecast:

For the most current salary information please refer to the Bureau of Labor Statistics "Occupational Outlook Handbook" found at [www.bls.gov/ooh/](http://www.bls.gov/ooh/).

### Accreditation:

The Association of Collegiate Business Schools and Programs (ACBSP) accredits the Management Technology Degree Program. The ACBSP is the only nationally recognized organization that grants specialized accreditation to two and four-year college and university business programs.

# BUSINESS TECHNOLOGY

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## INDUSTRIAL MANAGEMENT - MANAGEMENT TECHNOLOGY

MAJOR CODE - CM10 • CONCENTRATION CODE - CM12

AC 103	Introduction to Accounting (EDGE) <sup>1</sup>	3
ENL 111	Written Communication <sup>2</sup>	3
IT 101	Fundamentals of Computers (EDGE)	3
MAT 145	Applications in Algebra <sup>3</sup>	3
MG 101	Introduction to Business (EDGE) <sup>1</sup>	3
AC 201	Financial Accounting <sup>4</sup>	3
AT 104	Records Management <sup>1</sup>	3
MT 200	Blueprint Reading	3
MFE 120	Introduction to Manual Machining <sup>5</sup>	4
MAT 210	Statistics for Business and Industry <sup>6</sup>	3
AC 210	Managerial Accounting <sup>7</sup>	3
COM 112/125	Oral Communication <sup>8</sup> or Interpersonal Communication <sup>8</sup>	3
ENL 231	Technical Report Writing <sup>9</sup>	3
MFE 220	Computer Aided Design 1 <sup>10</sup>	4
MG 202	Business Organization & Management <sup>11</sup>	3
MK 130	Fundamentals of Marketing <sup>1</sup>	3
FN 231	Business Finance <sup>4</sup>	3
MG 226	Commercial Papers & Transactions <sup>1</sup>	3
MG 296	Integrated Business Strategies <sup>12</sup>	3
	Social Science Requirement <sup>13</sup>	3

**Hours required for graduation: 62**

### Earn a Degree and Graduate Early (EDGE):

This program provides students the opportunity to receive credit for their high school EDGE courses.

### Contact Information:

Rick Brown • Room 243 • Phone: (304) 710-3408 or 1-866-N-ROLLED (1-866-676-5533) • E-mail: brownr@mctc.edu

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1. AC 103, MG 101, AT 104, MK 130 and MG 226 have a prerequisite of REA 098, or ACT Reading 18, or SAT Reading 421, or Accuplacer Reading 80.
  2. ENL 111 has a prerequisite of REA 098, or placement in 100-level reading.
  3. MAT 145 has a prerequisite of ACT 19, MAT 096, or Plac 100.
  4. AC 201 has a prerequisite of AC 103 or permission.
  5. MFE 120 has a prerequisite of MAT 145 or permission.
  6. MAT 210 has a prerequisite of MAT 115 or MAT 145.
  7. AC 210 has a prerequisite of AC 103 or AC 108 or AC 201.
  8. COM 111 and COM 125 have a prerequisite of REA 098 or placement in 100-level reading.
  9. ENL 231 has a prerequisite of ENL 111.
  10. MFE 120 has a prerequisite of MAT 145 or permission.
  11. MG 202 has a prerequisite of MG 101.
  12. MG 296 has a prerequisite of 45 credit hours completed in the program.
  13. Social Science requirement: select from EC 102, SS 201, SS 210, or PSYC 215.

# BUSINESS TECHNOLOGY

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## INTERIOR DESIGN ASSOCIATE IN APPLIED SCIENCE

### Program Description:

The Interior Design Program is a cooperative effort between Mountwest Community & Technical College and Cabell County Career Technology Center (CCCTC). Students will take their interior design technical training at Cabell County Career Technology Center and their business and general education courses at Mountwest Community & Technical College.

The Interior Design Program is associated with the American Society of Interior Design (ASID). It is designed for individuals who wish to seek employment in interior design or related fields. The program provides students with the opportunity to acquire knowledge and understanding of the equipment and supplies, principles and elements of design, and actual hands-on training required for entry-level positions. Students also learn the basics of efficient space planning, color theory, drafting, lighting, furniture, floral design, exterior design and human factors that affect interior design.

Upon completion of the Interior Design, Associate in Applied Science Degree, the graduate will be able to:

- Exhibit knowledge of the terminology associated with interior design;
- Apply interior design concepts to planning the space and furnishing the interiors of private homes, public buildings, and institutional establishments;
- Demonstrate good interpersonal and customer service skills;
- Prepare and present written and oral communication;
- Gain real-life experience through placement in an internship.

### Career Outlook:

Interior designers enhance the function, safety, and quality of interior spaces of private homes, public buildings, and business or institutional facilities, such as offices, restaurants, retail establishments, hospitals, hotels, and theaters. They also plan the interiors of existing structures that are undergoing renovation or expansion.

Increasingly, designers are using computers to plan layouts because computers make it easier to change plans based upon ideas received from the client. Interior designers also design lighting and architectural details such as crown molding, built-in bookshelves, or cabinets, coordinate colors, and select furniture, floor coverings, and window treatments. Rising demand for interior design of private homes, offices, restaurants and other retail establishments, and institutions that care for the rapidly growing elderly population should spur employment growth of interior designers.

### Employment Opportunities:

- Architectural firms
- Interior design firms
- Kitchen design centers
- Department stores
- Furniture stores

### Salary Forecast:

For the most current salary information please refer to the Bureau of Labor Statistics "Occupational Outlook Handbook" found at [www.bls.gov/ooh/](http://www.bls.gov/ooh/).

### Admission Requirements:

In addition to complying with Mountwest Community & Technical College's admission standards, students must also apply for admission to Cabell County Career Technology Center and meet the admission standards to be able to take the interior design courses.

# BUSINESS TECHNOLOGY

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## INTERIOR DESIGN<sup>1</sup>

### MAJOR CODE – CI10

ENL 111	Written Communication <sup>2</sup>	3
ID 102	Intro to Design <sup>3</sup>	3
ID 110	Perspective Drawing Techniques <sup>3</sup>	3
MAT 120	Applied Professional Math <sup>4</sup>	3
MK 130	Fundamentals of Marketing <sup>3</sup>	3

COM 112	Oral Communication <sup>5</sup>	3
EC 102	Basic Economics <sup>3</sup>	3
ID 120	Advanced Perspective Drawing <sup>6</sup>	3
ID 201	3-D Design <sup>7</sup>	3
IT 110	Computer Skills for Interior Design	3
	Math/Science Requirement <sup>5</sup>	3

### COMPONENT II

Interior Design Technical Training Taught by Cabell County Career Technology Center (first or second year depending on whether students start at Mountwest or CCTC).

CAD 111	Computer-Aided Drafting	3
ID 111	Interior Design Theory (EDGE)	3
ID 112	Design Graphics <sup>1</sup> (EDGE)	3
ID 205	Interior Design Architecture <sup>1</sup> (EDGE)	3
ID 211	Technical Drawing <sup>1</sup> (EDGE)	3
ID 212	Interior Textile Materials <sup>1</sup> (EDGE)	3

CAD 211	Adv. Computer Aided Interior Design	3
ID 115	Visual Merchandising <sup>8</sup> (EDGE)	3
ID 215	Floral Design and Application <sup>8</sup> (EDGE)	3
ID 220	Window/Wall/Floor Treatments <sup>9</sup> (EDGE)	3
ID 225	Furniture Construction/History <sup>9</sup> (EDGE)	2
ID 299	Internship <sup>10</sup> (EDGE)	3

**Hours required for graduation: 65**

### Earn a Degree and Graduate Early (EDGE):

This program provides students the opportunity to receive credit for their high school EDGE courses.

### Contact Information:

Rick Brown • Room 243 • Phone: (304) 710-3408 or 1-866-N-ROLLED (1-866-676-5533) • E-mail: brownr@mctc.edu

Lou Etta Bowen • Cabell County Career Technology Center • Phone: (304) 528-5106 • E-mail: lbowen@marshall.edu

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1. Interior Design technical training taught by Cabell County Career Technology Center first or second year depending on whether students start at Mountwest or CCTC. Students who intend to apply for financial aid must enroll exclusively at one institution and must apply through the institution in which they enroll. Financial aid received through one of the institutions will not apply to courses take at the other institution.
  2. ENL 111 has a prerequisite of REA 098, or ACT 18, or SAT 421, or appropriate reading placement.
  3. ID 102, ID 110, MK 130 and EC 102 have a prerequisite of REA 098, or ACT Reading 18, or SAT Reading 421, or Accuplacer Reading of 80.
  4. MAT 120 has a prerequisite of MAT 096, MAT 097, MAT 095 or PMTH 1003.
  5. COM 112 has a prerequisite of SAT 450 or ACT 18.
  6. ID 120 has a prerequisite of ID 110.
  7. ID 201 and IT 110 have a prerequisite of ID 110.
  8. ID 115 and ID 215 have a prerequisite of ID 111.
  9. ID 220 and ID 225 have a prerequisite of ID 212.
  10. Student must complete a minimum of 48 credit hours of the program before they are eligible to take ID 299.

# ALLIED HEALTH

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## DENTAL ASSISTANT ASSOCIATE IN APPLIED SCIENCE

### **Program Description:**

The Dental Assistant Program is a cooperative effort between Mountwest Community & Technical College and Putnam Career & Technical Center. Dental assistants perform a range of patient care, office and laboratory duties. They are an integral part of the dental office, acting as a second pair of hands for a dentist. Ultimately, their role is to make certain that the examination of a patient is performed efficiently. Almost all jobs for dental assistants are in dental offices.

### **Career Description:**

Dental assistants have many important duties in the dental office. They prepare the patient for treatment and obtain their dental records. During the examination of the patient, dental assistants hand instruments and materials to the dentist and keep the patient's mouth dry by using suction of other equipment. Other duties in the office include sterilizing and disinfecting instruments, preparing the instrument trays for dental procedures, and educating patients on oral health care.

Some dental assistants take x-ray film, and prepare materials for impressions and restorations. They also may remove sutures and apply topical anesthetics to the gums. Those with laboratory duties make casts of teeth for impressions, and make temporary crowns. Dental assistants with office duties schedule and confirm appointments, keep patient records, send bills, receive payments, and order supplies and materials.

### **Career Outlook:**

Job prospects should be excellent. Employment of dental assistants is expected to grow much faster than the average for all occupations through 2018, due to population growth and greater retention of natural teeth by middle aged people and senior citizens. Additionally, numerous job openings will arise as recent dental school graduates replace the older dentists that were less likely to hire dental assistants.

You may also contact the American Dental Assistants Association at [www.dentalassistant.org](http://www.dentalassistant.org).

### **Salary Forecast:**

For the most current salary information please refer to the Bureau of Labor Statistics "Occupational Outlook Handbook" found at [www.bls.gov/ooh/](http://www.bls.gov/ooh/).

### **Admission Requirements for DA Program:**

Students seeking admission into the Dental Assistant Program must arrange an appointment with the program faculty prior to submitting the application packet. This is to ensure that students receive current information regarding the program admission requirements and the criteria for selection.



# ALLIED HEALTH

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## DENTAL ASSISTANT MAJOR CODE - CTA2

DA 241	Biomedical Science	4
DA 243	Clinical Science	4
DA 244	Dental Assisting General Studies	3
DA 246	Dental Science	4
DA 247	Dental Specialties I	2
DA 248	Dental Terminology I	2
DA 242	Dental Assisting Clinical Practice	4
DA 245	Dental Assisting Clinical Mentoring	6
DA 249	Supervised Dental Assisting Experience	3
DA 250	Dental Specialties II	2
DA 251	Dental Terminology II	2
AH 151	Medical Terminology <sup>4</sup>	3
ENL 111	Written Communication <sup>4,5</sup>	3
IT 101	Fundamentals of Computers (EDGE)	3
	Human Biology Elective <sup>6</sup>	3
	Math Elective <sup>7</sup>	3
AH 216	Pharmacology <sup>8</sup>	3
AH 220	Nutrition <sup>4</sup>	3
BIOL 210	Microbiology	3
COM 112/125	Oral Communication or Interpersonal Communication	3
	Social Science Elective <sup>9</sup>	3

**Hours required for graduation: 66**

### Earn a Degree and Graduate Early (EDGE):

This program provides students the opportunity to receive credit for their high school EDGE courses.

### Contact Information:

Edward Bays • Room 431 • Phone: (304) 710-3528 or 1-866-N-ROLLED (1-866-676-5533) • E-mail: bays@mctc.edu

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1. All non-DA courses are offered at Mountwest Community & Technical College.
  2. Dental assistant (DA) courses are delivered at Putnam Career and Technical Center at Eleanor, WV.
  3. All third semester dental assistant (DA) courses must be completed with a "C" or better.
  4. AH 151, ENL 111, and AH 220 have a prerequisite of REA 098, or placement in 100-level reading.
  5. ENL 111 has a prerequisite of ENL 095, or placement in 100-level English, and REA 098, or placement in 100-level reading.
  6. Human biology electives include: BIOL 102, BIOL 257, BIOL 258, BIOL 260, or BIOL 265.
  7. MAT 145 has a prerequisite of MAT 096, or MAT 097, or placement in 100-level math.
  8. AH 216 has a prerequisite of AH 151.
  9. Choose from EC, HIST, PSYC, SS 100-level or above.

# ALLIED HEALTH

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## DENTAL LABORATORY TECHNOLOGY ASSOCIATE IN APPLIED SCIENCE

### Program Description:

One year of training at the Putnam Career and Technical Center (PCTC) and 31 credit hours at Mountwest will result in an Associate in Applied Science degree in Dental Laboratory Technology. Students will follow the Putnam County school calendar while completing the dental laboratory technology courses, and attend the PCTC every day from 8:30 a.m. - 3 p.m. during the technical portion of the program.

### Career Outlook:

Dental laboratory technicians make and repair dental appliances such as dentures, crowns, and braces. Specializations are available in various aspects of the work prescribed by dentists and orthodontists: crown and bridge technicians, metal dental technicians, partial denture technicians, dental ceramists and orthodontic technicians. Most dental laboratory technicians work in commercial dental laboratories employing 2 to 20 people. Employment opportunities are available in private dental offices, dental schools, hospitals, and companies that manufacture dental prosthetic materials.

Most job openings will arise from the need to replace technicians who transfer to other occupations or who leave the labor force. During the last few years, demand has risen from an aging public that is growing increasingly interested in cosmetic prostheses. For example, many dental laboratories are filling orders for composite fillings that are the same shade of white as natural teeth to replace older, less attractive fillings.

### Salary Forecast:

For the most current salary information please refer to the Bureau of Labor Statistics "Occupational Outlook Handbook" found at [www.bls.gov/ooh/](http://www.bls.gov/ooh/).

### Admission Requirements for Mountwest:

The college adheres to an open admissions policy, which means applicants with a high school diploma or a GED are eligible for admission into Mountwest. Applicants with neither a high school diploma nor a GED may be admitted on a conditional basis.

### Admission Requirements for DLT Program:

Students seeking admission into the Dental Laboratory Technology Program must arrange an appointment with the program faculty prior to submitting the application packet. This is to ensure that students receive current information regarding the program admission requirements and the criteria for selection.

### Employment Opportunities:

- Dental labs
- Private dental offices
- Dental schools
- Dental labs that manufacture prosthetic materials

# ALLIED HEALTH

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## DENTAL LABORATORY TECHNOLOGY

### MAJOR CODE – CD10

AH 151	Medical Terminology	3
ENL 111	Written Communication	3
IT 101	Fundamentals of Computers (EDGE)	3
MG 101	Introduction to Business	3
SCI 120	Basics in Physical Science	4
COM 112	Oral Communication	3
BIOL 257	Intro to Anatomy and Physiology (EDGE)	3
MAT 115	Business Mathematics	3
MG 202	Business Organization and Mgmt	3
PSYC 215	Lifespan Psychology <sup>1</sup>	3
DLT 101	Intro to Dental Technology (1st 9 weeks) <sup>6, 7</sup>	6
DLT 104	Basic Tech of Complete Dentures (2nd 9 weeks) <sup>6</sup>	9
DLT 108	Basic Tech of Partial Dentures (1st 9 weeks) <sup>6, 8</sup>	9
DLT 112	Basic Tech of Inlays/Crowns/ Bridges/Ceramics (2nd 9 weeks) <sup>6</sup>	10
DLT 116	Clinical Experience (2nd 9 weeks) <sup>6, 9</sup>	1

**Hours required for graduation: 66**

### Earn a Degree and Graduate Early (EDGE):

This program provides students the opportunity to receive credit for their high school EDGE courses.

### Contact Information:

Edward Bays • Room 481 • Phone: (304) 710-3528 or 1-866-N-ROLLED (1-866-676-5533) • E-mail: bays@mctc.edu  
Jessie Smith • Putnam Career and Technical Center • Phone: (304) 586-3494, Ext. 213

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1. AH 151, and PSYC 215 have a prerequisite of REA 098, or placement in 100-level reading.
  2. ENL 111 has a prerequisite of ENL 095, or placement in 100-level English, and REA 098, or placement in 100-level reading.
  3. Physical science elective may be substituted for SCI 120 with permission.
  4. MAT 115 has a prerequisite of MAT 096, or MAT 097, or placement in 100-level math.
  5. MG 202 has a prerequisite of MG 101.
  6. Dental laboratory technology classes are delivered at the Putnam Career and Technical Center at Eleanor, WV
  7. DLT 101 has a prerequisite of admission to the Dental Laboratory Technology Program.
  8. All first semester DLT courses must be completed with a "C" or better before student can register for second semester coursework.
  9. DLT 116 has a prerequisite of DLT 112.

# ALLIED HEALTH

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## HEALTH INFORMATION TECHNOLOGY ASSOCIATE IN APPLIED SCIENCE

### Program Description:

The health information technician is the professional responsible for maintaining components of health information systems in a manner consistent with the medical, administrative, ethical, legal, accreditation, and regulatory requirements of the health care delivery system. In all types of facilities, and in various locations within a facility, the technician possesses the technical knowledge and skill necessary to process, maintain, compile, and report data for reimbursement, facility planning, marketing, risk management, quality assessment, and research; to abstract and code clinical data using appropriate classification systems; and to analyze health records according to standards. The health information technician may be responsible for functional supervision of the various components of the health information system. Within the 63 credit hours students must earn for the associate degree, 32 credit hours of health information technology classes are required. This includes 5 credit hours of directed practice where the students will practice their skills in a health information setting.

### Career Outlook:

Job prospects should be very good. Employment of medical records and health information technicians is expected to grow much faster than the average for all occupations through 2012, due to rapid growth in the number of medical tests, treatments, and procedures that will be increasingly scrutinized by third-party payers, regulators, courts, and consumers ([www.bls.gov](http://www.bls.gov)).

### Salary Forecast:

For the most current salary information please refer to the Bureau of Labor Statistics "Occupational Outlook Handbook" found at [www.bls.gov/ooh/](http://www.bls.gov/ooh/).

### Admission Requirements:

1. Completion of the first year of course work with a grade point average of 2.5 or above with a grade of at least C in all courses.
2. Completion of a minimum of 20 hours of observation in a health information management department of a health care facility.
3. Applications will be accepted from January 1 of each year for the upcoming fall semester. Admission to the program will be granted starting in May. This is a limited enrollment program.
4. Students seeking admission into the Health Information Technology program must arrange an appointment with the program faculty prior to submitting the application packet. This is to ensure that students receive current information regarding the program admission requirements and the criteria for selection.

### Employment Opportunities:

- Acute care facilities
- Long-term care facilities
- Insurance companies
- Rehabilitation centers
- Physicians' offices
- Medical transcription
- Ambulatory care facilities
- State and local health departments
- Sales representatives for health information supplies
- Professional billing companies
- Attorneys' offices

# ALLIED HEALTH

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## HEALTH INFORMATION TECHNOLOGY

### MAJOR CODE - CH10

AH 151	Medical Terminology <sup>1</sup> (EDGE)	3
AH 216	Basic Pharmacology <sup>2</sup>	3
ENL 111	Written Communication	3
IT 101	Fundamentals of Computers (EDGE)	3
	Psychology approved elective	3
AH 205	Principles of Disease	3
BIOL 258	Principles of Anatomy & Physiology (EDGE)	4
AH 204	Legal and Ethical Issues in Healthcare	3
	Oral Communication elective	3
HIT 201	Health Information Tech I <sup>3</sup>	3
HIT 201L	Health Information Tech I Lab	1
HIT 205	ICD-10-CM Diagnostic Coding	3
HIT 206	Healthcare Statistics	3
HIT 210	Computer Health Info Systems	3
HIT 214	Directed Practice I <sup>4,5</sup>	1
HIT 202	Health Information Tech II <sup>3</sup>	3
HIT 202L	Health Information Tech II Lab	1
HIT 207	ICD-10-PCS Procedural Coding	3
HIT 208	Qual. Improvement in Healthcare	2
HIT 209	CPT-Procedural Coding	3
HIT 215	Directed Practice II <sup>5,6</sup>	2
MA 205	Medical Office Claims Procedures	3
HIT 212	Health Information Technology <sup>7</sup>	2
HIT 218	Directed Practice III <sup>5,8</sup>	2

**Hours required for graduation: 63**

### Earn a Degree and Graduate Early (EDGE):

This program provides students the opportunity to receive credit for their high school EDGE courses.

### Contact Information:

Janet B. Smith • Room 433 • Phone: (304) 710-3516 or 1-866-N-ROLLED (1-866-676-5533) • E-mail: smithjan@mctc.edu

\*Application process for Health Information Technology: file a Mountwest Community & Technical College application provided by the Office of Admissions. File a Health Information Technology Program application provided by the HIT Program Coordinator in the spring of the first year in the program prior to starting classes in the fall.

\*\*Academic policy for Health Information Technology: each HIT course must be completed with a grade of C or better. Students earning a grade of less than C in an HIT course must repeat the course. Evidence of a current satisfactory health record must be submitted prior to participation in the directed practice experience. Students are responsible for transportation to and from the directed practice sites.

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1. AH 151, SS 201, SS 215, SS 225 have a prerequisite of REA 098 or ACT Reading 18 or SAT Reading 421 or ACCUPLACER 098.
  2. AH 216 has a prerequisite of AH 151.
  3. HIT 201 and HIT 202 have respective corequisites of HIT 201L and HIT 202L.
  4. HIT 214 has a co-requisite of HIT 201 and HIT 201L.
  5. HIT 214, HIT 215 and HIT 218 should be taken in sequence.
  6. HIT 215 has a prerequisite of HIT 214.
  7. HIT 212 has a prerequisite of HIT 201, HIT 201L, HIT 202, HIT 202L, HIT 205, HIT 207, HIT 206, HIT 208, HIT 209 and HIT 210.
  8. HIT 218 has a prerequisite of HIT 205, HIT 207 and HIT 209.

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# ALLIED HEALTH

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## HEALTH SCIENCE ASSOCIATE IN APPLIED SCIENCE

### Program Description:

The Health Science A.A.S. Program is a unique opportunity for students holding a national certification in a professional field to build on that experience and earn an associate's degree. The associate degree often allows students greater flexibility in their chosen field of study and opportunities for advancement in their jobs. Health Science A.A.S. graduates have a wide range of career options within the health science industries. Graduates work in professional, scientific, or technical services firms. Health science graduates also work in education services, federal, state, and local governments, or pharmaceutical and medicine manufacturing.

The A.A.S. Health Science Degree includes a minimum of 21 general education credits, at least 9 allied health and/or life science credits and a maximum of 30 credit hours earned through national certification. The credits earned through national certification can be from a variety of careers, including but not limited to, medical records, phlebotomy, patient care technician, certified nurse assistant, massage therapy, cardiovascular technician, EKG technician, DOT drug testing, and many more.

### Career Outlook:

According to the United States Department of Labor, the employment projection on the average for all Health Science professions is expected to grow as fast as other occupations. However, selective specialties within this field are expected to grow faster.

### Salary Forecast:

Hourly wages for health science technicians averages over \$8.00 to \$35.00/ hour with benefits depending on certification. (Information obtained from the Occupational Outlook Handbook 2010-2011)

### Admission Requirements:

1. Mountwest Community & Technical College is an open enrollment institution.
2. Applicants must complete all general education and prerequisite courses with a "C" or better, and must have a cumulative GPA of 2.0 or higher.
3. Prior to admission to the Health Science Program and/or clinical internships, students may be required to document that they have successfully passed a criminal background check and drug screen. For more information concerning the Allied Health Criminal background check and drug screen procedure, please contact the Dean of Allied Health & Life Sciences.

### National Areas of Emphasis Include, but are not limited to:

- EMT
- Clinical laboratory (MLT, HT, Phleb)
- EKG tech
- Massage therapy
- Nursing (CAN, LPN, PCT, PCS)
- Pharmacy technician
- Radiology technology
- Respiratory therapy
- Surgical technology
- Ophthalmic technician
- Ultrasound
- Veterinary technician

### Employment Opportunities:

- Acute care facilities
- Long-term care facilities
- Insurance companies
- Rehabilitation centers
- Physicians' offices
- Medical transcription
- Ambulatory care facilities
- State and local health departments
- Sales representatives for health information supplies
- Professional billing companies
- Attorneys' offices

# ALLIED HEALTH

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## HEALTH SCIENCE

### MAJOR CODE - CH70

BIOL 257	Intro to Anatomy and Physiology <sup>1</sup>	3
IT 101	Fundamentals of Computers	3
COM 112	Oral Communication <sup>2</sup>	3
ENL 111	Written Communication <sup>3</sup>	3
	Math Elective	3
	General Education Elective	3
	Humanities or Social Science Elective	3
AH 151	Medical Terminology <sup>4</sup>	3
AH 205	Principles of Disease <sup>5</sup>	4
AH 207	Infection Control for Health Professionals <sup>6</sup>	4
AH 216	Basic Pharmacology <sup>7</sup>	3
AH 217	Personal Fitness Training <sup>8</sup>	4
AH 220	Basic Nutrition <sup>9</sup>	3
EME 105	Basic Life Support	3
	Nationally Certified Credentialed Area of Emphasis <sup>10</sup>	15-30

**Hours required for graduation: 60**

### Earn a Degree and Graduate Early (EDGE):

This program provides students the opportunity to receive credit for their high school EDGE courses.

### Contact Information:

Janet B. Smith • Room 443 • Phone: (304) 710-3516 or 1-866-N-ROLLED (1-866-676-5533) • E-mail: smithjan@mctc.edu

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1. BIOL 257 or suitable substitute.
  2. COM 112 has a prerequisite of SAT Verbal 450 or ACT Verbal 18.
  3. ENL 111 has a prerequisite of ACT Combined English/Writing 18 or ENL 085 or ENL 095 or ACT Verbal 18 or SAT Writing 450 or Placement Reading 80 or SAT Writing 421 or REA 098.
  4. AH 151 has a prerequisite of REA 098, ACT 18, SAT 421 or PREA 098.
  5. AH 205 has a prerequisite of BSC 227 or BIL 257 or BIOL 260.
  6. AH 207 has a prerequisite of AH 151.
  7. AH 216 has a prerequisite of REA 098 or ACT 18, or SAT 421 or PREA 098.
  8. AH 217 has a prerequisite of REA 098, ACT 18, SAT 421 or PREA 098.
  9. AH 220 has a prerequisite of REA 098 or ACT 18, or SAT 421 or PREA 098.
  10. Equivalency hours based on the WV Board of Governor's Credit Equivalency Guidelines: "summary of credit awards for certified credentials," or credit recommendation from the American Council for Education.

# ALLIED HEALTH

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## MASSAGE THERAPY ASSOCIATE IN APPLIED SCIENCE

### Program Description:

The A.A.S. Degree in Massage Therapy offers two options for students to earn their associate degree in massage therapy. Licensed Massage Therapists (LMTs) offer a range of services from relaxation massage to precise clinical soft tissue treatment. Massage techniques can release scar tissue, increase joint range of motion, enhance circulation of blood and lymph and increase the supply of oxygen and nutrients to cells, eliminating toxic waste products resulting in a healthier person. A holistic approach to massage therapy integrates an understanding that there are physical, mental, emotional, and spiritual components to each individual. LMT's are currently employed through private practice, chiropractic offices, hospitals, health clubs, day spas, cruise ships, fitness centers, beauty salons, and more.

### Career Outlook:

Nationally, the number of jobs for massage therapists is expected to grow faster than average through the year 2016 ([www.bls.gov](http://www.bls.gov)). Many factors will affect this growth. More people are becoming interested in massage as a way to relieve stress and promote health. As disposable incomes grow, many people will seek massages for personal benefit. There will also be growth in full-service spa salons. These salons offer services such as beauty wraps, pedicures, and massages in addition to traditional hair and makeup services. Many employees will be needed to offer a range of services. The medical benefits of massage are becoming more widely known. As a result, more naturopaths, acupuncturists, chiropractors, physical therapists, and physicians will refer their patients to massage therapists. However, this will depend somewhat on if massage therapy is covered by health insurance plans. In addition, an aging population will increase the number of people with conditions that can benefit from massage therapy.

### Salary Forecast:

For the most current salary information please refer to the Bureau of Labor Statistics "Occupational Outlook Handbook" found at [www.bls.gov/ooh/](http://www.bls.gov/ooh/).

### Program Admission Requirements:

Students seeking admission into the Massage Therapy Program must arrange an appointment with the Mountwest Community & Technical College program coordinator prior to submitting the application packet. This is to ensure that students receive current information requirements and the criteria for selection.

### Employment Opportunities:

- Doctors' offices
- Chiropractors' offices
- Hospitals
- Physical therapy offices
- Medical clinics
- Massage therapy practices



# ALLIED HEALTH

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## MASSAGE THERAPY

### MAJOR CODE - CM70

AH 151	Medical Terminology (Edge)	3
ENL 111	Written Communication	3
MAS 101	Introduction to Massage Therapy	1
IT	IT Elective	3
BIOL 257	Intro to Anatomy and Physiology (EDGE)	3
COM 112	Oral Communication	3
MAT	Math Elective	3
SS	Social Science Elective	3
MAS 201	Eastern Theory	3
MAS 212	Body Works I for MAS	3
MAS 230	Kinesiology for MAS	5
MAS 240	Muscle Palp I	3
MAS 214	Body Works II for MAS	3
MAS 228	Pathology and Pharmacology for MAS	3
MAS 245	Muscle Palp II	3
MAS 250	Shiatzu	3
MAS 255	Deep Tissue	3
MAS 222	Business and Ethics for MAS	3
MAS 235	Student Clinical Integrative Massage	3
MAS 270	Spa Theory for MAS	2
MAS 275	MAS Board Review	1

**Hours required for graduation: 60**

### Earn a Degree and Graduate Early (EDGE):

This program provides students the opportunity to receive credit for their high school EDGE courses.

### Contact Information:

Mary Jo Perdue • Room 439 • Phone: (304) 710-3519 or 1-866-N-ROLLED (1-866-676-5533) • E-mail: [perduem@mctc.edu](mailto:perduem@mctc.edu)

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1. MAS courses are by permission of the program coordinator pending admission to program. Successful completion of all MAS courses with a "C" or better is required for transition in the MAS program. Students receiving a D or F in any program course will be required to repeat that course before continuing in the program. All MAS courses must be taken in sequence and completed within three years.
  2. Criminal background check and drug screen are required prior to admission to summer clinical courses.

# ALLIED HEALTH

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## MEDICAL ASSISTANT ASSOCIATE IN APPLIED SCIENCE

### Program Description:

Medical assistants are allied health professionals who assist physicians in their offices or other medical settings. In accordance with respective state laws, they perform a broad range of administrative and clinical duties, as indicated by the American Association of Medical Assistants recent role delineation study. The Mountwest Medical Assistant Program is accredited by the Commission on Accreditation of Allied Health Education Programs upon the recommendation of the Curriculum Review Board of the American Association of Medical Assistants Endowment (AAMAE).

Administrative duties include scheduling and receiving patients, preparing and maintaining medical records, performing basic secretarial skills and medical transcription, handling telephone calls and writing correspondence, serving as a liaison between the physician and other individuals, and managing practice finances. Clinical duties include asepsis and infection control, taking patient histories and vital signs, performing first aid and CPR, preparing patient for procedures, assisting the physician with examinations and treatments, collecting and processing specimens, performing selected diagnostic tests, and preparing and administering medications as directed by the physician.

Both administrative and clinical duties involve maintenance of equipment and supplies for the practice. A medical assistant who is sufficiently qualified by education and/or experience may be responsible for supervising personnel, developing and conducting public outreach programs to market the physician's professional services, and participating in the negotiation of leases and of equipment and supply contracts.

### Career Outlook:

Employment of medical assistants is expected to grow much faster than the average for all occupations through the year 2012 as the health services industry expands because of technological advances in medicine and a growing and aging population. Increasing utilization of medical assistants in the rapidly growing healthcare industries will result in fast employment growth for the occupation. In fact, medical assistants are projected to be the fastest growing occupation through 2012 ([www.bls.gov](http://www.bls.gov)).

### Salary Forecast:

For the most current salary information please refer to the Bureau of Labor Statistics "Occupational Outlook Handbook" found at [www.bls.gov/ooh/](http://www.bls.gov/ooh/).

### Admission Requirements:

Students seeking admission into the Medical Assistant Program must arrange an appointment with the program faculty prior to mitting the application packet. This is to ensure that students receive current information regarding the program admission requirements and the criteria for selection.

1. Completion of the first year general and support courses with a 2.5 or better GPA with at least a C in all MA courses;
2. CPR certification (EME 105);
3. Physical exam with proper documentation of vaccinations, prior to internship.

Applications will be accepted beginning January 1 each year for the upcoming fall semester. Admission to the program will be granted starting in May. This is a limited enrollment program. For additional information about careers as a medical assistant, visit the American Association of Medical Assistants website at [www.aama-ntl.org](http://www.aama-ntl.org).

### Employment Opportunities:

- Physicians' offices
- Clinics
- Hospitals
- Any other type of healthcare setting

# ALLIED HEALTH

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## MEDICAL ASSISTANT

### MAJOR CODE - CM30

AH 151	Medical Terminology	3
ENL 111	Written Communication <sup>1</sup>	3
EME 105	First on Scene	3
IT 101	Fundamentals of Computers (EDGE)	3
MAT 115	Business Mathematics	3
AH 220	Basic Nutrition <sup>1</sup>	3
BIOL 257	Intro to Anatomy & Physiology (EDGE)	3
COM 112	Oral Communications	3
IT 150	Application to Spreadsheets	3
PSYC 215	Lifespan Psychology <sup>1</sup>	3
HIT 201	Health Information Tech I	3
HIT 201L	Health Information Tech I Lab	1
LAW 248	Medical Law	
<i>or</i>		
AH 204	Legal & Ethical Issues in Healthcare	3
MA 201	Medical Assisting Techniques I	3
MA 204	Physician's Office Med. Coding	3
MA 206	Medical Office Procedures	3
AH 216	Basic Pharmacology	3
MA 202	Medical Assisting Tech II	4
MA 203	Medical Lab Techniques	3
MA 205	Medical Office Claims Procedure	3
MA 207	Medical Office Internship	3

**Hours required for graduation: 60**

### Earn a Degree and Graduate Early (EDGE):

This program provides students the opportunity to receive credit for their high school EDGE courses.

### Contact Information:

Kellie Cyrus • Room 453 • Phone: (304) 710-3526 or 1-866-N-ROLLED (1-866-676-5533) • E-mail: [cyrus12@mctc.edu](mailto:cyrus12@mctc.edu)

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1. AH 151, ENL 111, AH 220, and PSYC 215 have a prerequisite of REA 098, or ACT 18, or SAT 421, or appropriate reading placement.
  2. MAT 115 has a prerequisite of MAT 097, or ACT 19, or PMTH 100.
  3. IT 150 has a prerequisite of IT 101.
  4. HIT 201 has a prerequisite of admission to the MA program.
  5. HIT 201 and HIT 201L must be taken together as corequisites.
  6. AH 216 has a prerequisite of AH 151.
  7. MA 202 has a prerequisite of MA 201.
  8. MA 207 has a prerequisite of MA 205.

# ALLIED HEALTH

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## PARAMEDIC SCIENCE ASSOCIATE IN APPLIED SCIENCE

### Program Description:

The emergency medical technician-paramedic (EMT) is a specialist in the pre-hospital care of the sick and injured. This person bridges the gap between the emergency room physician and the critical patient in the out-of-hospital setting. Paramedics provide emergency medical treatment and stabilization, rescue of persons entrapped in life-threatening situations, transportation of critical patients to specialized treatment facilities, support and assistance to fire and law enforcement agencies, and public education and safety training to target populations.

The student completing an Associate in Applied Science Paramedic Degree will complete in addition to the paramedic courses, general education courses that will better prepare the student to enter the workforce and progress to competitive job markets and management positions.

The Paramedic Science Associate Degree program is an intense program designed for individuals involved in both career and volunteer aspects of the emergency medical services realm. The program consists of classroom lectures, practical labs and approximately 400 hours of clinical internships, as well as core courses and EMS courses specifically designed for EMS professionals. Students will be eligible to sit for the National Registry of Emergency Medical Technicians Paramedic Examination after completion of the Paramedic Science (Certificate) Program only if the student has maintained a letter grade of "C" or higher in all Paramedic Science (Certificate) courses and credit "CR" in all paramedic clinical courses.

Students approved for program admission in the academic year 2012-13 will begin core coursework for the Paramedic Program (Associate of Applied Science) in the fall of 2012.

### Career Outlook:

Employment of emergency medical technicians and paramedics is expected to grow faster than the average for all occupations through 2012. Population growth and urbanization will increase the demand for full-time paid EMTs and paramedics rather than for volunteers. In addition, a large segment of the population—the aging baby boomers—will further spur demand for EMT services as they become more likely to have medical emergencies. There will still be demand for part-time, volunteer EMTs and paramedics in rural areas and smaller metropolitan areas. In addition to those arising from job growth, openings will occur because of replacement needs.

### Salary Forecast:

For the most current salary information please refer to the Bureau of Labor Statistics "Occupational Outlook Handbook" found at [www.bls.gov/ooh/](http://www.bls.gov/ooh/).

### Admission Requirements:

Students seeking admission into the Paramedic Science Program must arrange an appointment with the program faculty to obtain the application packet. This is to ensure that students receive current information regarding the program admission requirements and the criteria for selection.

Students must be EMT-B certified and maintain EMT-B certification as prerequisite for admission to and continuation in the program.

Students must successfully pass a criminal background and drug screen prior to placement in a clinical setting.

### Employment Opportunities:

- Hospitals
- Emergency medical service providers
- Private corporations
- Governmental agencies
- Aeromedical flight services
- Industry

# ALLIED HEALTH

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## PARAMEDIC SCIENCE<sup>1,2,3,4,5</sup>

### MAJOR CODE - CP30

BIOL 258	Principles of Anatomy and Physiology <sup>6</sup>	4
ENL 111	Written Communication <sup>7</sup>	3
	Math Elective (100-level or above)	3
Gen Ed	Elective (100-level or above)	3
EME 109	Emergency Medical Technician	10
Gen Ed	Elective (100-level or above)	3
PAR 205	EMS Preparatory	3
PAR 210	Airway Management	3
PAR 211	Principles of Trauma Management	3
PAR 212	Pre-Hospital Pharmacology	3
PAR 251	Paramedic Clinical I	3
PAR 220	Cardiovascular Emergencies	6
PAR 230	Special Patient Considerations	3
PAR 231	Medical Emergencies	4
PAR 252	Paramedic Clinical II	3
PAR 225	Rescue Operations	3
PAR 253	Paramedic Clinical III	3
PAR 290	Paramedic Capstone	3

**Hours required for graduation: 66**

### Earn a Degree and Graduate Early (EDGE):

This program provides students the opportunity to receive credit for their high school EDGE courses.

### Contact Information:

Edward Bays • Room 431 • Phone: (304) 710-3528 or 1-866-N-ROLLED (1-866-676-5533) • E-mail: bays@mctc.edu

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1. Students move through paramedic coursework in sequence, beginning with the first semester (fall) coursework.
  2. Students must receive a letter grade of "C" or higher in "PAR" courses to be eligible to graduate from the program.
  3. Clinical grades will be given on a credit/non-credit basis. Students must earn a credit grade in all "PAR" clinical courses to be eligible to graduate from the program.
  4. Students who at any time during the program earn a letter grade below "C" in "PAR" courses, or receive a non-credit in "PAR" clinical courses will be dismissed from the program.
  5. Students who are dismissed from the program may reapply the next time to program begins.
  6. Students who are EMT certified may begin coursework during the third semester of the A.A.S. degree program. If a student has not completed BIOL 258, it must be taken during the third semester.
  7. ENL 111 has a prerequisite of ENL 095, or placement in 100-level English, and REA 098, or placement in 100-level reading.

# ALLIED HEALTH

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## PHARMACY TECHNICIAN ASSOCIATE IN APPLIED SCIENCE

### Program Description:

Pharmacy technicians help licensed pharmacists provide medication and other health care products to patients. Technicians usually perform routine tasks to help prepare prescribed medication, such as counting tablets and labeling bottles. They also perform administrative duties, such as answering phones, stocking shelves, and operating cash registers. Technicians refer any questions regarding prescriptions, drug information, or health matters to a pharmacist.

Pharmacy technicians who work in retail or mail-order pharmacies have varying responsibilities depending on state rules and regulations. Technicians receive prescriptions or requests for prescription refills from patients. They must verify that information on the prescription is complete and accurate. To prepare a prescription, technicians must retrieve, count, pour, weigh, measure, and sometimes mix the medication. Then, they prepare the prescription labels, select the type of prescription container, and affix the prescription and auxiliary labels to the container. Once the prescription is filled, technicians price and file the prescription, which must be checked by a pharmacist before it is given to the patient. Technicians may establish and maintain patient profiles, prepare insurance claim forms, and stock and take inventory of prescription and over-the-counter medications. In hospitals, nursing homes, and assisted-living facilities, technicians have responsibilities, including reading patients' charts and preparing the appropriate medication.

The A .A .S. Pharmacy Technician Degree includes a total of 64 credit hours, of which 32 credit hours are pharmacy technician specific courses. Successful completion of the PHT program will include a clinical internship at an affiliated health-care and retail facility. Many states requires licensure in order to perform pharmacy technician work. The West Virginia Board of Pharmacy currently required licensure of all pharmacy technicians. Upon completion of the PHT program, graduates will be eligible to sit for the national board examination .

### Career Outlook:

According to the United States Department of Labor, "Employment for pharmacy technicians is expected to increase by 32% from 2006 to 2016, which is much faster than the average for all occupations . "In West Virginia, the job outlook is similarly positive with an annual projected increase of 2.28% over the next 10 years to reach an overall 22.1% increase, ([www.worforcewv.org](http://www.worforcewv.org)).

### Admission Requirements:

1. Completion of Pharmacy Technician admission packet, which may be found in the Allied Health & Life Sciences Division.
2. Applicants must complete all general education and prerequisite courses with a grade of "C" or better, and must have a cumulative GPA of 2 .0 or higher.
3. Proof of medical insurance coverage is required for internship.
4. Prior to internship, students must submit proof of Tuberculosis testing and Hepatitis B vaccination, or sign a waiver refusing vaccination.
5. Some clinical facilities may require random drug screen testing or background checks prior to acceptance into internship.
6. The PHT program is a limited enrollment program. Program admission for the upcoming fall semester will be granted beginning in June.

### Additional Requirements:

In order to graduate from the A .A .S. PHT program, students must maintain a minimum grade of "C" or better in all PHT courses. They will be allowed to repeat the course one time before dismissal from the program.

The cost of tuberculosis testing, vaccinations, and background checks are the responsibility of the student. Students are responsible for room and board, as well as transportation during clinical internship.

### Employment Opportunities:

- Hospitals
- Health care clinics
- Physician's office laboratories
- Reference laboratories

# ALLIED HEALTH

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## PHARMACY TECHNICIAN

### MAJOR CODE - CP70

AH 151	Medical Terminology I	3
BIOL 257	Intro Anatomy & Physiology	3
ENL 111	Written Communication	3
IT 101	Fundamentals of Computers (EDGE)	3
	Approved MAT course <sup>2</sup>	3
	Approved COM course	3
AH 205	Principles of Disease	4
AH 207	Infection Control Health Prof	4
PHT 201	Intro to Pharmacy Technician	3
PSYC 215	Lifespan Psychology <sup>1</sup>	3
AH 204	Legal and Ethical Issues in Healthcare	3

### Second Year Registration Requirements

"C" or better in all 1st year curriculum classes, a cumulative GPA of 2.0, admission to the Pharmacy Technician A.A.S. Program

PHT 204	Pharmacy Practice I	3
PHT 206	Pharmacy Calculations	3
PHT 208	Sterile Products	2
PHT 216	Pharmacology for PHT I	3
	General Education Elective	3
PHT 226	Pharmacology for PHT II	2
PHT 250	Pharmacy Practice II	3
PHT 260	Practice Management	3
PHT 270	Point of Care	2
PHT 290	Technician Experiential Training	6

**Hours required for graduation: 65**

### Earn a Degree and Graduate Early (EDGE):

This program provides students the opportunity to receive credit for their high school EDGE courses.

### Contact Information:

Melissa Ballard, BA, CPhT • Room 435 • Phone: (304) 710-3517 or 1-866-N-ROLLED (1-866-676-5533) •  
E-mail: ballard@mctc.edu

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1. ENL 111 has a prerequisite of REA 098, or placement in 100-level reading.
  2. Choose from the following approved MAT courses: MAT 145 or MAT 133. MAT 145 has a prerequisite of MAT 096, MAT 097, or placement in 100-level mathematics. COM 125 has a prerequisite of REA 098, or placement in 100-level reading.
  3. Choose from the following approved COM courses: COM 112 or COM 125.
  4. AH 205 has a prerequisite of BIOL 257 or BIOL 258 or BIOL 260.
  5. AH 207 has a prerequisite of AH 151.

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# ALLIED HEALTH

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## PHYSICAL THERAPIST ASSISTANT ASSOCIATE IN APPLIED SCIENCE

### Program Description:

Physical therapist assistants (PTA) are educated, skilled healthcare workers who work under the supervision of a physical therapist (PT). PTA's assist in implementing physical therapy interventions in accordance with an established plan of care, treatment procedures which may involve the therapeutic use of water, massage, ultrasound, and the thermal properties of light and electricity to promote healing and relieve pain. The assistant also implements exercise programs designed for the restoration of strength, endurance, coordination, relaxation, and range of motion.

The program is designed to facilitate problem-solving, critical thinking, group interaction and improved self-assessment skills. The program is designed in a 1 + 1 curricular format. The first year's general prerequisite courses total 31 credit hours, focusing on general studies. Students receive foundational courses in functional human and neuroanatomy.

Through selective admissions, students are admitted into the second year of the program. This year consists of Physical Therapist Assistant Technical Education courses. Second-year courses include a comprehensive curriculum in adult, orthopedic, pediatric and spinal cord rehabilitation. Student will be required to complete 720 hours of full-time clinical education. The costs of clinical education (travel, housing, incidentals) are the responsibility of the student.

### Career Outlook:

Employment of physical therapist assistants is expected to grow much faster than the average. The impact of proposed Federal legislation imposing limits on reimbursement for therapy services may adversely affect the short-term job outlook for PTAs. However, over the long run, demand for PTAs and aides will continue to rise in accordance with growth in the number of individuals with disabilities or limited function. The growing elderly population is particularly vulnerable to chronic and debilitating conditions that require therapeutic services. These patients often need additional assistance in their treatment, making the roles of assistants vital. The large baby-boom generation is entering the prime age for heart attacks and strokes, further increasing the demand for cardiac and physical rehabilitation. In addition, future medical developments should permit an increased percentage of trauma victims to survive, creating added demand for therapy services.

### Employment Opportunities:

- Home health
- Rehabilitation hospitals
- Private practice offices
- Nursing homes
- Acute care hospitals
- Skilled nursing units
- Outpatient departments
- School systems

### Admission Requirements:

Admission to the PTA Program is selective. Students seeking admission into the PTA Program at Mountwest may arrange an appointment with the program faculty prior to submitting their application packet.

- Application packets are available after November 15
- Application deadline is March 15
- Applications are valid only for the noted academic year

### Accreditation:

The PTA program is accredited by the Commission of Accreditation in Physical Therapy Education (CAPTE). For additional information, contact the American Physical Therapy Association, Department of Accreditation at: 703-706-3245 or online at [www.captionline.org](http://www.captionline.org).

### Requirement Associated With Completion of the Prerequisite Courses

If you have already taken the basic science courses they must have been successfully completed with the last 5 years in order to receive credit. Regardless of the grade achieved, students must re-take any course not meeting these timelines in order to receive credit toward meeting this admission criterion. Courses completed prior to admission into the PTA Program must have been completed with a minimum grade of "C" in order to be considered "successfully" completed.

Students are required to make a "C" or better in each course in the second year before graduating from the program. The student may be allowed to repeat a course one time before being dismissed from the program. Sequencing of courses and progression will be determined by the program faculty. If a student receives a "D" or "F" in more than one course in the same semester, then the student will be dismissed from the program.

Admission to PTA program is a prerequisite to all PTA coursework. Admission notifications will only be announced after final spring grades have been posted to the transcripts and should occur in mid-May.



# ALLIED HEALTH

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## PHYSICAL THERAPIST ASSISTANT<sup>1,2</sup>

### MAJOR CODE - CP10

BIOL 260	Applied Human Anatomy <sup>3</sup>	4
BIOL 265	Applied Human Physiology <sup>3</sup>	4
ENL 111	Written Communication <sup>4</sup>	3
MAT 145	Applications in Algebra <sup>5</sup>	3
	Social Science Elective <sup>8</sup>	3
COM 112	Oral Communication	3
BIOL 221	Structural Kinesiology <sup>6</sup>	4
BIOL 245	Physiology of Exercise <sup>6</sup>	3
SCI 110	Introductory Physics <sup>7</sup>	4
PTA 100	Introduction to Physical Therapy	3
PTA 110	Physical Therapy Modalities	2
PTA 110L	Physical Therapy Modalities Lab <sup>9</sup>	1
PTA 120	Patient Care Skills	2
PTA 120L	Patient Care Skills Lab <sup>9</sup>	1
PTA 130	Functional Anatomy and Procedures	3
PTA 130L	Functional Anatomy and Proc. Lab <sup>9</sup>	1
PTA 140	Clinical Practice I <sup>10</sup>	3
PTA 160	Neuroanatomy and Physiology	3
PTA 200	Pathological Conditions	3
PTA 220	Orthopedic Rehabilitation	3
PTA 220L	Orthopedic Rehabilitation Lab <sup>9</sup>	1
PTA 230	Adult Rehabilitation	3
PTA 230L	Adult Rehabilitation Lab <sup>9</sup>	1
PTA 240	Clinical Practice II	4
PTA 250	Specialized PT Interventions	3
PTA 270	PTA Seminar	3
PTA 260	Clinical Practice III <sup>12</sup>	4

**Hours required for graduation: 75**

### Earn a Degree and Graduate Early (EDGE):

This program provides students the opportunity to receive credit for their high school EDGE courses.

### Contact Information:

Travis H. Carlton, PTA, ED.S. MS • Room 449 • Phone: (304) 710-3524 or 1-866-N-ROLLED (1-866-676-5533)

E-mail: carltont@mctc.edu

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1. Admission to PTA program is a prerequisite to all PTA coursework.
  2. Students are required to make a "C" or better in each course in the second year before graduating from the program. The student will be allowed to repeat a course one time before being dismissed from the program. Sequencing of courses and progression will be determined by the program faculty. If a student receives a "D" or "F" in more than one course, then the student is dismissed from the program.
  3. BIOL 260 and BIOL 265 have a prerequisite of BIOL 257, or BIOL 258 or ACT 19.
  4. ENL 111 has a prerequisite of REA 098, or placement in 100-level reading.
  5. MAT 145 has a prerequisite of MAT 096, or MAT 097, placement in 100-level reading.
  6. BIOL 221 and BIOL 245 have a prerequisite of BIOL 260 and BIOL 265.
  7. SCI 110 has a prerequisite of MAT 145.
  8. Select from SS 201 or PSYC 215. SS 201 and PSYC have a prerequisite of REA 098 or placement in 100-level reading.
  9. All PTA Lab courses have a corequisites: PTA 110/PTA 110L; PTA 120/PTA 120L; PTA 130/PTA 130L; PTA 220/PTA 220L; PTA 230/PTA 230L.
  10. PTA 140 has a prerequisite of PTA 100, and corequisite of PTA 110, PTA 120, PTA 130, PTA 140, and PTA 160 with a "C" or better.
  11. PTA 240 and PTA 260 have a prerequisite of completion of all PTA coursework with a grade of "C" or better.

\*The following courses are recommended if planning to seek advanced degree (see advisor before enrolling as course may not be transferable): BIOL 221, BIOL 245, BIOL 260, and BIOL 265.

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# ALLIED HEALTH

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## RADIOLOGIC TECHNOLOGY ASSOCIATE IN APPLIED SCIENCE

### Program Description:

The Radiologic Technology Program is a cooperative effort between Mountwest and Collins Career Center (CCC). The student should complete or be enrolled in all pre-radiologic admission course before applying to the program. Admission requirements to Collins Career Center Radiologic Technology program may vary year to year. Please contact the program coordinator for up-to-date admission information. The CCC Radiologic Technology Program provides the students with a total of 1,000 classroom hours and 1,420 hours of clinical experience.

### Career Outlook:

Job opportunities are projected to grow faster than average. Some employers report difficulty hiring sufficient numbers of radiologic technologists and technicians. Imbalances between the demand for, and supply of, radiologic technologists and technicians should spur efforts to attract and retain qualified workers, such as improved compensation and working conditions. Radiologic technologists who also are experienced in more complex diagnostic imaging procedures, such as CT and MRI, will have better employment opportunities, brought about as employers seek to control costs by using multi-skilled employees.

Hospitals will remain the principal employer of radiologic technologists and technicians. However, a greater number of new jobs will be found in offices of physicians and diagnostic imaging centers. Health facilities such as these are expected to grow rapidly through 2018, due to the strong shift toward outpatient care, encouraged by third-party payers, and made possible by technological advances that permit more procedures to be performed outside the hospital. Some job openings also will arise from the need to replace technologists and technicians who leave the occupation.

### Salary Forecast:

For the most current salary information please refer to the Bureau of Labor Statistics "Occupational Outlook Handbook" found at [www.bls.gov/ooh/](http://www.bls.gov/ooh/).

### Admission Requirements:

Prior to acceptance into the Radiologic Technology Program, a student must have completed the following:

1. Prerequisite college courses. Courses may be completed at any post-secondary institution. For courses to qualify for the Associates of Applied Science degree in Radiologic Technology through Mountwest, they must be accepted and successfully transferred to Mountwest. This transfer process is the sole responsibility of the student. A minimum of 12 hours must be taken directly on Mountwest campus to be granted the associate's degree.

The following courses must be passed with a "C" or better:

MAT 145 - College Algebra	AH 151 - Medical Terminology
ENL 111 - Written Communication	IT 101 - Fundamentals of Computers
BIOL 257 - Introduction to Anatomy & Physiology	SCI 110 - College Physics

2. Minimum ACT score of 21 or
3. Successful completion of the pre-entrance (Work Keys) examination with a score of four in Locating Information, and five in both Applied Mathematics and Reading for Information.

High School and Post-Secondary GPA are also weighted factors in the application process. Points will be awarded for the following:

- High School GPA of 3.0 or better
- College GPA of 2.5 or better
- Completion of College Chemistry and/or Psychology with a grade of "C" or better will be awarded additional points.

### Employment Opportunities:

- Hospitals
- Clinics
- Commercial radiological laboratories
- Physicians' offices
- Mobile radiological services

# ALLIED HEALTH

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## RADIOLOGIC TECHNOLOGY<sup>1,2</sup>

### MAJOR CODE - CR10

AH 151	Medical Terminology <sup>3</sup>	3
BIOL 257	Intro to Anatomy and Physiology	3
ENL 111	Written Communication <sup>3</sup>	3
MAT 145	Applications in Algebra <sup>4</sup>	3
COM 112	Oral Communication	3
IT 101	Fundamentals of Computers (EDGE)	3
PSYC 215	Lifespan Psychology <sup>3</sup>	3
SCI 110	Introduction to Physics <sup>5</sup>	4
RAD 201	Introduction to Radiology	3
RAD 202	Clinical Practice I	2
RAD 203	Ethics and Law	1.5
RAD 204	Radiographic Procedures I	3
RAD 204L	Radiographic Procedures I Lab	2.5
RAD 205	Clinical Practice II	3
RAD 206	Radiation Protection/Radiobiology	3
RAD 208	Radiographic Procedures II	3
RAD 208L	Radiographic Procedures II Lab	1
RAD 209	Radiologic Pharmacology	1.5
RAD 210	Clinical Practice III	3
RAD 211	Radiation Characteristics/Radiation Physics	3
RAD 212	Imaging & Processing/Imaging Lab	3
RAD 213	Radiographic Pathology	3
RAD 215	Clinical Practice IV	3
RAD 217	Quality Assurance	1.5
RAD 218	Advanced Imaging Procedures	3
RAD 219	Registry Review	3
RAD 221	Human Diversity	1.5
RAD 222	Radiographic Procedures III	3

**Hours required for graduation: 75.5**

### Earn a Degree and Graduate Early (EDGE):

This program provides students the opportunity to receive credit for their high school EDGE courses.

### Contact Information:

Edward Bays • Room 431 • Phone: (304) 710-3528 or 1-866-N-ROLLED (1-866-676-5533) • E-mail: bays@mctc.edu  
Terri Williamson Collins Career Center • Phone: (740) 867-6641 • Ext: 362 • E-mail: williamsontl@collins-cc.edu

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1. Pre-Radiological admission courses are taken at Mountwest Community & Technical College.
  2. Admission to the Radiologic Technology Program is required before beginning the second and third year RS courses.
  3. AH 151, ENL 111, and PSYC 215 have a prerequisite of REA 098, or placement in 100-level reading.
  4. MAT 145 has a prerequisite of MAT 096, or placement in 100-level mathematics.
  5. SCI 110 has a prerequisite of MAT 125, or MAT 135, or MAT 145, or MAT 145E.

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# ALLIED HEALTH

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## RESPIRATORY THERAPY ASSOCIATE IN APPLIED SCIENCE

### Program Description:

Respiratory therapy is an allied health program whose practitioners are employed under medical direction to provide treatment, management, diagnostic evaluation, and care to patients with problems associated with the cardiopulmonary system. Job responsibilities vary from the administration of oxygen, humidity, aerosols and the drainage of lung secretions, mechanical ventilation, to the use of technologically sophisticated monitoring devices and treatment techniques to enhance the survival of patients in intensive care units. Respiratory therapists may also perform pulmonary function testing.

The Respiratory Therapy Program is a cooperative effort between Collins Career Center and Mountwest Community & Technical College. There are 30 semester credit hours required from Mountwest Community & Technical College. The student may either complete the Mountwest courses prior to application to the program or finish the courses while completing the respiratory therapy courses at Collins Career Center.

### Career Outlook:

Job opportunities are expected to be very good, especially for respiratory therapists with cardiopulmonary care skills or experience working with infants. Employment of respiratory therapists is expected to increase faster than the average for all occupations through the year 2016 because of substantial growth in numbers of the middle-aged and elderly population—a development that will heighten the incidence of cardiopulmonary disease.

### Salary Forecast:

For the most current salary information please refer to the Bureau of Labor Statistics “Occupational Outlook Handbook” found at [www.bls.gov/ooh/](http://www.bls.gov/ooh/).

### Admission Requirements:

1. The Respiratory Therapy Program has selective admissions each year. The first 24 eligible applications received will be admitted to the program. If admitted, there are 57 credit hours of respiratory therapy courses to be completed at Collins Career Center. As part of the 57 credit hours, the student will be required to complete clinical practice rotations at area health care facilities.
2. Prior to admission to the Respiratory Therapist Program and/or clinical internships, students may be required to document that they have successfully passed a criminal background check and drug screen. For more information concerning the Allied Health criminal background check and drug screen procedure, please contact the Dean of Allied Health & Life Sciences at (304) 710-3512.

### Employment Opportunities:

- Home health
- Skilled nursing homes
- Skilled nursing units within an acute care hospital
- Outpatient centers
- Rehabilitation hospitals
- Acute care hospitals
- Physicians office

# ALLIED HEALTH

## RESPIRATORY THERAPY<sup>1,2,3,4</sup>

### MAJOR CODE - CR20

AH 151	Medical Terminology <sup>5</sup> (EDGE)	3
BIOL 257	Intro to Anatomy and Physiology (EDGE)	3
ENL 111	Written Communication <sup>5</sup>	3
IT 101	Fundamentals of Computers (EDGE)	3
MAT 145	Applications in Algebra	3
BIOL 210	Microbiology	3
COM 112	Oral Communication	3
PSYC 215	Lifespan Psychology <sup>5</sup>	3
SCI 220	Introduction to Chemistry <sup>7</sup>	3
AH 226	Respiratory Therapy Pharmacology <sup>8</sup>	3
CLIN 101	Clinical Practice I	3
RTT 101	Respiratory Care Procedures I <sup>9</sup>	3
RTT 101L	Respiratory Care Procedures I Lab	1
RTT 110	Cardiopulmonary Evaluation I <sup>10</sup>	3
CLIN 102	Clinical Practice II <sup>11</sup>	2
RTT 102	Respiratory Care Physics <sup>12</sup>	3
RTT 111	Cardiopulmonary Pathophysiology <sup>13</sup>	3
CLIN 103	Clinical Practice III <sup>14</sup>	3
RTT 103	Mechanical Vent Technology <sup>15</sup>	3
RTT 103L	Mechanical Vent Technology Lab	1
RTT 201	Cardiopulmonary Evaluation II <sup>16</sup>	3
RTT 202	Respiratory Care Procedures II <sup>17</sup>	3
RTT 202 L	Respiratory Care Procedures II Lab	1
CLIN 204	Clinical Practice IV <sup>18</sup>	3
RTT 204	Mechanical Vent Management <sup>19</sup>	3
RTT 204L	Mechanical Vent Management Lab	1
RTT 205	Neonatal/Pediatric Respiratory Care	3
RTT 206	Seminar/Board Review <sup>20</sup>	3
RTT 207	Respiratory Home Care/Rehab <sup>21</sup>	3
CLIN 205	Clinical Practice V <sup>22</sup>	4
RTT 208	Clinical App. of Critical Thinking <sup>23</sup>	3
RTT 210	Respiratory Professional Strategies <sup>24</sup>	2

**Hours required for graduation: 87**

### Earn a Degree and Graduate Early (EDGE):

This program provides students the opportunity to receive credit for their high school EDGE courses.

### Contact Information:

Edward Bays • Room 431 • Phone: (304) 710-3528 or 1-866-N-ROLLED (1-866-676-5533) • E-mail: bays@mctc.edu  
Tommie Weaver • Collins Career Center • Phone: (740) 867-6641 • Ext: 415 • E-mail: weavertr@collins-cc.edu

1. Cooperative degree between Mountwest Community & Technical College and Collins Career Center.
2. Respiratory classes (RTT) have a prerequisite of admission to Respiratory Therapy Program and are taught by Collins Career Center faculty.
3. For information on admission to Respiratory Therapy Program contact, Tommie Weaver at Collins Career Center (740) 867-6641 Ext. 415.
4. Students move through Respiratory Therapy coursework in sequence, beginning with first quarter coursework.
5. AH 226 has a prerequisite of admission to Respiratory Therapy Program and AH 151.
6. BIOL 210 and SCI 220 have a prerequisite of MAT 145 or MAT 150.

# ALLIED HEALTH

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## **SURGICAL TECHNOLOGY ASSOCIATE IN APPLIED SCIENCE**

### **Program Description:**

The technical studies degree is designed to meet three major needs:

1. To provide for cooperatively sponsored educational opportunities leading to the associate in applied science degree and/or one-year certificate for students in quality education and training programs.
2. To increase the abilities of employees to use technology effectively and responsibly.
3. To assist those employed in the workforce to understand that education is a life-long process. Mountwest Community & Technical College delivers educational programs in a variety of occupational fields to businesses and industries having an immediate need for such programs.

Components of the program include the following: general education, classroom instruction in a technical core and in the occupational area, and possible on-the-job training. Technical studies students must meet admission and performance standards. Credits earned through either the approved apprenticeship programs or through industry based education and training programs will not be added to the student's collegiate transcript until the student has completed twelve program credit hours from Mountwest Community & Technical College, and has obtained at least a 2.00 GPA.

### **Career Outlook:**

Employment of surgical technologists is expected to grow much faster than average for all occupations through the year 2014 as the volume of surgery increases. Job opportunities are expected to be good. The number of surgical procedures is expected to rise as the population grows and ages. The number of older people, including the baby boom generation, who generally require more surgical procedures, will account for a larger portion of the general population. Technological advances, such as fiber optics and laser technology, will permit an increasing number of new surgical procedures to be performed and also will allow surgical technologists to assist with a greater number of procedures.

Hospitals will continue to be the primary employer of surgical technologists, although much faster employment growth is expected in offices of physicians and in outpatient care centers, including ambulatory surgical centers.

### **Program Admission Requirements:**

The college adheres to an open admission policy which means applicants with a high school diploma or a GED are eligible for admission. Applicants with neither a high school diploma nor a GED may be admitted on a conditional basis.

### **Salary Forecast:**

For the most current salary information please refer to the Bureau of Labor Statistics "Occupational Outlook Handbook" found at [www.bls.gov/ooh/](http://www.bls.gov/ooh/).

# ALLIED HEALTH

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## SURGICAL TECHNOLOGY<sup>1</sup>

### MAJOR CODE - CTA1

AH 151	Medical Terminology <sup>2</sup> (EDGE)	3
COM 112	Oral Communication	3
ENL 111	Written Communication <sup>3</sup>	3
IT 101	Fundamentals of Computers (EDGE)	3
MAT 145	Applications in Algebra <sup>4</sup>	3
AH 207	Infection Control for Health Professionals <sup>5</sup>	4
BIOL 257	Introduction to Anatomy & Physiology	3
ENL 231	Technical Report Writing	3
PSYC 215	Lifespan Psychology <sup>2</sup>	3
ST 100	Introduction to Surgical Technology	4
ST 101	Asepsis and Sterile Technique/Lab	2
ST	Pharmacology for Surgical Technology	1
ST 200	Surgical Case Management	8
ST 201	Clinical	2
ST 300	Surgical Procedures I	5
ST 301	Clinical	4
ST 400	Surgical Procedures II	5
ST 401	Clinical <sup>6</sup>	4

**Hours required for graduation: 63**

### Earn a Degree and Graduate Early (EDGE):

This program provides students the opportunity to receive credit for their high school EDGE courses.

### Contact Information:

Edward Bays • Room 431 • Phone: (304) 710-3528 or 1-866-N-ROLLED (1-866-676-5533) • E-mail: bays@mctc.edu

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1. Prior to acceptance into the Surgical Technology Program, a student must complete an application through Collins Career Center, be accepted, and meet all program prerequisites.
  2. AH 151 has a prerequisite of REA 098, or placement in 100-level reading.
  3. ENL 111 has a prerequisite of ENL 095, or placement in 100-level English, and REA 098, or placement in 100-level reading.
  4. MAT 145 has a prerequisite of MAT 096, or MAT 097, or placement in 100-level mathematics.
  5. AH 207 has a prerequisite of AH 151.
  6. ST 401 has a prerequisite of successful completion of ST 100, ST 101, ST 200, and ST 201 with a grade of "C" or better.

# ALLIED HEALTH

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## VETERINARY TECHNOLOGY ASSOCIATE OF APPLIED SCIENCE

### Program Description:

Veterinary technicians are an integral part of veterinary medicine and they work under the supervision of veterinarians. Veterinary technicians are employed to assist in many veterinary tasks. They cannot diagnose, prescribe medications or perform surgery. Most veterinarians consider their technicians to have the same role as nurses would to general doctors and surgeons. They must be knowledgeable in many areas of veterinary care including anesthesia, surgery, bandaging, radiology, pharmacology, dentistry, nutrition, laboratory procedures, and animal care and handling. They are also required to communicate with clients and must possess office and management skills.

The Veterinary Technician program at Mountwest Community & Technical College consists of 70 credit hours. This is a two-year associate program and is not to be considered a pre-veterinary medicine program. The course of study will include biology, chemistry, anatomy and physiology, parasitology, nutrition, animal disease, anesthesia, pharmacology along with animal care, restraint and handling.

Students will work with client pets, small animals and farm animals. Students will gain experience by completing two practicums and an externship in veterinary facilities. Students will be placed in facilities at the program directors discretion so that they may obtain experience in different types of settings. Students will obtain approximately 440 hours of clinical experience.

### Career Outlook:

Employment of veterinary technologists and technicians is expected to grow from 2010 to 2020, much better than the average for all occupations. A growing pet population will require more veterinary technologists and technicians. In addition, many people consider their pets to be part of their family and are willing to pay more for pet care than in the past. Also, veterinary medicine has advanced considerably, and many of the veterinary services offered today are now comparable to health services for humans. Source: U.S. Department of Labor

### Salary Forecast:

For the most current salary information please refer to the Bureau of Labor Statistics "Occupational Outlook Handbook" found at [www.bls.gov/ooh/](http://www.bls.gov/ooh/).

### Admission Requirements:

Students must submit an application for this program as it is selective admission. Students must also have:

- 2.5 GPA from the institution currently or previously enrolled
- A minimum ACT Math score of 19 or COMPASS algebra score of 36 or Accuplacer score of 85
- A minimum ACT English score of 18 or COMPASS English score of 71 or Accuplacer score of 5
- A minimum Reading Accuplacer score of 79
- Must also have 120 hours of documented voluntary or work experience in a veterinary hospital or animal clinic prior to starting the program in the fall semester. This must include a minimum of 20 hours at an animal shelter.
- A letter of recommendation for the student to attend the program.

### Accreditation:

The program will seek accreditation through the American Veterinary Association (AVMA) based on accreditation requirements.

### Employment Opportunities:

- Veterinary clinics and animal hospitals



# ALLIED HEALTH

## VETERINARY TECHNOLOGY

### MAJOR CODE – CV10

	Math Elective <sup>1</sup>	3
VET 101	Intro to Veterinary Technology	3
VET 210	Veterinary Nursing I <sup>2</sup>	3
VET 215	Clinical Lab I <sup>2</sup>	3
VET 227	Anatomy and Physiology for Vet Tech	4
AH 151	Medical Terminology <sup>3</sup>	3
SCI 220	Chemistry <sup>4</sup>	3
VET 216	Veterinary Pharmacology	2
VET 220	Veterinary Nursing II <sup>5</sup>	3
VET 225	Clinical Lab II <sup>4</sup>	3
VET 260	Veterinary Imaging	3
(Summer Session)		
ENL 111	Written Communications <sup>6</sup>	3
VET 285	Vet Tech Practicum I <sup>7</sup>	3
COM 125	Interpersonal Communication <sup>8</sup>	3
BIOL 210	Introduction to Clinical Microbiology	3
VET 230	Veterinary Nursing III <sup>9</sup>	3
VET 245	Veterinary Anesthesia <sup>10</sup>	2
VET 250	Veterinary Nutrition and Disease	2
VET 255	Veterinary Surgery <sup>10</sup>	2
VET 287	Vet Tech Practicum II <sup>11</sup>	3
VET 235	Veterinary Office Technician Procedures	2
VET 240	Veterinary Nursing IV <sup>12</sup>	3
VET 265	Veterinary Emergency and Critical Care	2
VET 290	Veterinary Technology (VTNE) Seminar <sup>13</sup>	2
VET 295	Veterinary Technology Externship <sup>14</sup>	5

**Hours required for graduation: 71**

### Earn a Degree and Graduate Early (EDGE):

This program provides students the opportunity to receive credit for their high school EDGE courses.

### Contact Information:

Janet B. Smith • Room 433 • Phone: 304-710-3516 or 1-866-N-ROLLED (1-866-676-5533) • Email: smithjan@mctc.edu

1. Choose from MAT 120, MAT 125, MAT 135, or MAT 145.

2. VET 210 and 215 are co-requisites

3. AH 151 has a prerequisite of REA 098.

4. SCI 220 has a prerequisite of MAT 120, MAT 125, MAT 135, or MAT 145.

5. VET 220 and VET 225 are co-requisites.

6. ENL 111 has a prerequisite of ENL 095, or placement in 100-level English, and REA 098, or placement in 100-level reading.

7. VET 285 has a prerequisites of VET 210, VET 215, VET 216, VET 220, and VET 260.

8. COM 125 has a prerequisite of REA 098, or placement in 100-level reading.

9. VET 230 has a prerequisite of VT 210, and VET 220.

10. VET 245, and VET 255 are co-requisites.

11. VET 287 has a prerequisite of VET 230, VET 245, VET 250, VET 255, and VET 285.

12. VET 240 has a prerequisite of VET 210, VET 220, and VET 230.

13. VET 290 has a prerequisite of all VET classes and co-requisites of VET 235, VET 240, and VET 265.

14. VET 295 is the capstone course. All VET classes are prerequisites. This course will be completed in the second eight-weeks of the final semester

# HOSPITALITY MANAGEMENT

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## CULINARY ARTS ASSOCIATE IN APPLIED SCIENCE

### Program Description:

The hospitality and food service industry is a large, diverse field that provides challenging and exciting career opportunities for people from all walks of life. The possibilities for satisfying careers are almost limitless. The rewards and satisfactions provided by the industry far exceed those of many other fields of work.

While the different segments of the hospitality and tourism industry have their own unique characteristics, they all share the same mission and heritage-serving the guest or customer. The segments of hospitality and tourism are traveling services, lodging, food service, and recreation services. The program offers advanced chef training as well as restaurant management skills. After studying the fundamentals of classical and contemporary cuisine and restaurant procedures, students will develop advanced skills in garde manager and a la carte cooking. The graduate will have the necessary training to work in a variety of culinary establishments as sous chef, garde manager, kitchen supervisor, and restaurant manager.

### Career Description:

Chefs, cooks, and food preparation workers prepare, season, and cook a wide range of foods from soups, snacks, and salads to entrees, side dishes, and desserts in a variety of restaurants and other food services establishments. Chefs and cooks create recipes and prepare meals, while food preparation workers peel and cut vegetables, trim meat, prepare poultry, and perform other duties such as keeping work areas clean and monitoring temperatures of ovens and stovetops.

### Career Outlook:

Job openings for chefs, cooks, and food preparation workers are expected to be plentiful through 2014; however, competition for jobs in the top kitchens of higher-end restaurants should be keen. While job growth will create new positions, the overwhelming majority of job openings will stem from the need to replace workers who leave this large occupational group. (Information obtained from Occupational Outlook Handbook, 2006-2007)

### Salary Forecast:

For the most current salary information please refer to the Bureau of Labor Statistics "Occupational Outlook Handbook" found at [www.bls.gov/ooh/](http://www.bls.gov/ooh/).

### Admission Requirements:

The college adheres to an open admissions policy meaning applicants with a high school diploma or a GED are eligible for admission. Applicants with neither a high school diploma nor a GED may be admitted on a conditional basis.

### Tech Prep Affiliation:

The Hospitality Management Program is aligned with the West Virginia Tech Prep Business Cluster. This career track provides the opportunity for students to acquire college credit while attending high school.

For high school students interested in food service careers and coming from applicable programs offering ProStart® curriculum, the program will provide for a seamless transition from ProStart® through the completion of the Culinary Arts Certificate.

Students who complete the high school ProStart® program and pass the ProStart® examination with a score of 75% or higher will receive six credit hours toward the Culinary Arts Certificate. This will leave 30 credit hours to complete the certificate requirement of 36 credit hours.

### Employment Opportunities:

- Restaurants
- Kitchen supervisor
- Sous chef
- Garde manager chef
- A la carte chef
- Restaurant manager

# HOSPITALITY MANAGEMENT

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## CULINARY ARTS

### MAJOR CODE - CH20 • CONCENTRATION CODE - CH21

CA 105	Fabrication & Knife Skills	3
CA 110	Mise en Place <sup>1</sup>	3
CA 120	A la Carte Dining Room Serv I (EDGE)	2
CA 190	Hospitality Lab Practicum I	1
CA 200	Sanitation and Safety (EDGE)	2
HM 101	Travel, Tourism & Hospitality Industry	2
IT 101	Fundamentals of Computers (EDGE)	3
CA 112	Garde Manager <sup>2</sup>	3
CA 195	Hospitality Lab Practicum II <sup>3</sup>	1
CA 269	Soups, Stocks & Sauces <sup>4</sup>	2
CA 270	Managing Culinary Operations	2
CA 275	Cost Control and Revenue Management <sup>5</sup>	2
ENL 111	Written Communications <sup>6</sup>	3
MAT 137	Culinary Mathematics	5
CA 116	Intro to Breads and Doughs <sup>7</sup>	3
CA 205	A la Carte Dining Rm Serv II <sup>8</sup>	3
CA 245	Culinary Nutrition	2
CA 290	Hospitality Practicum Lab III <sup>9</sup>	1
COM 112	Oral Communication	
or		
COM 125	Interpersonal Communication	3
	Social Science Elective <sup>10</sup>	3
CA 135	International Cuisine <sup>11</sup>	3
CA 225	Advanced Cooking & Artistry <sup>12</sup>	3
CA 235	Menu Planning	2
CA 260	Culinary Selection and Procurement	2
HM 240	Intro to Vineyards & Breweries	2
HM 299	Internship Apprenticeship	1

**Hours required for graduation: 62**

### Earn a Degree and Graduate Early (EDGE):

This program provides students the opportunity to receive credit for their high school EDGE courses.

### Contact Information:

Larry Perry, M.S. • Center for Culinary Arts • 1648 Eighth Avenue

Phone: (304) 399-0213 or 1-866-N-ROLLED (1-866-676-5533) • E-mail: perry149@mctc.edu

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1. CA 110 has prerequisites of CA 105 and CA 200.
  2. CA 112 has prerequisites of CA 105, CA 110, CA 200, CA 269 with a grade of "C" or better.
  3. CA 195 has a prerequisite of CA 190.
  4. CA 269 has prerequisites of CA 200, CA 105, CA 110 with a grade of "C" or better.
  5. CA 275 has a prerequisite of IT 101.
  6. ENL 111 has a prerequisite of REA 098, or placement in 100-level reading.
  7. CA 116 has prerequisites of CA 105, CA 110, CA 200, CA 112, CA 269 with a grade of "C" or better.
  8. CA 205 has prerequisites of CA 105, CA 110, CA 200, CA 112, CA 116, CA 269 with a grade of "C" or better.
  9. CA 290 has prerequisites of CA 190 and CA 195.
  10. Choose from EC, HIST, PSYC, SS 100-level or above.
  11. CA 135 has prerequisites of CA 105, CA 110, CA 200, CA 112, CA 116, CA 205, CA 269 with a grade of "C" or better.
  12. CA 225 has prerequisites of CA 105, CA 110, CA 200, CA 112, CA 116, CA 135, CA 205, CA 269 with a grade of "C" or better.
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# HOSPITALITY MANAGEMENT

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## HOTEL/LODGING MANAGEMENT ASSOCIATE IN APPLIED SCIENCE

### Program Description:

The hospitality and tourism industry is a large, diverse field that provides challenging and exciting career opportunities for people from all walks of life. The possibilities for satisfying careers are almost limitless. The rewards and satisfactions provided by the industry far exceed those of many other fields of work.

While the different segments of the hospitality and tourism industry have their own unique characteristics, they all share the same mission and heritage, serving the guest or customer. The segments of hospitality and tourism are traveling services, lodging, food service, and recreation services. Students will attain knowledge in food service disciplines, customer service, sanitation, purchasing and inventory control, business operations, marketing, retailing, accounting management, and communication skills.

### Career Outlook:

Employment of lodging management is expected to grow more slowly than the average for all occupations through 2012. Additional job openings are expected to occur as experienced manager's transfer to other occupations or leave the labor force. Job opportunities are expected to be best for persons with college degrees in hotel or restaurant management.

A comfortable room, good food, and a helpful staff can make time away from home an enjoyable experience for both vacationing families and business travelers. While most lodging managers work in traditional hotels and motels, some work in other lodging establishments, such as camps, inns, boarding houses, dude ranches, and recreational resorts. In full-service hotels, lodging managers help their guests have a pleasant stay by providing many of the comforts of home, including cable television, fitness equipment, voice mail, as well as specialized services such as health spas. Lodging managers often schedule available meeting rooms and electronic equipment for business travelers, including slide projectors and fax machines. Lodging managers are responsible for keeping their establishments efficient and profitable. In a small establishment with a limited staff, the manager may oversee all aspects of operations. However, large hotels may employ hundreds of workers, and the general manager usually is aided by a number of assistant managers assigned to the various departments of the operation. In hotels of every size, managerial duties vary significantly by job title.

### Employment Opportunities:

- Hotel Management
- Resort Management
- Tourism Offices
- Travel Services
- Recreation Services

### Salary Forecast:

Median annual earnings of lodging managers were \$37,660 in May 2004. The middle 50 percent earned between \$28,640 and \$51,030. The lowest 10 percent earned less than \$22,680, while the highest 10 percent earned more than \$72,160. (Information obtained from Occupational Outlook Handbook, 2006-2007)

### Tech Prep Affiliation:

The Hospitality Management Program is aligned with the West Virginia Tech Prep Business/Marketing Cluster. This career track provides the opportunity for students to acquire college credit while attending high school.

For high school students interested in food service careers and coming from applicable programs offering ProStart® curriculum, the program will provide for a seamless transition from ProStart® through the completion of an Associate in Applied Science Degree in Hospitality Management.

Students who complete the high school ProStart® program and pass the ProStart® examination with a score of 75% or higher will receive nine credit hours toward the associate degree. This will leave 57 credit hours to complete the associate degree requirement of 60 credit hours.

# HOSPITALITY MANAGEMENT

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## HOTEL/LODGING MANAGEMENT

MAJOR CODE - CH20 • CONCENTRATION CODE - CH22

CA 200	Culinary Sanitation and Safety <sup>1,2</sup> (EDGE)	2
ENL 111	Written Communication <sup>8</sup>	3
HM 101	Travel, Tourism & Hospitality	2
HM 220	Managing Catering Operations	3
IT 101	Fundamentals of Computers (EDGE)	3
MAT 115	Business Mathematics <sup>3</sup>	3
HM 137	Trends in the Hospitality Industry	3
HM 145	Hotel Front Office Procedures	3
HM 155	Hospitality Information Systems <sup>4</sup>	3
MAT 120	Applied Professional Math <sup>3</sup>	3
SS 201	Human Relations <sup>5</sup>	3
CA 235	Menu Planning	2
CA 120	A la Cart Dining Rm Service I <sup>2</sup> (EDGE)	2
COM 112	Oral Communications	3
HM 222	Rooms Division Management <sup>6</sup>	3
HM 250	Managing Hospitality Marketing	3
HM 285	Legal Aspects of Hospitality Management	3
CA 260	Culinary Selection and Procurement	2
CA 275	Cost Control and Revenue Management <sup>4</sup>	2
HM 210	Human Resources & Diversity Man.	3
HM 240	Intro to Vineyards & Breweries	2
HM 299	Internship/Apprenticeship <sup>7</sup>	1
	Elective	3

**Hours required for graduation: 60**

### Earn a Degree and Graduate Early (EDGE):

This program provides students the opportunity to receive credit for their high school EDGE courses.

### Contact Information:

Larry Perry, M.S. • Center for Culinary Arts • 1648 Eighth Avenue

Phone: (304) 399-0213 or 1-866-N-ROLLED (1-866-676-5533) • E-mail: perry149@mctc.edu

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1. ProStart<sup>®</sup> course
  2. Student who complete the high school ProStart<sup>®</sup> program and pass the ProStart<sup>®</sup> examination with a score of 75% or higher will receive college credit for CA 120, CA 200, and a 3-hour elective course.
  3. MAT 115 and MAT 120 has prerequisite of ACT 19; MAT 095, MAT 097, MAT 097E, or PLAC 100
  4. HM 155 and CA 275 have a prerequisite of IT 101.
  5. SS 201 has a prerequisite of REA 098 or appropriate placement test scores.
  6. HM 222 has a prerequisite of HM 145.
  7. Students must receive permission from the program coordinator to enroll in HM 299. Students may complete the requirement between the 1st and 2nd year.
  8. ENL 111 has a prerequisite of ENL 095 or placement in 100-level English and REA 098 or placement in 100-level reading .

# INFORMATION TECHNOLOGY

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## ANIMATION AND GAME DEVELOPER ASSOCIATE IN APPLIED SCIENCE

### Program Description:

Students who receive an A.A.S. in Information Technology (IT) will possess a broad base of computer skills and knowledge. The curriculum is designed to maintain maximum flexibility in order to compete in the changing workforce. Today's games are very complex. They require teams of programmers, designers, artists, testers, advertisers, and producers to organize and develop them. Training needed for game development is enormous, warranting a complex education of multiple courses in multiple fields. The Animation and Game Developer curriculum is designed to provide training in principles and techniques used to create interactive 2D and 3D computer games.

Students can learn:

- Design software
- Programming languages
- Modeling and animation skills
- Web graphic design
- Game engines used to design and develop games

IT 298, an internship course taken over the course of a student's four semesters, requires the student to apply knowledge and skills acquired in the classroom to a real-world employment environment.

### Career Outlook:

According to the 2008-2009 U.S. Department of Labor Occupational Outlook Handbook, employment in professional, scientific, and technical services will grow by 28.8 percent and add 2.1 million new jobs by 2016. Employment in computer systems design and related services will grow by 38.3 percent and add nearly one-fourth of all new jobs in professional, scientific, and technical services. Employment growth will be driven by the increasing reliance of businesses on information technology and the continuing importance of maintaining system and network security. Management, scientific, and technical consulting services also will grow at a staggering 78 percent, and account for another third of growth in this super sector. Demand for these services will be spurred by the increased use of new technology and computer software, and the growing complexity of business.

One of the most important requirements of an IT student is their willingness to learn throughout their professional career. The IT Division can provide students with the knowledge and skills to start on that path. The successful student will provide the energy, enthusiasm, and drive to continue to acquire new knowledge and skills in order to succeed in the rapidly changing world of Information Technology.

### Employment Opportunities:

- Programmer
- Web /game designer
- Product tester
- Animation designer
- Project manager
- Software publishers
- Educational support services

### Salary Forecast:

For the most current salary information please refer to the Bureau of Labor Statistics "Occupational Outlook Handbook" found at [www.bls.gov/ooh/](http://www.bls.gov/ooh/).

### Program Admission Requirements:

The college adheres to an open admission policy which means applicants with a high school diploma or a GED are eligible for admission. Applicants with neither a high school diploma nor a GED may be admitted on a conditional basis.

# INFORMATION TECHNOLOGY

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## ANIMATION AND GAME DEVELOPER

### MAJOR CODE - C120 • CONCENTRATION CODE - C128

ENL 111	Written Communication <sup>1</sup>	3
IT 101/102	Fundamentals of Computers <sup>2</sup> (EDGE) or Advanced Computer Applications <sup>2,3</sup>	3
IT 110	Computer Skills for Designers <sup>3</sup>	3
IT 171	Introduction to Gaming Concepts I	3
IT 298	Gaming & Design Internship <sup>4</sup>	1
	Approved Math Elective <sup>5</sup>	3
COM 112/125	Oral Communication or Interpersonal Communication	3
IT 107	Fundamentals of the Internet	3
IT 115	Introduction to BASIC <sup>3</sup>	3
IT 271	Introduction to Gaming Concepts II <sup>6</sup>	3
IT 298	Gaming & Design Internship <sup>3</sup>	1
ENL 231	Technical Report Writing <sup>7</sup>	3
IT 212	Publishing on the Internet <sup>8</sup>	3
IT 215	Advanced Programming <sup>9</sup>	3
IT 250	Applications to Database <sup>3</sup>	3
IT 298	Gaming & Design Internship <sup>4</sup>	1
	IT Elective	3
IT 213	Web Graphic/Design	3
IT 242	Emerging Web Technologies <sup>10</sup>	3
IT 272	Intro to 3D Modular Programming <sup>11</sup>	3
IT 277	Management Information Systems <sup>12</sup>	3
IT 298	Gaming & Design Internship <sup>3</sup>	1
	IT Elective	3

**Hours required for graduation: 61**

### Earn a Degree and Graduate Early (EDGE):

This program provides students the opportunity to receive credit for their high school EDGE courses.

### Contact Information:

Joshua Joseph • Room 207 • Phone (304) 710-3397 • E-mail: joseph15@mctc.edu

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1. ENL 111 has a prerequisite of ENL 095, or placement in 100-level English, and REA 098 or placement in 100-level reading.
  2. Students are expected to have basic knowledge of computers including operating systems such as Window XP or Vista and Microsoft Office 2003 or Office 2007 before entering this program. The student must register for IT 101 during his or her first semester or successfully pass a challenge exam for IT 101.
  3. IT 102, IT 110, IT 115, and IT 250 have a prerequisite of IT 101.
  4. Permission of program coordinator is required in order to enroll in IT 298.
  5. MAT 215, and MAT 205 have a prerequisite of MAT 145. (Select one based on program track-see advisor).
  6. IT 271 has a prerequisite of IT 171.
  7. ENL 231 has a prerequisite of ENL 111 or COM 111. (ENG 354 is required only if planning to continue with bachelor's degree).
  8. IT 212 and IT 213 have a prerequisite of IT 107.
  9. IT 215 has a prerequisite of IT 115.
  10. IT 242 has a prerequisite of IT 212.
  11. IT 272 has a prerequisite of IT 215.
  12. IT 277 is to be taken in last semester or with permission.

# INFORMATION TECHNOLOGY

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## GEOSPATIAL SCIENCE AND TECHNOLOGY ASSOCIATE IN APPLIED SCIENCE

### Program Description:

The Mountwest Community & Technical College offers students the opportunity to work with and develop technical skills with image and image-processing software products. The application of satellite imaging, aerial photography, remote sensing, and geographical information systems is a large growth area with application to many career fields where image enhancement and data analysis can be used in decision making situations. The geospatial worker should possess basic skills in the manipulation of existing GIS software, problem identification and problem solving, mastery of analytic geospatial tools, and critical topics in the fields of computer science, mathematics and statistics, and information technology. The geospatial workforce must be capable of dealing with a continuing pattern of rapid change, as well as with the substantial challenge of adapting existing knowledge and tools to uses in a variety of new, complex situations. Above-average knowledge of computer and information science, as well as the ability to spend their careers in near-continuous learning mode, are critical characteristics at nearly all levels of the future geospatial workforce.

### Career Outlook:

The U.S. Department of Labor recently identified the growing importance of the geospatial based industry, along with 13 other sectors, as the focus of its High-Growth Job Training Initiative. The 14 sectors were selected based on the following criteria:

1. They are projected to add substantial numbers of new jobs to the economy or affect the growth of other industries, or
2. They are existing or emerging businesses being transformed by technology and innovation requiring new skill sets for workers.

In addition to the geospatial industry, only biotechnology and nanotechnology were identified as being among the most important of these emerging and evolving fields (Gewin 2004). While new career titles are being created, the U.S. Department of Labor states that overall employment of surveyors, cartographers, photogrammetrists, and surveying technicians is expected to grow about as fast as the average for all occupations through the year 2014.

### Employment Opportunities:

- Business: financial services, insurance, real estate, retail, and commercial business cartography and map publishing
- Communications: location-based services, media and press, and telecommunications conservation
- Defense: defense and intelligence
- Education: schools, libraries, and museums
- Engineering: civil engineering, and surveying
- Government: economic development, elections, general, homeland security, land records, law enforcement, public safety, state and local sustainable development, urban and regional planning
- Health and human services: hospitals and health systems, public health and human services
- Natural Resources: agriculture, archaeology, cave, environmental management, forestry, marine and coast, mining and earth science, petroleum, pipeline, and water resources
- Transportation: logistics, transportation systems and networks
- Utilities: electric, gas, and water/wastewater

### Salary Forecast:

For the most current salary information please refer to the Bureau of Labor Statistics "Occupational Outlook Handbook" found at [www.bls.gov/ooh/](http://www.bls.gov/ooh/).

### Program Admission Requirements:

The college adheres to an open admissions policy which means applicants with a high school diploma or a GED are eligible for admission. Applicants with neither a high school diploma nor a GED may be admitted on a conditional basis.



# INFORMATION TECHNOLOGY

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## GEOSPATIAL SCIENCE AND TECHNOLOGY

MAJOR CODE – CI20 • CONCENTRATION CODE – CI27

ENL 111	Written Communication <sup>1</sup>	3
IT 101/102	Fundamentals of Computers <sup>2</sup> (EDGE)	3
IT 160	Geographic Information System Concepts	3
IT 120	Network Operating Systems <sup>3</sup>	4
IT 250	Applications to Databases <sup>3,4</sup>	3
COM 112	Oral Communication	3
IT 165	Concepts Spatial Analysis & 3D Modeling <sup>5</sup>	3
IT 221	Advanced Operating Systems <sup>6,7</sup>	3
IT 270	Computer Essentials and Applications <sup>3</sup>	4
	Approved Math Elective <sup>8</sup>	3
IT 210	Networking Administration I <sup>9,10</sup>	3
IT 211	Networking Administration II <sup>10,11</sup>	3
IT 216	Networking Administration III <sup>10</sup>	3
IT 217	Networking Administration IV <sup>10</sup>	3
IT 260	Integration of GIS and RS Systems <sup>6</sup>	3
ENL 231	Technical Report Writing <sup>11</sup>	3
IT 266	Image Web Server Development <sup>5</sup>	3
IT 277	Management Information Systems <sup>12</sup>	3
IT 299	Information Technology Internship <sup>13</sup>	3
	Approved IT Elective <sup>14</sup>	3

**Hours required for graduation: 62**

### Earn a Degree and Graduate Early (EDGE):

This program provides students the opportunity to receive credit for their high school EDGE courses.

### Contact Information:

Theresa M. Litteral • Room 213 • Phone: (304) 710-3401 or 1-866-N-ROLLED (1-866-676-5533) • E-mail: [litteral@mctc.edu](mailto:litteral@mctc.edu)

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1. ENL 111 has a prerequisite of ENL 095 or placement in 100-level English, and REA 098 or placement in 100-level reading .
  2. IT 101 or IT 102 will meet the Fundamentals of Computers requirement .
  3. IT 250 and IT 270 have prerequisites of IT 101 and IT 102 .
  4. IT 210, IT 211, IT 216, IT 217 and IT 250 are offered fall semesters only .
  5. IT 165, IT 260 and IT 266 have a prerequisite of IT 160 .
  6. IT 221 has a prerequisite of IT 120 or IT 131 .
  7. IT 221 is offered spring semesters only .
  8. Approved math electives are MAT 145, MAT 146, MAT 205 and MAT 215 (select one based on program track – see advisor) .
  9. IT 221 has a prerequisite of IT 120 or IT 131 .
  10. Networking Administration classes IT 210, IT 211, IT 216 and IT 217 must be taken concurrently . These classes cannot be taken individually .
  11. ENL 231 has a prerequisite of COM 111 or ENL 111 .
  12. IT 277 must be taken in last semester or with permission .
  13. Permission of program coordinator/dean is required in order to enroll in IT 299.
  14. Choose from any of the following: IT 107, IT 110, IT 115, IT 131, IT 141, IT 150, IT 171, IT 212, IT 213, IT 215, IT 219, IT 222, IT 223, IT 224, IT 225, IT 226, IT 227, IT 230, IT 231, IT 241, IT 242, IT 245, IT 255, IT 268, IT 269, IT 270, IT 272, IT 277, IT 278, IT 279 .

# INFORMATION TECHNOLOGY

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## GRAPHIC DESIGN ASSOCIATE OF APPLIED SCIENCE

### **Program Description:**

Students who receive an A.A.S. in Graphic Design will possess the knowledge and skills needed to create and communicate ideas visually. The curriculum is designed to provide students up-to-date, industry-standard design education and computer training making them highly employable in today's workforce. A wide variety of occupations and industries benefit from the unique skills graphic designers possess, including but not limited to, specialized design services, advertising, public relations and educational institutions. The Graphic Design program emphasizes portfolio development through the study of principles and elements of design, typography, illustration, identity design, advertising design, web design and simulated real-world work situations.

### **Career Outlook:**

According to the Bureau of Labor Statistics, March 2012, graphic designers will take on increasingly important roles in the marketing of products in print and electronic media. The change in employment of graphic designers from 2012 to 2022 is projected to vary by industry. For example, the employment of graphic designers in computer systems design and related services is projected to grow 35 percent over this period. With the increased use of the Internet, graphic designers will be needed to create designs and images for portable devices, websites, electronic publications, and video entertainment media. Local growth will depend upon factors such as training, experience, and area of expertise.

Career backgrounds that utilize graphic design skills besides the expected specialized design positions include public relations, administrative, IT support, and marketing to name a few.

### **Salary Forecast:**

For the most current salary information please refer to the Bureau of Labor Statistics "Occupational Outlook Handbook" found at [www.bls.gov/ooh/](http://www.bls.gov/ooh/).

### **Admission Requirements:**

The college adheres to an open admission policy which means applicants with a high school diploma or a GED are eligible for admission. Applicants with neither a high school diploma nor a GED may be admitted on a conditional basis.

### **Employment Opportunities:**

- Specialized design firms
- Advertising agencies
- Public relations firms
- Educational institutions

# INFORMATION TECHNOLOGY

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## GRAPHIC DESIGN

### MAJOR CODE – CG40

ART 101	Introduction to Visual Arts	3
DSGN 120	Graphic Design I <sup>1</sup>	3
ENL 111	Written Communication <sup>2</sup>	3
IT 101	Fundamentals of Computers (EDGE)	3
IT 110	Computer Skills for Designers	3
IT 298	Gaming & Design Internship	1
COM 125	Interpersonal Communication <sup>3</sup>	3
DSGN 150	Graphic Design II <sup>4</sup>	3
IT 212	Publishing on the Internet <sup>5</sup>	3
IT 298	Gaming & Design Internship	1
	Approved Elective <sup>6</sup>	3
	Approved Math Elective <sup>7</sup>	3
DSGN 210	Digital Illustration <sup>8</sup>	3
DSGN 220	Typography <sup>8</sup>	3
DSGN 230	New Media <sup>8</sup>	3
IT 213	Web Graphic/Design <sup>5</sup>	3
IT 298	Gaming & Design Internship	1
PSYC 200	General Psychology <sup>3</sup>	3
DSGN 250	Graphic Design III <sup>8</sup>	3
DSGN 260	Interactive Design <sup>8</sup>	3
DSGN 270	Brand Identity Design <sup>9</sup>	3
IT 242 or	Advanced Web Publishing <sup>10</sup>	
IT 252	Emerging Web Technologies <sup>10</sup>	3
IT 298	Gaming & Design Internship	1

**Hours required for graduation: 61**

### Earn a Degree and Graduate Early (EDGE):

This program provides students the opportunity to receive credit for their high school EDGE courses

### Contact Information:

Julie Terry • Room 301 • Phone: 304-710-3439 • Email: [terryj@mctc.edu](mailto:terryj@mctc.edu)

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1. DSGN 120 has a co-requisite of IT 110.

2. ENL 111 has a prerequisite of ENL 095, or placement in 100 level English, and REA 098, or placement in 100-level reading.

3. COM 125, and PSYC 200 have a prerequisite of REA 098, or placement in 100-level reading.

4. DSGN 150 has a prerequisite of DSGN 120.

5. IT 212, and IT 213 have a prerequisite of IT 107.

6. Choose from one of the following: COM 230, IT 171, or MK 279.

7. Choose from any 100-level or above Mathematics course.

8. DSGN 210, DSGN 220, DSGN 230, DSGN 250, and DSGN 260 have a prerequisite of DSGN 150.

9. DSGN 270 has a prerequisite of DSGN 220.

10. IT 242, and IT 252 have a prerequisite of IT 212.

# INFORMATION TECHNOLOGY

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## NETWORK SYSTEMS ADMINISTRATION (MICROSOFT) ASSOCIATE IN APPLIED SCIENCE

### Program Description:

As a leading Microsoft IT Academy, Mountwest Community & Technical College offers the Network Systems Administration Option to help prepare students for the Microsoft Certified IT Professional (MCITP) certification examinations. The curriculum and course materials are designed by Microsoft, and the College's instructors are Microsoft Certified IT Professionals (MCITP) with industry experience that take a personal interest in mentoring students through every step of the certification process.

### Career Outlook:

The U.S. Department of Labor – Bureau of Labor Statistics states that computer-related jobs (IT) hold numerous positions within the Top-20 Fastest Growing Occupations in the country. Additionally, IT jobs are reported to have the highest earning of any of the occupations in the list.

Computer occupations are expected to be some of the fastest growing in the U.S. economy and will account for 5 out of the 20 fastest growing occupations over the next decade through 2015. Employment growth will be driven by the increasing reliance of businesses on information technology and the continuing importance of maintaining system and network security. In addition to high growth rates, computer and healthcare occupations combined will add more than 1.5 million new jobs. High growth rates among computer occupations reflect projected rapid growth in the computer and data processing industries.

Management, scientific and technical consulting services will grow very rapidly, by 55.4%, spurred by the increased use of new technology and the growing complexity of business.

### Employment Opportunities:

- Network administrator
- Network engineer
- Systems support technician
- Network designer
- Network security systems designer

### Salary Forecast:

For the most current salary information please refer to the Bureau of Labor Statistics "Occupational Outlook Handbook" found at [www.bls.gov/ooh/](http://www.bls.gov/ooh/).

### Program Admission Requirements:

The college adheres to an open admission policy which means applicants with a high school diploma or a GED are eligible for admission. Applicants with neither a high school diploma nor a GED may be admitted on a conditional basis.

### Career Description:

The Microsoft Certified IT Professional (MCITP) credential is the premier certification for professionals who analyze the business requirements and design and implement the infrastructure for business solutions based on the Microsoft Windows platform and Microsoft Server software. It is one of the most widely recognized and sought after technical certifications in the IT industry, demonstrating to employers, clients and colleagues that an individual has achieved expertise in the area of Information Technology.

# INFORMATION TECHNOLOGY

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## NETWORK SYSTEMS ADMINISTRATION (MICROSOFT)

MAJOR CODE – CI20 • CONCENTRATION CODE – CI24

ENL 111	Written Communication <sup>1</sup>	3
IT 102	Fundamentals of Computers (EDGE)	3
IT 120	Network Operating Systems	4
IT 230	Network Communications	3
	Approved Math Elective <sup>2</sup>	3
COM 112	Oral Communication	3
ENL 231	Technical Report Writing <sup>3</sup>	3
IT 221	Advanced Operating Systems <sup>4,5</sup>	3
IT 224	Fundamentals of Network Security <sup>5,6</sup>	3
IT 210	Networking Administration I <sup>7,8,9</sup>	3
IT 211	Networking Administration II <sup>8,9</sup>	3
IT 216	Networking Administration III <sup>8,9</sup>	3
IT 217	Networking Administration IV <sup>8,9</sup>	3
IT 245	Information Storage and Management <sup>8,9</sup>	3
IT 219	Networking Administration V <sup>5,11,12</sup>	3
IT 222	Networking Administration VI <sup>5,11,12</sup>	3
IT 223	Networking Administration VII <sup>5,11,12</sup>	3
IT 255	Virtualization Technologies <sup>5,10</sup>	3
IT 277	Management Information Systems <sup>13</sup>	3
IT 299	Information Technology Internship <sup>14</sup>	3

**Hours required for graduation: 61**

### Earn a Degree and Graduate Early (EDGE):

This program provides students the opportunity to receive credit for their high school EDGE courses.

### Contact Information:

Patrick Smith • Room 209 • Phone: (304) 710-3398 or 1-866-N-ROLLED (1-866-676-5533) • E-mail: smith288@mctc.edu

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1. ENL 111 has a prerequisite of ENL 095, or placement in 100-level English, and REA 098, or placement in 100-level reading.
  2. Approved math electives are MAT 145, MAT 146, MAT 250 and MAT 215 (select one based on program track-see advisor).
  3. ENL 231 has a prerequisite of ENL 111 or permission.
  4. IT 221 has a prerequisite of IT 120 or IT 131.
  5. IT 219, IT 221, IT 222, IT 223, IT 224 and IT 255 are offered spring semester only.
  6. IT 224 has a prerequisite of IT 101 or IT 102.
  7. IT 210 has a prerequisite of IT 120 or permission .
  8. Networking Administration classes IT 210, IT 211, IT 216 and IT 217 must be taken concurrently. These classes cannot be taken individually.
  9. IT 210, IT 211, IT 216, IT 217 and IT 245 are offered fall semesters only.
  10. IT 245 and IT 255 have a prerequisite of IT 210 or permission.
  11. IT 219, IT 222 and IT 223 have a prerequisite of IT 217.
  12. Networking Administration classes IT 219, IT 222 and IT 223 must be taken concurrently. These classes cannot be taken individually.
  13. IT 277 is to be taken in the last semester or permission.
  14. Permission of program coordinator/dean is required in order to register for IT 299.

# INFORMATION TECHNOLOGY

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## NETWORK SYSTEMS DEVELOPMENT (CCNA) ASSOCIATE IN APPLIED SCIENCE

### **Program Description:**

The Cisco Networking Academy at Mountwest Community & Technical College offers Cisco Certified Network Associate (CCNA) training that prepares individuals to install, configure, and operate LAN, WAN, and dial access services for enterprise organizations with networks from 100 to more than 500 nodes. Concepts laboratory exercises focus on IP, Ethernet based LANs, Frame Relay and Serial WANs, interior routing protocols such as RIP and IGRP and exterior protocols such as BGP. The Cisco Networking Academy Program is a comprehensive learning program that provides students with the IT skills essential in a global economy. The Networking Academy delivers web-based content, online assessment, student performance tracking, hands-on labs, instructor support, and preparation for the CCNA industry-standard certifications.

### **Career Outlook:**

The U.S. Department of Labor states that Network Systems and Data Communications Analysts will see an increase in employment growth of 53.36% between 2008 and 2018. The computer systems design and related services industry is expected to be one of the top-ten fastest growing industries in the U.S. economy, projected to add more than 115,800 jobs between 2008 and 2018. Professionals and specialists will see the best prospects for employment because they have the higher level skills necessary to stay abreast of rapid changes in technology ([http://www.bls.gov/emp/ep\\_table\\_103.htm](http://www.bls.gov/emp/ep_table_103.htm)).

### **Employment Opportunities:**

- Network administrator
- Network engineer
- Systems support technician
- Network designer
- Network security systems designer

### **Salary Forecast:**

For the most current salary information please refer to the Bureau of Labor Statistics "Occupational Outlook Handbook" found at [www.bls.gov/ooh/](http://www.bls.gov/ooh/).

### **Program Admission Requirements:**

The college adheres to an open admission policy which means applicants with a high school diploma or a GED are eligible for admission. Applicants with neither a high school diploma nor a GED may be admitted on a conditional basis.

# INFORMATION TECHNOLOGY

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## NETWORK SYSTEMS DEVELOPMENT (CCNA)

MAJOR CODE – CI20 • CONCENTRATION CODE – CI25

ENL 111	Written Communication <sup>1</sup>	3
IT 102	Advanced Computer Applications	3
IT 120	Network Operating Systems	4
IT 131	Introduction to Networking (EDGE) <sup>2</sup>	4
COM 112	Oral Communication	3
IT 224	Fundamentals of Network Security <sup>3,4</sup>	3
IT 141	Networking Systems II (EDGE) <sup>4,5</sup>	4
IT 221	Advanced Operating Systems <sup>6</sup>	3
ENL 231	Technical Report Writing <sup>7</sup>	3
IT 231	Networking Systems III (EDGE) <sup>2, 8</sup>	4
IT 270	Computer Essentials and Applications <sup>11</sup>	4
	Approved IT Elective <sup>10</sup>	3
	Approved Math Elective <sup>11</sup>	3
IT 225	Fundamentals of Wireless LANs <sup>4, 12</sup>	4
IT 241	Networking Systems IV (EDGE) <sup>14</sup>	4
IT 277	Management Information Systems <sup>15</sup>	3
IT 299	Information Technology Internship <sup>16</sup>	3
	Approved IT Elective <sup>10</sup>	3

**Hours required for graduation: 61**

### Earn a Degree and Graduate Early (EDGE):

This program provides students the opportunity to receive credit for their high school EDGE courses.

### Contact Information:

Patrick Smith • Room 209 • Phone: (304) 710-3405 or 1-866-N-ROLLED (1-866-676-5533) • E-mail: smith288@mctc.edu

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1. ENL 111 has a prerequisite of ENL 095, or placement in 100-level English and REA 098, or placement in 100-level reading .
  2. IT 131 and IT 231 are offered fall semester only.
  3. IT 224 has a prerequisite of IT 101 or IT 102.
  4. IT 141, IT 224, IT 241 and IT 225 are offered spring semester only.
  5. IT 141 has a prerequisite of IT 131.
  6. IT 221 has a prerequisite of IT 120 or IT 131.
  7. ENL 231 has a prerequisite of ENL 111.
  8. IT 231 has a prerequisite of IT 141.
  9. IT 270 has a prerequisite of IT 101 or IT 102.
  10. Choose from any of the following: IT 107, IT 110, IT 115, IT 131, IT 141, IT 150, IT 171, IT 212, IT 213, IT 215, IT 219, IT 222, IT 223, IT 224, IT 225, IT 226, IT 227, IT 230, IT 231, IT 240, IT 241, IT 242, IT 245, IT 255, IT 268, IT 269, IT 270, IT 272, IT 277, IT 278, IT 279 .
  11. Approved math electives are MAT 145, MAT 146, MAT 205 and MAT 215 (select one based on program track-see advisor) .
  13. IT 225 has a prerequisite of IT 131, IT 230, or permission.
  14. IT 241 has a prerequisite of IT 231.
  15. IT 277 has to be in last semester or permission.
  16. Permission of IT program coordinator/dean is required in order to enroll in IT 299.

# INFORMATION TECHNOLOGY

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## NETWORK SYSTEMS SECURITY ASSOCIATE IN APPLIED SCIENCE

### Program Description:

The Associate in Applied Science Degree Program in Network Systems Security offers comprehensive network training from Mountwest Community & Technical College's Microsoft Information Technology Academy and Cisco Networking Academy. Within the two-year associate degree program, students take courses developed by Microsoft and Cisco, providing specialized skills in network administration, design, and security. Students will take courses preparing them for the following certifications:

CompTIA's A+ Hardware and Operating Systems	Microsoft's MCITP: Server Administrator (Microsoft Certified IT Professional)
CompTIA's Linux+	Cisco's CCNA (Cisco Certified Network Associate)
CompTIA's Security+	CompTIA's Server+

### Career Outlook:

The National Strategy to Secure Cyberspace identifies a need for training programs in cyber security to produce a workforce capable of securing our nation's information technology infrastructure ([http://csrc.nist.gov/policies/cyberspace\\_strategy.pdf](http://csrc.nist.gov/policies/cyberspace_strategy.pdf)). A recent IDC survey shows that the total information technology security market revenues, including software, hardware, and services, is expected to increase from \$17 billion in 2001 to \$45 billion by 2006, thus fueling a 24% rise in spending for network security services.

### Salary Forecast:

For the most current salary information please refer to the Bureau of Labor Statistics "Occupational Outlook Handbook" found at [www.bls.gov/ooh/](http://www.bls.gov/ooh/).

### Employment Opportunities:

- Network administrator
- Web designer
- Systems support technician
- Network designer
- Security solutions designer
- Help desk technician
- Hardware technician
- Software applications

### Career Description:

A well-rounded network professional is capable of performing network administration, design, maintenance, and security on a variety of network operating systems and devices. Microsoft Certified IT Professional Server Administrators manage and troubleshoot system environments running the Windows 2008 operating system. Cisco Certified Network Associates design, build, and maintain computer networks using a variety of network devices. CompTIA Security+ and Cisco Network Security Specialists design and implement security solutions that reduce network vulnerability. Cisco Wireless LAN Support Specialists implement and troubleshoot Wireless LANs. Mountwest Community & Technical College's Network Systems Security Option provides fundamental networking knowledge and skills with specific network security training crucial for entry into information security positions in public corporations and government entities.



# INFORMATION TECHNOLOGY

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## NETWORK SYSTEMS SECURITY

MAJOR CODE – CI20 • CONCENTRATION CODE – CI26

ENL 111	Written Communication <sup>1</sup>	3
IT 102	Advanced Computer Applications	3
IT 120	Network Operating Systems	4
IT 131	Introduction to Networking (EDGE) <sup>2</sup>	4
COM 112	Oral Communication	3
IT 141	Networking Systems II (EDGE) <sup>3,4</sup>	4
IT 224	Fundamentals of Network Security <sup>3,5</sup>	3
MAT	Approved Math Elective <sup>6</sup>	3
IT 210	Networking Administration I <sup>2,7,8</sup>	3
IT 211	Networking Administration II <sup>2,5</sup>	3
IT 216	Networking Administration III <sup>2,5</sup>	3
IT 217	Networking Administration IV <sup>2,5</sup>	3
IT 231	Networking Systems III (EDGE) <sup>2,7</sup>	4
ENL 231	Technical Report Writing <sup>9</sup>	3
IT 225	Fundamentals of Wireless LANs <sup>3,10</sup>	4
IT 241	Networking Systems IV (EDGE) <sup>3,11</sup>	4
IT 277	Management Information Systems <sup>12</sup>	3
IT 299	Information Technology Internship <sup>13</sup>	3

**Hours required for graduation: 60**

### Earn a Degree and Graduate Early (EDGE):

This program provides students the opportunity to receive credit for their high school EDGE courses.

### Contact Information:

Patrick Smith • Room 209 • Phone: (304) 710-3398 or 1-866-N-ROLLED (1-866-676-5533) • E-mail: smith288@mctc.edu

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1. ENL 111 has a prerequisite of REA 098, ACT 18, SAT 421, or appropriate reading placement.
  2. IT 101 or IT 102 will meet the Fundamentals of Computers requirement.
  3. IT 120 has a prerequisite of IT 101.
  4. IT 141 has a prerequisite of IT 131.
  5. IT 210 has a prerequisite of IT 120 or permission.
  6. Approved math electives are MAT 145, MAT 146, MAT 205 and MAT 215 (select one based on program track – see advisor).
  7. Networking Administration classes IT 210, IT 211, IT 216, and IT 217 must be taken concurrently. These classes cannot be taken individually.
  8. IT 211 has a prerequisite of IT 210, and IT 216, and IT 217.
  9. IT 231 has a prerequisite of IT 141.
  10. ENL 231 has a prerequisite of ENL 111.
  11. IT 225 has a prerequisite of IT 141.
  12. IT 241 has a prerequisite of IT 231.
  13. IT 277 should be taken in last semester or with permission.
  14. IT 299 has a prerequisite of permission of program coordinator/dean.

# INFORMATION TECHNOLOGY

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## WEB DEVELOPER ASSOCIATE IN APPLIED SCIENCE

### **Program Description:**

Students who graduate with the Web Development Option can expect to find employment as a content developer, web designer, web authoring, web developer, or database support technician. Employment could be with a professional service, consulting organization or an in-house staff position or on a contract basis. Graduates could also find employment with a consulting firm or an entry-level position within a computer department.

### **Career Outlook:**

Organizations are increasingly using the World Wide Web for a diverse set of business purposes. Websites are used for marketing, sales, communications, public relations, and training. Careers in Web development involve the design and maintenance of such sites. Web developers typically work with a client to determine the needs of the organization. A design will be created, tested and documented. Some positions in the Web development require creativity. The majority of positions are found at companies that specialize in Web development and multimedia creations, but some large corporations hire Web developers for in-house design as well. The array of organizations seeking Web developers is extremely diverse. These organizations may include publishing firms, electronic game companies, educational institutions, marketing firms, government agencies and many more.

The demand for skilled computer professionals is expected to increase as organizations attempt to maximize the efficiency of their computer systems. As international and domestic competition increases, organizations will face growing pressure to use technological advances in areas such as factory and office automation and telecommunications technology. Many more computer trained individuals will be needed to incorporate these advances in new or existing systems.

### **Employment Opportunities:**

- Network administration
- Web designer
- Systems support technician
- Network designer
- Security solutions designer
- Help desk technician
- Hardware technician
- Software applications

### **Salary Forecast:**

For the most current salary information please refer to the Bureau of Labor Statistics "Occupational Outlook Handbook" found at [www.bls.gov/ooh/](http://www.bls.gov/ooh/).

### **Program Admission Requirements:**

The college adheres to an open admission policy which means applicants with a high school diploma or a GED are eligible for admission. Applicants with neither a high school diploma nor a GED may be admitted on a conditional basis.

# INFORMATION TECHNOLOGY

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## WEB DEVELOPER

MAJOR CODE – CI20 • CONCENTRATION CODE – CI21

ENL 111	Written Communication <sup>1</sup>	3
IT 101/102	Fundamentals of Computers (EDGE) <sup>2</sup>	3
IT 107	Fundamentals of the Internet	3
IT 110	Computer Skills For Designers <sup>3</sup>	3
IT	IT Elective <sup>3</sup>	3
COM	Approved Elective <sup>4</sup>	3
IT 115	Introduction to Programming <sup>5</sup>	3
IT 212	Publishing on the Internet <sup>6,7</sup>	3
IT 270	Computer Essentials and Applications <sup>5</sup>	4
MAT	Approved Math Elective <sup>8</sup>	3
ENL 231	Technical Report Writing <sup>8</sup>	3
IT 171	Introduction Gaming Concepts I	3
IT 213	Web Graphics/Design <sup>3</sup>	3
IT 250	Applications to Databaes <sup>5,10</sup>	4
IT 277	Management Information Systems	3
IT 221	Advanced Operating Systems <sup>5</sup>	3
IT 242	Emerging Web Technologies <sup>7,11</sup>	3
IT 252	Advanced Web Publishing <sup>7,9</sup>	3
IT 271	Introduction to Gaming II <sup>7,12</sup>	3
IT 299	Information Technology Internship <sup>13</sup>	3

**Hours required for graduation: 61**

### Earn a Degree and Graduate Early (EDGE):

This program provides students the opportunity to receive credit for their high school EDGE courses.

### Contact Information:

Kim Preece • Room 211 • Phone: (304) 710-3399 or 1-866-N-ROLLED (1-866-676-5533) • E-mail: preece@mctc.edu

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1. ENL 111 has a prerequisite of REA 098, or placement in 100-level reading.
  2. IT 101 or IT 102 will meet the Fundamentals of Computers requirement.
  3. Choose from the following: IT 111, IT 112, IT 113, IT 120, IT 141, IT 150, IT 160, IT 165, IT 210, IT 211, IT 215, IT 216, IT 217, IT 222, IT 223, IT 225, IT 226, IT 227, IT 230, IT 231, IT 240, IT 241, IT 245, IT 255, IT 270, IT 272, IT 276, IT 278, IT 279, IT 293, or IT 298.
  4. Choose from the following: COM 112 Oral Communication or COM 125 Interpersonal Communication.
  5. IT 115, IT 224, IT 250, and IT 270 have a prerequisite of IT 101 or IT 102.
  6. IT 212 and IT 213 have a prerequisite of IT 107.
  7. IT 212, IT 242, IT 252 and IT 271 are offered spring semester only.
  8. Approved math electives are MAT 145, MAT 205 and MAT 215 (select one based on program track – see advisor).
  9. ENL 231 has a prerequisite of ENL 111.
  10. IT 171, IT 213 and IT 250 are offered fall semesters only.
  11. IT 242 and IT 252 have a prerequisite of IT 212.
  12. IT 271 has a prerequisite of a C or better in IT 171.
  13. Permission of program coordinator/dean is required in order to enroll in IT 299.

# LEGAL STUDIES

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## CRIMINAL JUSTICE ASSOCIATE IN APPLIED SCIENCE

### Program Description:

The Criminal Justice Degree is available to on-campus students and law enforcement officers who have attended an approved law enforcement academy. This program of study was developed to provide both groups of individuals the criminal justice background to successfully work in either the law enforcement field or private security. Law enforcement officers have the option of completing a field internship to earn college credit that may be applied towards earning this degree.

### Career Outlook:

The opportunity for public service through law enforcement or security work is attractive to many because the job is challenging and involves much personal responsibility. Furthermore, law enforcement officers in many agencies may retire with a pension after 20 or 25 years of service, allowing them to pursue a second career while still in their 40s. Because of relatively attractive salaries and benefits, the number of qualified candidates exceeds the number of job openings in federal law enforcement agencies and in most state police departments – resulting in increased hiring standards and selectivity by employers. Competition should remain keen for higher paying jobs with state and federal agencies and police departments in more affluent areas. Opportunities for employment in the public sector will be better with local or special police departments, especially in departments that offer lower starting salaries, or in urban communities where the crime rate is relatively high. Applicants with college training in criminal justice, military police experience, or both should have the best opportunities for selection. Employment opportunities for police officers, security personnel, and private detectives are expected to continue to grow. With the advent of a more security conscious society and citizen's concern about drug-related and property crimes should contribute to an increasing demand for more police and security services.

### Employment Opportunities:

- Police Force
- Federal Bureau of Investigation
- Private Security
- Federal Marshal
- Private Investigator

### Salary Forecast:

For the most current salary information please refer to the Bureau of Labor Statistics "Occupational Outlook Handbook" found at [www.bls.gov/ooh/](http://www.bls.gov/ooh/).

### Admission Requirements:

The college adheres to an open admissions policy which means applicants with a high school diploma or a GED are eligible for admission. Applicants with neither a high school diploma nor a GED may be admitted on a conditional basis.

### Earn a Degree and Graduate Early (EDGE):

This program provides students the opportunity to receive credit for their high school EDGE courses.

### Contact Information:

Donna Donathan • Room 247 • Phone: (304) 710-3411 or 1-866-N-ROLLED (1-866-676-5533) • E-mail: [donathan@mctc.edu](mailto:donathan@mctc.edu)

Heather Hussell • Room 249 • Phone: (304) 710-3412 or 1-866-N-ROLLED (1-866-676-5533) • E-mail: [hussell8@mctc.edu](mailto:hussell8@mctc.edu)

*Contact for graduates of an approved police academy*

Jenna Parker • Coordinator of Off-Campus Programs • Room 255 • Phone (304) 710-3414 or 1-866-N-ROLLED (1-866-676-5533) • E-mail: [parker54@mctc.edu](mailto:parker54@mctc.edu)

# LEGAL STUDIES

## CRIMINAL JUSTICE<sup>1</sup>

### MAJOR CODE – CP80

COM 112/125	Oral Communication or Interpersonal Communication	3
ENL 111	Written Communication <sup>2</sup>	3
IT 101	Fundamentals of Computers (EDGE)	3
	Social Science Elective <sup>3</sup>	3-4
	Mathematics Elective <sup>4</sup>	3
	Laboratory Science Elective <sup>5</sup>	3
	General Elective <sup>6</sup>	3
CJS 101/111	Introduction to Criminal Justice or Law Enforcement Orientation <sup>7</sup>	3
CJS 231	Fundamentals of Criminal Law	2
CJS 233	Fundamentals of Criminal Investigations	3
EME 105	First on Scene <sup>8</sup>	3

### Criminal Justice Electives, select from the following<sup>9</sup>

CJS 102	Introduction to Corrections	3
CJS 120	Patrol Operations and Procedures	3
CJS 122	Police Arsenal and Weapons	3
CJS 235	Police Organization and Administration	3
CJS 237	Police Role in Crime and Delinquency	3
CJS 239	Criminal Evidence and Procedure	3
CJS 242	Police-Community Relations	3
CJS 244	Introduction to Criminalistics	2-4
CJS 246	Police Records and Reports	3
CJS 248	Traffic Administration and Enforcement	2-3
CJS 280-283	Special Topics in Police Science	1-4
CJS 285	Law Enforcement OJT <sup>10,11</sup>	12
CJS 298	Criminal Justice Internship <sup>10,12</sup>	3
LAW 101	General Law I	3
LAW 102	General Law II	3
LAW 240	Criminal Litigation <sup>13</sup>	3

**Hours required for graduation: 60**

- Students must complete 12 hours with Mountwest to establish academic residency.
- ENL 111 has a prerequisite of REA 098, or placement in 100-level reading.
- Choose from EC, HIST, PSYC, SS at the 100-level or above.
- Select from: MAT 115, MAT 145, or MAT 120. MAT 115, MAT 120, and MAT 145 have a prerequisite of MAT 096, or MAT 097, or placement in 100-level math.
- Select a science course from the following: BIOL 101, BIOL 257, SCI 110, SCI 120, SCI 201, or Forensic Science.
- To fulfill general education elective select from ENL 115, ENL 231, Social Science or approved Humanities courses.
- Select one foundational Criminal Justice course. Contact the program coordinator to select a course. The following courses fulfill General Education Electives requirement: any COM, any ENL, EC 102, any HIST, IT 107 or IT 150, any PSYC, or any SS courses
- In-field law enforcement officers may substitute another CJS course 1st aid course.
- Select from elective courses to develop a program of study and complete remaining academic credit hours to earn degree based on employment requirements. See advisor for additional courses.
- Capstone Courses, select one based on employment status.
- Available only for serving law enforcement officers, see advisor for details.
- Students must arrange with advisor for approved internship sites.
- Prerequisite for Criminal Justice students is LAW 102, CJS 101, or CJS 111.

# LEGAL STUDIES

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## PARALEGAL ASSOCIATE IN APPLIED SCIENCE

### Program Description:

A paralegal is a highly skilled paraprofessional with specialized training who works under the direct supervision of an attorney. Job responsibilities require knowledge of law and legal procedures in rendering direct assistance to lawyers and clients. Tasks may include interviewing, case investigation, the preparation of pleadings, and legal research. The increasing complexities of the legal assistant's work environment have also created the need for individuals who possess skills including interpersonal, communication, analytical, decision-making, customer service, and computer skills. Paralegals cannot provide legal services directly to the public except as permitted by law.

The Paralegal Program was planned with assistance from the West Virginia State Bar and a program advisory committee consisting of attorneys and legal assistants. The program has been granted approval by the American Bar Association and also offers the associate in applied science degree graduates the opportunity to pursue a baccalaureate degree in legal studies from Marshall University's College of Liberal Arts, Criminal Justice Department. Upon completion of the Paralegal Associate in Applied Science Degree, the graduate will be able to:

- Exhibit knowledge of legal terminology to communicate with attorneys, peers, managers, and other professionals
- Develop specific skills in those areas of law practice in which legal assistants customarily function
- Assist attorneys with client interviews, legal research, preparation of documents and pleadings for trial and other professional activities normally undertaken by paraprofessionals to assist with the practice of law
- Exhibit knowledge of appropriate ethical behavior for legal assistants

### Career Outlook:

Employment of paralegals and legal assistants is projected to grow faster than the average for all occupations through 2012. Some employment growth stems from law rooms and other employers with legal staff hiring paralegals/legal assistants to lower the cost and increase the availability and efficiency of legal services. The job openings for paralegals in the future will be new jobs created by employment growth, and additional job openings will arise as people leave the occupation. Despite projections of fast employment growth, competition for jobs should continue as many people seek to go into this profession; however, highly skilled, formally trained paralegals have excellent employment potential.

### Employment Opportunities:

- Legal assistant/paralegal for law firms
- Legal assistant/paralegal for a business entity's legal department
- Legal assistant/paralegal for governmental agencies
- Administrator for a nonprofit legal services corporation
- Trust administrative assistant
- Editor of a legal publishing company
- Criminal justice occupations on corrections and law enforcement

### Salary Forecast:

For the most current salary information please refer to the Bureau of Labor Statistics "Occupational Outlook Handbook" found at [www.bls.gov/ooh/](http://www.bls.gov/ooh/).

### Admission Requirements:

The college adheres to an open admissions policy meaning applicants with a high school diploma or a GED are eligible for admission. Applicants with neither a high school diploma nor a GED may be admitted on a conditional basis.

# LEGAL STUDIES

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## PARALEGAL<sup>1</sup> MAJOR CODE - CL10

AT 136/IT 101	Introduction to Word Processing <sup>2</sup>	3
ENL 111	Written Communication <sup>3</sup>	3
LAW 101	General Law I <sup>2</sup>	3
LAW 103	Legal Assisting <sup>2,4</sup>	3
LAW 104	Legal Ethics <sup>4</sup>	1
MAT	Mathematics Requirement <sup>5</sup>	3
COM 112/125	Oral Communication or Interpersonal Communication <sup>3</sup>	3
ENL 115	Written Communication II <sup>6</sup>	3
LAW 102	General Law II <sup>7</sup>	3
LAW 213	Law Office Technology <sup>8</sup>	3
	Social Science Elective <sup>9</sup>	3
LAW 211	Legal Research and Writing I <sup>10</sup>	3
LAW 235	Civil Litigation <sup>10</sup>	3
LAW 240	Criminal Litigation <sup>10</sup>	3
	Law Elective <sup>11</sup>	3
	Science, Humanities or Language Elective <sup>12</sup>	3
LAW 212	Legal Research and Writing II <sup>13</sup>	3
LAW 290	Internship <sup>14</sup>	3
	Law Elective <sup>11</sup>	3
	Law Elective <sup>11</sup>	3
	Science, Humanities or Language Elective <sup>15</sup>	3

**Hours required for graduation: 61**

### Earn a Degree and Graduate Early (EDGE):

This program provides students the opportunity to receive credit for their high school EDGE courses.

### Contact Information:

Heather R. Hussell • Room 249 • Phone: (304) 710-3412 or 1-866-N-ROLLED (1-866-676-5533)

E-mail: hussell8@mctc.edu

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1. Students are required to make a "C" or better in each LAW course before graduating from the program.
  2. LAW 101, LAW 103 and COM 125 have a prerequisite of REA 098 or ACT Reading 18 or SAT Reading 421 or Accuplacer Reading 80.
  3. ENL 111 has a prerequisite of ENL 095, or placement in 100-level English, and ReA 098, or placement in 100-level reading.
  4. LAW 103 and LAW 104 are co-requisites.
  5. Select any 100 level or higher mathematics course.
  6. ENL 115 has a prerequisite of ENL 111.
  7. LAW 102 has a prerequisite of LAW 101.
  8. LAW 213 has a prerequisite of AT 136 or IT 101.
  9. Select any 100 level course in economics, history, political science, sociology, or other approved social science course.
  10. LAW 211, LAW 235 and LAW 240 have a prerequisite of LAW 102.
  11. Recommended electives: LAW 110, LAW 209, LAW 225, LAW 231, LAW 244, LAW 248, LAW 250, LAW 255, LAW 260, LAW 280-283 and LAW 290.
  12. Select any 100 level or higher science, humanities or language course.
  13. LAW 212 has a prerequisite of LAW 211.
  14. LAW 290 has a prerequisite of permission by program coordinator.
  15. Select any 100 level or higher science, humanities or language course. If a student has completed a 100 level or higher math course other than MAT 115, they can take another LAW electives.

# TRANSPORTATION

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## AVIATION ASSOCIATE IN APPLIED SCIENCE

### **Program Description:**

The Aviation Technology Program provides specialized training for the student having an interest in aviation or wishing to pursue a career in the aviation industry. The field of aviation, by its nature, must be classified as multi-disciplinary for it truly is the joining of many specialties into an active, challenging career area. There are certain characteristics that serve as a basic blueprint for all aspects of the aviation field. Science, mathematics, engineering, business, and humanities all form a basic foundation to the program.

The Aviation Technology Program consists of a Flight Operations phase containing pilot flight and ground training. The program consists of a total of 62 credit hours of which 42 hours are Mountwest Community & Technical College courses, and 20 hours aviation hours are awarded via FAA licenses.

### **Career Outlook:**

Civilian aircraft pilots and flight engineers held about 116,000 jobs in 2008, according to the Bureau of Labor Statistics (BLS). About 76,800 worked as airline pilots, copilots, and flight engineers. The rest were commercial pilots who worked as flight instructors at local airports or for large businesses that fly company cargo and executives in their own airplanes or helicopters. Pilots are located across the country, but airline pilots usually are based near major metropolitan airports or airports operating as hubs for the major airlines.

Employment of aircraft pilots and flight engineers is projected to grow 12 percent from 2008 to 2018, which is about as fast as the average for all occupations. Population growth and an expanding economy are expected to boost the demand for air travel, contributing to job growth. New jobs will be created as airlines expand their capacity to meet this rising demand by increasing the number of planes in operation and the number of flights offered. About 7,300 careers for commercial airline pilots are expected to be added to the field through 2018.

### **Salary Forecast:**

For the most current salary information please refer to the Bureau of Labor Statistics "Occupational Outlook Handbook" found at [www.bls.gov/ooh/](http://www.bls.gov/ooh/).

### **Additional Flight Certifications:**

For additional ratings that may be applied as college credit toward this degree, contact Dr. Kristy Wood at [wood25@mctc.edu](mailto:wood25@mctc.edu).



# TRANSPORTATION

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## TRANSPORTATION TECHNOLOGY - AVIATION

**MAJOR CODE – CT40 • CONCENTRATION CODE – CT42**

AVT 100	Introduction to Aviation Technology	3
AVT 150	Private Pilot Ground & Flight Training <sup>1</sup>	
or		
AVT 151, 152, 153	Private Pilot Ground & Flight Training I, II, and III	6
ENL 111	Written Communication <sup>2</sup>	3
IT 101	Fundamentals of Computers (EDGE)	3
TRAN 100	Transportations Systems Overview	3
AVT 125	Aviation Meteorology	3
AVT 175	Instrument Ground & Flight Training <sup>3</sup>	
or		
AVT 176 & 177	Instrument Ground & Flight Training I and II	4
COM 112	Oral Communication	
or		
COM 125	Interpersonal Communication	3
TRAN 230	Transportation Geography	3
AVT 200	Commercial Pilot Ground & Flight Training <sup>4</sup>	
or		
AVT 201, 202, and 203	Commercial Pilot Ground & Flight Training I, II, and III	6
TRAN 200	Transportation Law and Policy	3
TRAN 210	Transportation Economics	3
MAT	Approved Math Elective <sup>5</sup>	3
AVT 210	Airport Management & Operations	3
AVT 260	Certified Flight Instructor <sup>6</sup>	
or		
AVT 261 & 262	Certified Flight Instructor I and II	4
TRAN 220	Transportation Security	3
TRAN 250	Transportation Information Systems	3
SS	Social Science Elective <sup>7</sup>	3

**Hours required for graduation: 62**

### Earn a Degree and Graduate Early (EDGE):

This program provides students the opportunity to receive credit for their high school EDGE courses.

### Contact Information:

Kristy Wood • Room 205 • Phone: (304) 710-3396 or 1-866-N-ROLLED (1-866-676-5533) • E-mail: wood25@mctc.edu

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1. Off-campus flight training via advisor approved program. The following courses together are equivalent to AVT 150: AVT 151, AVT 152, AVT 153.
  2. ENL 111 has a prerequisite of REA 098, or placement in 100-level reading.
  3. Off-campus flight training via advisor approved program. The following courses together are equivalent to AVT 175: AVT 176, AVT 177.
  4. Off-campus flight training via advisor approved program. The following courses together are equivalent to AVT 200: AVT 201, AVT 202, AVT 203.
  5. Choose from any MAT 100-level or above. All MAT 100-level courses have a prerequisite of MAT 096 or placement in 100-level math.
  6. Off-campus flight training via advisor approved program. The following courses together are equivalent to AVT 260: AVT 261, AVT 262.
  7. Choose from EC, HIST, PSYC, or SS 100-level or above.

# TRANSPORTATION

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## INTELLIGENT TRANSPORTATION SYSTEMS ASSOCIATE IN APPLIED SCIENCE

### **Program Description:**

The Transportation Technology Program provides a specialized distance learning education and training for the student having an interest in management and wishing to pursue a career in the intermodal transportation industry. All forms of business and industry are tethered to a trade and transportation skilled workforce for their own success. This unique on-line, distance learning, and life-experience curriculum breaks the tether to the traditional classroom. It is designed to support a drop-in/drop-out lifelong learning philosophy of continuing education and ladder degree options from a certificate of achievement for specific skill sets to a master's degree in transportation studies. In addition to formal academic credit, the program is designed to accept related credit equivalency from any academic, vocational, or industry training program to include documented life-long learning skills, test-out exam, industry recognized certifications, and/or continuing education units (CEU's).

### **Career Outlook:**

According to the Bureau of Labor Statistics (BLS), the 2008 employment of geospatial information scientists and technologists of transportation is 961,200. Of these, 339,500 were network and computer systems administrators, 120,400 were database administrators, and 292,000 were network and data communications analysts. In addition, about 209,300 were classified as "computer specialists, all other," a residual category.

In West Virginia, the overall employment of geographic information systems technicians is projected to increase by six percent from 2006 to 2016, much faster than the average for all occupations. In addition, this occupation will increase to 1,150 over that period.

### **Salary Forecast:**

For the most current salary information please refer to the Bureau of Labor Statistics "Occupational Outlook Handbook" found at [www.bls.gov/ooh/](http://www.bls.gov/ooh/).

# TRANSPORTATION

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## INTELLIGENT TRANSPORTATION SYSTEMS

MAJOR CODE – CT40 • CONCENTRATION CODE – CT41

ENL 111	Written Communication <sup>1</sup>	3
IT 101	Fundamentals of Computers (EDGE)	3
IT 131	Introduction to Networking (EDGE)	3
IT 160	Geographic Information System Concepts	3
	Mathematics Elective <sup>2</sup> or IT 150	3
	English or Communication Elective <sup>3</sup>	3
IT 165	Spatial Analysis & 3D Modeling <sup>4</sup>	3
TRAN 101	Transportations Systems Overview	3
TRAN 230	Transportation Geography	3
TRAN 270	Intelligent Transportation Systems <sup>5</sup>	3
MG 232	Supply Chain Management	3
TRAN 200	Transportation Law & Policy	3
TRAN 210	Transportation Economics	3
TRAN 220	Transportation Security	3
TRAN 272	Intermodal Transportation Systems	3
IT 277	Management Information Systems	3
TRAN 250	Transportation Information Systems	3
TRAN 273	ITS Systems and Applications	3
TRAN 274	ITS Project Management	3
TRAN 279	ITS Capstone	3

**Hours required for graduation: 60**

### Earn a Degree and Graduate Early (EDGE):

This program provides students the opportunity to receive credit for their high school EDGE courses.

### Contact Information:

Kristy Wood • Room 205 • Phone: (304) 710-3396 or 1-866-N-ROLLED (1-866-676-5533) • E-mail: wood25@mctc.edu

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1. ENL 111 has a prerequisite of ENL 095, or placement in 100-level English, and REA 098, or placement in 100-level reading.
  2. Choose from any MAT 100-level or above. All MAT 100-level courses have a prerequisite of MAT 097 or placement in 100-level math.
  3. Choose from any English or Communications 100-level or above.
  4. IT 165 has a prerequisite of IT 160.
  5. TRAN 270 has a prerequisite of TRAN 101.

# TRANSPORTATION

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## INTERMODAL MANAGEMENT ASSOCIATE IN APPLIED SCIENCE

### **Program Description:**

The Transportation Technology Program provides a specialized distance learning education and training for the student having an interest in management and wishing to pursue a career in the intermodal transportation industry. All forms of business and industry are tethered to a trade and transportation industry skilled workforce for their own success. This unique online, distance learning, and life-experience curriculum breaks the tether to the traditional classroom. It is designed to support a drop-in/drop-out lifelong learning philosophy of continuing education and ladder degree options from a certificate of achievement for specific skill sets to a Master's degree in Transportation Studies. In addition to formal academic credit, the program is designed to accept related credit equivalency from any academic, vocational, or industry training program to include documented life-long learning skills, test-out exams, industry recognized certifications, and/or continuing education units (CEU's).

### **Career Outlook:**

In addition to providing overall direction and supervision, transportation managers' work may include scheduling transportation, providing safety and other training, providing service support, and resolution of logistical problems. These highly-skilled workers may be first-line managers who work directly with the employees they supervise, or may be higher up in the firm's management structure, working as a middle manager. Occupations that satisfy this work value offer job security and good working conditions.

According to the Bureau of Labor Statistics (BLS), the 2009 employment of first-line supervisors/managers of transportation is 205,708, who directly supervise and coordinate activities of transportation and material-moving machine and vehicle operators and helpers. The projected job openings in transportation management are 37,700 from 2008 to 2018.

### **Salary Forecast:**

For the most current salary information please refer to the Bureau of Labor Statistics "Occupational Outlook Handbook" found at [www.bls.gov/ooh/](http://www.bls.gov/ooh/).

# TRANSPORTATION

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## INTERMODAL MANAGEMENT

**MAJOR CODE – CT40 • CONCENTRATION CODE – CT44**

AC 103	Introduction to Accounting (EDGE)	3
ENL 111	Written Communication	3
IT 101	Fundamentals of Computers (EDGE) <sup>1</sup>	3
MAT 115	Business Mathematics	3
MG 101	Introduction to Business (EDGE)	3
AC 201	Financial Accounting <sup>2</sup>	3
COM 112	Oral Communication	3
MAT 210	Statistics for Business and Industry <sup>3</sup>	3
TRAN 101	Intro to Transportation Systems	3
TRAN 230	Transportation Geography	3
FN 231	Business Finance <sup>4</sup>	3
MG 232	Transportation Logistics	3
MG 202	Business Organization & Management <sup>5</sup>	3
TRAN 200	Transportation Law & Policy	3
TRAN 210	Transportation Economics	3
TRAN 265	Transportation MGT and Operations	3
AC 210	Managerial Accounting	3
MG 299	Internship <sup>6</sup>	3
TRAN 250	Transportation Information Systems	3
TRAN 220	Transportation Security	3

**Hours required for graduation: 60**

### **Earn a Degree and Graduate Early (EDGE):**

This program provides students the opportunity to receive credit for their high school EDGE courses.

### **Contact Information:**

Kristy Wood • Room 205 • Phone: (304) 710-3396 or 1-866-N-ROLLED (1-866-676-5533) • E-mail: wood25@mctc.edu

Rick Brown • Room 243 Phone: (304) 710-3408 or 1-866-N-ROLLED (1-866-676-5533) • E-mail: brownr@mctc.edu

Gerald Doyle • Room 245 • Phone: (304) 710-3409 or 1-866-N-ROLLED (1-866-676-5533) • E-mail: doyle1@mctc.edu

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1. Students are expected to have basic knowledge of computers including operating systems such as Windows XP or 7 and Microsoft Office before entering this program. The student must register for IT 101 (EDGE) during his or her first semester or successfully pass a challenge exam for IT 101 (EDGE).
  2. AC 201 has a prerequisite of AC 103 or permission.
  3. MAT 210 has a prerequisite of MAT 115.
  4. FN 231 has a prerequisite of AC 201 or AC 103.
  5. MG 202 and MG 233 have a prerequisite of MG 101.
  6. MG 299 has a prerequisite of 45 credit hours completed in the program.

# TRANSPORTATION

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## MARITIME ASSOCIATE IN APPLIED SCIENCE

### Program Description:

The Maritime Technology Option provides training for becoming a captain, deckhand or engineer who works on a vessel. These employees operate and maintain civilian-owned deep-sea merchant ships, tugboats, towboats, ferries, barges, offshore supply vessels, cruise ships and other waterborne crafts.

- Some merchant mariners spend extended periods at sea while others operate boat close to port and can go home at night.
- Entry, training, and educational requirements for many water transportation
- Excellent job opportunities are expected, especially for marine officers.

### Career Outlook:

Employment in water transportation occupations is projected to grow 15% by 2018, faster than the average for other occupations. Job growth will stem from increasing tourism and growth in offshore oil and gas production. Employment will also rise in and around major port cities due to increasing international trade.

### Employment Opportunities:

Graduates with intermodal transportation management skills will find employment opportunities in a variety of settings including the retail, wholesale, and service industries. The greatest expansion in the job market over the next ten years is expected to occur in the small business sector. This will provide enhanced employment prospects for business managers with intermodal transportation management skills. Opportunities for advancement are further enhanced by a student's motivation and desire to succeed.

### Salary Forecast:

For the most current salary information please refer to the Bureau of Labor Statistics "Occupational Outlook Handbook" found at [www.bls.gov/ooh/](http://www.bls.gov/ooh/).

### Earn a Degree and Graduate Early (EDGE):

This program provides students the opportunity to receive credit for their high school EDGE courses.

### Contact Information:

Capt. John Whiteley • Inland Waterway Academy • Fire Safety Academy • Ohio River Road • Phone: (304) 697-5616  
or 1-866-N-ROLLED (1-866-676-5533 • [whiteley@mctc.edu](mailto:whiteley@mctc.edu)

Kristy Wood • Room 205 • Phone: (304) 710-3396 or 1-866-N-ROLLED (1-866-676-5533) • E-mail: [wood25@mctc.edu](mailto:wood25@mctc.edu)

# TRANSPORTATION

## MARITIME

### MAJOR CODE – CT40 • CONCENTRATION CODE – CT44

#### Component I General Education Core (online)

ENL 111	Written Communication	3
IT 101	Fundamentals of Computers (EDGE) <sup>1</sup>	3
	Math Elective <sup>2,3</sup>	3
	Science Elective <sup>4</sup>	3
	Communication/English Elective <sup>5</sup>	3

#### Component II—Maritime Occupation Specialty Courses (minimum 15-21 hours from the courses below)<sup>6,\*</sup>

	Deckhand	3
100 GRT	Master	6
200 GRT	Rules of the Road	3
	Towing Assistance	1
	Operator Uninspected Passenger Vessels	4
	Upgrade OUPV to 100 GRT Master	2
	Apprentice Mate (Inland)	9
	Apprentice Mate (Inland and NC)	1-12
	Rules of the Road	3
	Steersman WR	6
	Increase in Scope Steersman WR to Inland	3
	Auxiliary Sailing	1
	Radar Observer (Western Rivers)	2
	Radar Observer (Inland)	3
	Tank Barge Firefighting	1
	IW 108 Advanced Firefighting	1
	Tankerman—PIC (Barge)	3
CA 120	A la Carte Dining Room Service	1
CA 200	Culinary Sanitation and Safety	1
CA 235	Menu Planning	3
CA 245	Culinary Nutrition	3
CA 260	Culinary Selection and Procurement	3
CA 270	Managing Culinary Operations	3
CA 235	Menu Planning	3
EC 102	Basic Economics	3
ISM 133	Principles of Supervision and Mgt	3
MG 101	Introduction to Business	3

#### Component III – Transportation Core (online)

TRAN 101	Intro Transportation Systems	3
TRAN 200	Transportation Law & Policy	3
TRAN 210	Transportation Economics	3
TRAN 220	Transportation Security	3
TRAN 230	Transportation Geography	3
TRAN 250	Transportation Information Systems	3

#### Component IV-OJT/Fieldwork<sup>7</sup>

TS 102	On-The-Job Training/Fieldwork	6
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*\*Other Coast Guard approved coursework may be accepted. Please contact Capt. John Whiteley at whiteley@mctc.edu or 304-697-5616 for a course work review.*

1. Students are expected to have basic knowledge of computers including operating systems such as Windows XP and Microsoft Office 2003 before entering this program. The student must register for IT 101 (EDGE) during his or her first semester or successfully pass a challenge exam for IT 101 (EDGE).
2. Approved mathematics courses: MAT 115, MAT 145, or MAT 120 unless transfer credit applies.
3. MAT 145 has prerequisite of ACT19, MAT 097, or PLAC 100.
4. Approved science courses: SCI 110, SCI 220, BIOL 102, BIOL 257, SS 201, SS 210 or SS 250.
5. Approved English/communication elective courses: ENL 115, ENL 231, COM 112, COM 125, or COM 130.
6. Contact Capt. John Whiteley: whiteley@mctc.edu or (304) 697-5616.
7. Contact Capt. John Whiteley: whiteley@mctc.edu or (304) 697-5616.

# TRANSPORTATION

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## RAILWAY ASSOCIATE IN APPLIED SCIENCE

### Program Description:

The Railroad Technology Option is designed to provide the basic skills for entry into a railroad employee career path. Most railroad transportation workers begin as laborers, brake operators, or conductors after completing training on signals, timetables, operating rules, and related subjects. Although new employees may be hired as conductors, seniority determines whether an employee may hold a conductor position full-time. Employers almost always fill engineer positions with workers who have experience in other railroad-operating occupations.

- Opportunities are expected to be good for qualified applicants since a large number of workers are expected to retire or leave these occupations by 2018.
- 76% of these workers are members of unions, and earnings are relatively high.

### Career Outlook:

Employment is expected to increase 9% by 2018, which is about as fast as the average for all occupations. Opportunities for rail transportation workers will be good for workers who meet basic qualifications because a large number of older workers are expected to retire over the next decade, particularly at freight railroads. Prospects will be best for those positions that are also expected to see growth, like locomotive engineers and conductors.

### Salary Forecast:

For the most current salary information please refer to the Bureau of Labor Statistics "Occupational Outlook Handbook" found at [www.bls.gov/ooh/](http://www.bls.gov/ooh/).

### Entrance Requirements:

Entry into this program requires acceptance by third party railroad agencies. Please contact Dr. Kristy Wood at [wood25@mctc.edu](mailto:wood25@mctc.edu).



# TRANSPORTATION

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## RAILWAY

### MAJOR CODE – CT40 • CONCENTRATION CODE – CT45

ENL 111	Written Communication <sup>1</sup>	3
IT 101	Fundamentals of Computers <sup>2</sup> (EDGE)	3
MAT	Math Elective <sup>3</sup>	3
SCI	Science Elective <sup>4</sup>	3
ENL/COM	English/Communication Elective <sup>5</sup>	3
WFD/TRAN	Misc Workforce Development Courses <sup>6</sup>	TBD
WFD/TRAN	Approved Company Onsite	TBD
WFD/TRAN	Training— Craft Specific	TBD
	Minimum Total Credits	21
TRAN 101	Intro Transportation Systems	3
TRAN 200	Transportation Law & Policy	3
TRAN 210	Transportation Economics	3
TRAN 220	Transportation Security	3
TRAN 230	Transportation Geography	3
TRAN 250	Transportation Information Systems	3
TS 102	On-The-Job Training/Fieldwork <sup>6</sup>	6

**Hours required for graduation: 60**

### Earn a Degree and Graduate Early (EDGE):

This program provides students the opportunity to receive credit for their high school EDGE courses.

### Contact Information:

Kristy Wood • Room 205 • Phone: (304) 710-3396 or 1-866-N-ROLLED (1-866-676-5533) • E-mail: wood25@mctc.edu

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1. ENL 111 has a prerequisite of REA 098, or placement in 100-level reading.
2. Students are expected to have basic knowledge of computers including operating systems such as windows XP or 2003 and Microsoft Office XP or 2003 before entering this program. The student must register for IT 101 (EDGE) during his or her first semester or successfully pass a challenge exam for IT 101 (EDGE).
3. Approved mathematics courses: MAT 115, MAT 145 or MAT 120 unless transfer credit applies.
4. Approved science courses: SCI 110, SCI 220, BIOL 102, BIOL 257, SS 201, SS 210 or SS 250.
5. Approved english/communication elective courses: ENL 115, ENL 231, COM 112, COM 125, or COM 130.
6. Contact Kristy Wood: wood25@mctc.edu or (304) 710-3423.

# TRANSPORTATION

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## ROADWAY ASSOCIATE IN APPLIED SCIENCE

### **Program Description:**

The Roadway Technology Program provides a specialized distance learning education and training for the student having an interest in highway transportation . This unique online, distance learning, and life-experience curriculum breaks the tether to the traditional classroom. It is designed to support a drop-in/drop-out lifelong learning philosophy of continuing education and ladder degree options from a certificate of achievement for specific skill sets to a Master's degree in Transportation Studies. In addition to formal academic credit, the program is designed to accept related credit equivalency from any academic, vocational, or industry training program to include documented life-long learning skills, test-out exams, industry recognized certifications, and/or continuing education units (CEU's).

### **Career Outlook:**

There is tremendous variety in roadway transportation . Options with this program include, but are not limited to, truck and bus drivers, transit workers, mechanics, technicians, and government transportation workers. The transportation field in general is expected to grow between 2010 and 2020 .

Heavy and tractor-trailer truck drivers earn on average \$37,770 per year and the field is expected to grow 21%. Delivery truck drivers and driver/sales workers earn on average \$27,050 per year and the field is expected to grow 13%. Material moving machine operators earn an average of \$30,800 per year and the field is expected to grow 12%. Subway and street car operators earn an average of \$56,880 per year and the field is expected to grow 10%. Bus drivers earn an average of \$29,160 per year and the field is expected to grow 13%.

### **Salary Forecast:**

For the most current salary information please refer to the Bureau of Labor Statistics "Occupational Outlook Handbook" found at [www.bls.gov/ooh/](http://www.bls.gov/ooh/).

### **Entrance Requirements:**

Entry into this program requires acceptance by third party railroad agencies. Please contact Dr. Kristy Wood at [wood25@mctc.edu](mailto:wood25@mctc.edu).

# TRANSPORTATION

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## ROADWAY

### MAJOR CODE – CT40 • CONCENTRATION CODE – CT45

ENL 111	Written Communication <sup>1</sup>	3
IT 101	Fundamentals of Computers <sup>2</sup> (EDGE)	3
MAT	Math Elective <sup>3</sup>	3
SCI	Science Elective <sup>4</sup>	3
ENL/COM	English/Communication Elective <sup>5</sup>	3
WFD/TRAN	Misc Workforce Development Courses <sup>6</sup>	TBD
WFD/TRAN	CDL/DOT/Military <sup>6</sup>	TBD
	Minimum Total Credits	15-21
TRAN 101	Intro Transportation Systems	3
TRAN 200	Transportation Law & Policy	3
TRAN 210	Transportation Economics	3
TRAN 220	Transportation Security	3
TRAN 230	Transportation Geography	3
TRAN 250	Transportation Information Systems	3
TS 102	On-The-Job Training/Fieldwork <sup>7</sup>	6-12

**Hours required for graduation: 60**

### Earn a Degree and Graduate Early (EDGE):

This program provides students the opportunity to receive credit for their high school EDGE courses.

### Contact Information:

Kristy Wood • Room 205 • Phone: (304) 710-3396 or 1-866-N-ROLLED (1-866-676-5533) • E-mail: wood25@mctc.edu

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1. Students are expected to have basic knowledge of computers including operating systems such as windows XP or 2003 and Microsoft Office XP or 2003 before entering this program. The student must register for IT 101 (EDGE) during his or her first semester or successfully pass a challenge exam for IT 101 (EDGE).
2. Approved mathematics courses: MAT 115, MAT 145 or MAT 150 unless transfer credit applies.
3. MAT 145 has a prerequisite of ACT 19, MAT 097, or PLAC 100.
4. Approved science courses: SCI 110, SCI 220, BIOL 102, BIOL 257, SS 201, SS 210 or SS 250.
5. Approved English/communication elective courses: ENL 115, ENL 231, COM 112, COM 125, or COM 130.
6. Contact Kristy Wood: wood25@mctc.edu.
7. Contact Kristy Wood: wood25@mctc.edu.



# One-Year Certificates



**ACCOUNTING/BOOKKEEPING**  
**ALLIED HEALTH OCCUPATIONS**  
**CERTIFIED CODING SPECIALIST**  
**DEAF STUDIES**  
**DENTAL LAB TECHNOLOGY**  
**EXERCISE SCIENCE**  
**HOSPITALITY MANAGEMENT - CULINARY ARTS**  
**MICROSOFT CERTIFIED IT PROFESSIONAL (MCITP)**  
**PUBLIC LIBRARY TECHNOLOGY**  
**TECHNICAL STUDIES**

# ONE-YEAR CERTIFICATES

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## ACCOUNTING/BOOKKEEPING CERTIFICATE

### Program Description:

The Accounting/Bookkeeping Certificate Program is designed to prepare students for entry-level positions in the accounting/bookkeeping field. The completion of the certificate program prepares students to work for CPA firms, corporate accounting departments, and small businesses. This includes clerical positions in specialized areas such as accounts payable, accounts receivable, payroll, and any position involved in the accounting functions of a business.

Students who successfully complete the certificate program will be able to demonstrate the following competencies:

- Identify and describe the fundamental principles and practices of accounting;
- Apply fundamental accounting principles and practices to prepare common income statements, balance sheets, and cash flow statements;
- Utilize microcomputer accounting software systems for the purpose of maintaining a general ledger, accounts receivable, accounts payable, and payroll;
- Identify, describe, and prepare a variety of tax records and reports necessary to maintain a business and to meet local, state, and federal requirements;
- Develop and analyze accounting information for managerial planning and control;
- Complete computer applications including word processing, spreadsheets, databases, electronic mail, and the Internet;
- Identify and apply the techniques of effective oral and written communication in a business setting;
- Perform business mathematical operations utilizing the calculator for computations.

### Career Outlook:

Accounting paraprofessionals are qualified for numerous career opportunities such as accountant's assistants, accounting clerks, bookkeepers, banking support staff, finance support staff, and income tax preparations clerks. According to the Bureau of Labor Statistics, "The large size of this occupation ensures plentiful job openings, including many opportunities for temporary and part-time work."

### Employment Opportunities:

- Accountant's assistants
- Accounting clerk
- Bookkeeper

### Salary Forecast:

For the most current salary information please refer to the Bureau of Labor Statistics "Occupational Outlook Handbook" found at [www.bls.gov/ooh/](http://www.bls.gov/ooh/).

### Program Admission Requirements:

The college adheres to an open admission policy which means applicants with a high school diploma or a GED are eligible for admission. Applicants with neither a high school diploma nor a GED may be admitted on a conditional basis.

# ONE-YEAR CERTIFICATES

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## ACCOUNTING/BOOKKEEPING

### MAJOR CODE – CA30

AC 103	Introduction to Accounting (EDGE) <sup>1</sup>	3
ENL 111	Written Communication <sup>2</sup>	3
IT 101	Fundamentals of Computers (EDGE)	3
MAT 115	Business Mathematics <sup>3</sup>	3
MG 101	Introduction to Business (EDGE) <sup>1</sup>	3
AC 201	Financial Accounting <sup>4</sup>	3
AC 221	Computerized Accounting <sup>5</sup>	3
AC 234	Taxation <sup>6</sup>	3
FN 231	Business Finance <sup>7</sup>	3
IT 150	Applications to Spreadsheets <sup>8</sup> (EDGE)	3

**Hours required for graduation: 30**

### Earn a Degree and Graduate Early (EDGE):

This program provides students the opportunity to receive credit for their high school EDGE courses.

### Contact Information:

Gerald Doyle • Room 245 • Phone: (304) 710-3409 or 1-866-N-ROLLED (1-866-676-5533) • E-mail: [doyle@mctc.edu](mailto:doyle@mctc.edu)

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1. AC 103 and MG 101 have a prerequisite of REA 098 or ACT Reading 18 or SAT Reading 421 or Accuplacer Reading 80.
  2. ENL 111 has a prerequisite of REA 098 or placement in 100-level reading.
  3. MAT 115 has a prerequisite of MAT 096, or MAT 097 or placement in 100-level math.
  4. AC 201 has a prerequisite of AC 103 or permission.
  5. AC 221 has prerequisites of AC 103, AC 108 or AC 201 and IT 101.
  6. AC 234 has a prerequisite of AC 201, or AC 103, or AC 108, or AC 215, or AC 216.
  7. FN 231 has a prerequisite of AC 103, or AC 108, or AC 201.
  8. IT 150 has a prerequisite of IT 101.

# ONE-YEAR CERTIFICATES

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## ALLIED HEALTH OCCUPATIONS CERTIFICATE

### **Program Description:**

The Allied Health Occupations Certificate Program is a unique opportunity for students interested in the health care field to earn a certificate that will help them further this goal. Health Occupations Certificate graduates have a wide range of career options within the health science industry. Graduates work in educational services, federal, state, and local governments, or pharmaceutical and medical facilities. The Health Occupations Certificate includes a minimum of 18 general education credits and 12 credit hours of Allied Health credits.

### **Career Outlook:**

According to the United States Department of Labor, the employment projection on the average for all health occupations professions is expected to grow as fast as other occupations. However, selective specialties within this field are expected to grow faster.

### **Salary Forecast:**

For the most current salary information please refer to the Bureau of Labor Statistics "Occupational Outlook Handbook" found at [www.bls.gov/ooh/](http://www.bls.gov/ooh/).

### **Program Admission Requirements:**

- Mountwest is an open enrollment institution. Please contact Student Services Division at (304) 710-3364 for specific admission requirements.
- Applicants must complete all general education and prerequisite courses with a grade of "C" or better, and must have a cumulative GPA of 2.0 or higher.



# ONE-YEAR CERTIFICATES

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## ALLIED HEALTH OCCUPATIONS

### MAJOR CODE – CM70

AH 151	Medical Terminology (EDGE) <sup>1</sup>	3
BIOL 257	Introduction To Anatomy & Physiology	3
ENL 111	Written Communication <sup>1</sup>	3
IT 101	Fundamentals of Computers (EDGE)	3
	Math Elective <sup>2</sup>	3
	Allied Health Elective <sup>3</sup>	9
COM 112/125	Oral Communication	3
	or Interpersonal Communication <sup>1</sup>	3
	Social Science Elective <sup>4</sup>	3

**Hours required for graduation: 30**

### Contact Information:

Janet B. Smith • Room 433 • Phone: (304) 710-3516 or 1-866-N-ROLLED (1-866-676-5533) • E-mail: smithjan@mctc.edu

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1. AH 151, COM 125 and ENL 111 have a prerequisite of REA 098, or placement in 100-level reading.
2. Choose from MAT 115, 145 and 150 or higher. MAT 115, MAT 145, and MAT 150 have a prerequisite of MAT 097 or placement in 100-level mathematics.
3. Recommended Allied Health electives include: AH 151, AH 205, AH 207, AH 216, AH 220, CLA 200, CLA 203, EME 105, EME 109 and others with permission.
4. Choose from EC, HIST, PSYC, SS at the 100-level or above.

# ONE-YEAR CERTIFICATES

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## CERTIFIED CODING SPECIALIST CERTIFICATE

### Program Description:

The Certified Coding Specialist (CCS) serves as a qualified technician in analyzing and classifying medical data, generally in the hospital setting. Using universally recognized coding systems (ICD-10-CM/PCS and CPT-4), the CCS assigns codes to diagnoses, injuries and procedures found in the records of patients. The codes are then reported to insurance companies or government agencies for payment/reimbursement of patients' health expenses, medical statistics and research. In addition the CCS is knowledgeable of medical terminology, disease processes, and pharmacology.

This program will enable the student to become familiar with the coding systems, medical terminology and medical background of anatomy and diseases which will give the student a basis on which to build. Students will also have the opportunity to complete a directed practice of 120 hours in a healthcare setting. This course will prepare students to sit for the CCS exam administered by the American Health Information Association. Please refer to their website at [www.ahima.org](http://www.ahima.org), or call (312) 787-2672 for further qualifications for taking the national certification test.

### Career Outlook:

Job prospects should be very good. Employment of medical records technicians is expected to grow much faster than the average for all occupations through 2012 due to rapid growth in the number of medical tests, treatments, and procedures that will be increasingly scrutinized by third-party payers, regulators, courts, and consumers.

### Employment Opportunities:

- Acute care facilities
- Ambulatory care facilities
- Rehabilitation centers
- Physicians' offices
- State and local health departments
- Insurance companies
- Professional billing companies

### Salary Forecast:

For the most current salary information please refer to the Bureau of Labor Statistics "Occupational Outlook Handbook" found at [www.bls.gov/ooh/](http://www.bls.gov/ooh/).

### Program Admission Requirements:

Students seeking admission into the Certified Coding Specialist program must arrange an appointment with the program faculty prior to submitting the application packet. This is to ensure that students receive current information regarding the program admission requirements and the criteria for selection.

# ONE-YEAR CERTIFICATES

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## CERTIFIED CODING SPECIALIST

### MAJOR CODE - CC20

AH 151	Medical Terminology (EDGE) <sup>1</sup>	3
BIOL 258	Principles of Anatomy & Physiology	4
ENL 111	Written Communication <sup>2</sup>	3
HIT 205	ICD-10-CM Diagnostic Coding	3
AH 205	Principles of Disease <sup>3</sup>	3
HIT 207	ICD-10-PCS Procedural Coding	3
HIT 209	CPT Procedural Coding	3
MAT	Math Elective <sup>4</sup>	3
HIT 215	Directed Practice II <sup>5</sup>	2
HIT 220	Coding for CCS Exam <sup>5</sup>	3

**Hours required for graduation: 30**

### Earn a Degree and Graduate Early (EDGE):

This program provides students the opportunity to receive credit for their high school EDGE courses.

### Contact Information:

Janet B. Smith • Room 433 • Phone: (304) 710-3516 or 1-866-N-ROLLED (1-866-676-5533) • E-mail: smithjan@mctc.edu

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1. AH 151 has a prerequisite of REA 098, or placement in 100-level reading.
  2. ENL 111 has a prerequisite of ENL 095 or placement in 100-level English, and REA 098 or placement in 100 level reading.
  3. AH 205 has a prerequisite of BIOL 257, BIOL 258, or BIOL 260.
  4. Choose from any 100-level mathematics course.
  5. Admission to Certified Coding Specialist Program is required.

# ONE-YEAR CERTIFICATES

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## DEAF STUDIES CERTIFICATE

### Program Description:

This certificate program is designed to give students a foundation in American Sign Language (ASL) and to acquaint them with basic issues of concern to the Deaf community. Furthermore, the program offers an opportunity to individuals already working in the Deaf community to increase their understanding of ASL and Deaf culture in order to strengthen their knowledge and communication skills. Upon completion of the One-Year Certificate Program in Deaf Studies, the graduate will be able to:

- effectively communicate with Deaf persons in informal settings such as teaching, human services, or health care;
- enhance their credentials for employment opportunities which do not require interpreter certification, but do assign value to skills in ASL and knowledge of Deaf culture;
- earn the academic qualifications for entry into advanced studies at universities offering sign language programs.

### Salary Forecast:

For the most current salary information please refer to the Bureau of Labor Statistics "Occupational Outlook Handbook" found at [www.bls.gov/ooh/](http://www.bls.gov/ooh/).

### Employment Opportunities:

- Enter an Interpreter Training Program, after which they may sit for certification examination, sponsored by the national licensing organization.
- Seek employment with an early intervention program that serves Deaf and Hard of Hearing children.
- A background in ASL and Deaf Studies will be useful in every field of employment.

### Additional Information:

Other individuals that can benefit from this program are parents of Deaf and Hard of Hearing children and young hearing children, teachers and child care providers, paraprofessionals, speech/language pathologists, counselors, interpreters, and medical professionals.

# ONE-YEAR CERTIFICATES

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## DEAF STUDIES

### MAJOR CODE – CA60

ASL 101	American Sign Language <sup>1</sup>	3
ASL 105	American Deaf Community <sup>1</sup>	3
ASL 220	Resources for the Deaf Community	3
COL 101	New Student Seminar	2
ENL 111	Written Communication <sup>1</sup>	3
IT 101	Fundamentals of Computers	3
ASL 102	American Sign Language II <sup>2</sup>	3
ASL 103	Fingerspelling	3
ASL 110	American Deaf Culture	3
ASL 205	American Deaf Community History	3
ASL 210	Deaf People in American History <sup>3</sup>	3

**Hours required for graduation: 32**

### Contact Information:

Leigh-Ann Brewer • Room 319 • Phone: (304) 710-3451 or 1-866-N-ROLLED (1-866-676-5533)

E-mail: brewer13@mctc.edu

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1. ASL 101, ASL 105, and ENL 111 have a prerequisite of REA 098, or placement in 100-level reading.

2. ASL 102 has a prerequisite of ASL 101.

3. ASL 210 has prerequisites of ASL 105, ASL 110, and ASL 205.

# ONE-YEAR CERTIFICATES

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## DENTAL LABORATORY TECHNOLOGY CERTIFICATE

### **Program Description:**

One year of training at the Putnam Career and Technical Center (PCTC) and 13 credit hours at Mountwest Community & Technical College will result in a Certificate of Applied Science in Dental Laboratory Technology. Students will follow the Putnam County school calendar while completing the Dental Laboratory Technology courses and attend the PCTC every day from 8:30 a.m.-3:00 p.m. during the technical portion of the program.

### **Career Outlook:**

Employment should increase slowly, as the public's improving dental health requires fewer dentures but more bridges and crowns. However, the employment is favorable because employers have difficulty filling training positions. The employment outlook is very good if the employees are willing to relocate.

### **Salary Forecast:**

For the most current salary information please refer to the Bureau of Labor Statistics "Occupational Outlook Handbook" found at [www.bls.gov/ooh/](http://www.bls.gov/ooh/).

### **Employment Opportunities:**

- Dental labs
- Private dental offices
- Dental schools
- Dental labs that manufacture prosthetic materials

### **Program Admission Requirements:**

The college adheres to an open admissions policy which means applicants with a high school diploma or a GED are eligible for admission. Applicants with neither a high school diploma nor a GED may be admitted on a conditional basis.

### **Career Description:**

Dental Laboratory Technicians make and repair dental appliances such as dentures, crowns, and braces. Specializations are available in various aspects of the work prescribed by dentists and orthodontists: crown and bridge technicians, metal dental technicians, partial denture technicians, dental ceramists and orthodontic technicians. Most dental laboratory technicians work in commercial dental laboratories employing 2 to 20 people. Employment opportunities are available in private dental offices, dental schools, hospitals, and companies that manufacture dental prosthetic materials.

# ONE-YEAR CERTIFICATES

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## DENTAL LABORATORY TECHNOLOGY

### MAJOR CODE – CD20

DLT 101	Intro to Dental Technology (EDGE) <sup>1,2,3</sup> (1st 9 weeks)	6
DLT 104	Complete Dentures (EDGE) <sup>1,3</sup> (2nd 9 weeks)	9
DLT 108	Partial Dentures (EDGE) <sup>1</sup> (1st 9 weeks)	9
DLT 112	Inlays/Crowns/Bridges/Ceramics (EDGE) <sup>1</sup> (2nd 9 weeks)	10
DLT 116	Clinical Experience (EDGE) <sup>1,4</sup> (2nd 9 weeks)	1

In addition to the Dental Laboratory Technology curriculum, the following

#### General Education requirements must be met:

ENL 111	Written Communication <sup>5</sup>	3
IT 101	Fundamentals of Computers (EDGE)	3
MG 101	Introduction to Business (EDGE)	3
SCI 120	Basics in Physical Science	4

**Hours required for graduation: 48**

#### Earn a Degree and Graduate Early (EDGE):

This program provides students the opportunity to receive credit for their high school EDGE courses.

#### Contact Information:

Edward Bays • Room 431 • Phone: (304) 710-3528 or 1-866-N-ROLLED (1-866-676-5533) • E-mail: bays@mctc.edu

Jesse Smith • Putnam Career and Technical Center • Phone: (304) 586-3494, ext. 213

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1. Dental Laboratory Technology courses are taught at Putnam County Technical Center at Eleanor.
  2. DLT 101 has a prerequisite of admission to the Dental Laboratory Technology Program.
  3. All first semester Dental Laboratory Technology courses must be completed with a "C" or better before student can register for second semester course work.
  4. DLT 116 has prerequisites of DLT 101, DLT 104, DLT 108, and a corequisite of DLT 112.
  5. ENL 111 has a prerequisite of ENL 095 or placement in 100-level English, and REA 098 or placement in 100-level reading.

# ONE-YEAR CERTIFICATES

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## EXERCISE SCIENCE CERTIFICATE

### **Program Description:**

The Exercise Science Certificate Program will provide the skills necessary to become a certified personal trainer in conjunction with obtaining prerequisite coursework required for advancement in other Allied Health Associate Degree Programs. Students obtaining the certificate will be prepared for direct employment within a health club, fitness center, or for individual private pay consultation.

### **Career Outlook:**

Employment of fitness trainers and instructors is expected to grow by 24 percent from 2010 to 2020, faster than the average for all occupations. As businesses and insurance organizations continue to recognize the benefits of health and fitness programs for their employees, incentives to join gyms or other fitness facilities will increase the need for workers in these areas.

### **Salary Forecast:**

For the most current salary information please refer to the Bureau of Labor Statistics "Occupational Outlook Handbook" found at [www.bls.gov/ooh/](http://www.bls.gov/ooh/).



# ONE-YEAR CERTIFICATES

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## EXERCISE SCIENCE

### MAJOR CODE – CE40

BIOL 260	Applied Human Anatomy <sup>1</sup>	4
BIOL 265	Applied Human Physiology <sup>2</sup>	4
ENL 111	Written Communication <sup>3</sup>	3
IT 101	Fundamentals of Computers (EDGE)	3
	Social Science Elective <sup>4</sup>	3
AH 217	Personal Fitness Training <sup>5</sup>	4
BIOL 221	Structural Kinesiology <sup>6</sup>	4
BIOL 245	Physiology of Exercise <sup>7</sup>	3
MAT 145	Applications in Algebra <sup>8</sup>	3

**Hours required for graduation: 31**

### Earn a Degree and Graduate Early (EDGE):

This program provides students the opportunity to receive credit for their high school EDGE courses.

### Contact Information:

Janet B. Smith • Room 433 • Phone: (304) 710-3516 or 1-866-N-ROLLED (1-866-676-5533) • E-mail: smithjan@mctc.edu

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1. BIOL 260 has a prerequisite of BIOL 257 (grade of "C" or better) or ACT 19 or BIOL 258 (grade of "C" or better).
  2. BIOL 265 has a prerequisite of BIOL 257 (grade of "C" or better) or ACT 18 or BIOL 258 (grade of "C" or better).
  3. ENL 111 has a prerequisite of ENL 095 or placement in 100-level English, and REA 098 or placement in 100-level math.
  4. Select from EC, HIST, PSYC, SS 100-level or above.
  5. AH 217 has a prerequisite of REA 098, or placement in 100-level reading.
  6. BIOL 221 has a prerequisite of BIOL 260 (grade of "C" or better).
  7. BIOL 245 has a prerequisite of BIOL 265 (grade of "C" or better).
  8. MAT 145 has a prerequisite of MAT 096, or MAT 097, or placement in 100-level math.

# ONE-YEAR CERTIFICATES

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## HOSPITALITY MANAGEMENT - CULINARY ARTS CERTIFICATE

### **Program Description:**

The hospitality and food service industry is a large, diverse field that provides challenging and exciting career opportunities for people from all walks of life. The possibilities for satisfying careers are almost limitless. The rewards and satisfactions provided by the industry far exceed those of many other fields of work.

While the different segments of the hospitality and tourism industry have their own unique characteristics, they all share the same mission and heritage-serving the guest or customer. The segments of hospitality and tourism are fine dining, catering, hotel and motel food service, casual family restaurants, chef-owned bistros, quick-service dining, national chains, national parks, resorts, casinos, stadiums, theme parks, cruise lines, and on-site foodservice operations such as hospital, collegiate, and company cafeterias. They all possess a common feature as one of the most dynamic employment and career fields available. The Culinary Arts Certificate prepares individuals for entry-level chef positions. Students will study the fundamentals of classical and contemporary cuisine, sanitation, nutrition, purchasing, cost control, kitchen management, and restaurant procedures. A range of different cuisines are taught from basic levels, to intermediate, to advanced. The curriculum is designed for the entry-level student with no previous work experience or formal training in the profession, as well as for industry professionals seeking to raise their skills.

### **Career Outlook:**

Competition for jobs in the top kitchens of higher-end restaurants should be keen. While job growth will create new positions, the overwhelming majority of job openings will stem from the need to replace workers who leave this large occupational group. Minimal education and training requirements, combined with a large number of part-time positions, make employment as chefs, cooks, and food preparation workers attractive to people seeking first time or short-term employment, a source of additional income, or a flexible schedule.

### **Salary Forecast:**

For the most current salary information please refer to the Bureau of Labor Statistics "Occupational Outlook Handbook" found at [www.bls.gov/ooh/](http://www.bls.gov/ooh/).

### **Admission Requirements:**

The college adheres to an open admissions policy meaning applicants with a high school diploma or a GED are eligible for admission. Applicants with neither a high school diploma nor a GED may be admitted on a conditional basis.

### **Career Description:**

Chefs, cooks, and food preparation workers prepare, season, and cook a wide range of foods- from soups, snacks, and salads, to entrees, side dishes, and desserts- in a variety of restaurants and other food services establishments. Chefs and cooks create recipes, menus, and prepare meals, while food preparation workers peel and cut vegetables, trim meat, prepare poultry, and perform other duties such as keeping work areas clean and monitoring temperatures of ovens and stovetops.

# ONE-YEAR CERTIFICATES

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## HOSPITALITY MANAGEMENT - CULINARY ARTS

MAJOR CODE – CH20 • CONCENTRATION CODE – CH31<sup>1</sup>

CA 105	Fabrication & Knife Skills <sup>2,3</sup>	3
CA 110	Mise en Place <sup>2,3</sup>	3
CA 120	A la Carte Dining Rm Serv <sup>2</sup> (EDGE)	2
CA 190	Hospitality Lab Practicum I	1
CA 200	Sanitation and Safety (EDGE) <sup>2,3</sup>	2
ENL 111	Written Communication <sup>4</sup>	3
HM 101	Travel, Tourism & Hospitality Industry <sup>2</sup>	2
CA 112	Garde Manager <sup>5</sup>	3
CA 195	Hospitality Lab Practicum II <sup>6</sup>	1
CA 269	Soups, Stocks & Sauces <sup>7</sup>	2
CA 275	Cost Control and Revenue Management <sup>2</sup>	2
IT 101	Fundamentals of Computers (EDGE)	3
MAT	Mathematics Elective <sup>8</sup>	3

**Hours required for graduation: 30**

### Earn a Degree and Graduate Early (EDGE):

This program provides students the opportunity to receive credit for their high school EDGE courses.

### Contact Information:

Larry Perry, M.S. • Center for Culinary Arts • 1648 8th Avenue • Phone: (304) 399-0210 or 1-866-N-ROLLED (1-866-676-5533) • Email: perry149@mctc.edu

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1. Students are required to make a grade of "C" or better in each CA and HM course before graduating from the program.
  2. CA 105, CA 110, CA 120, CA 200, CA 275, ENL 111, and HM 101 have a prerequisite of REA 098, or placement in 100-level reading.
  3. CA 105, CA 110, CA 200 must be taken concurrently.
  4. ENL 111 has a prerequisite of ENL 095, or placement in 100-level English, and REA 098, or placement in 100-level reading.
  5. CA 112 has a prerequisite of CA 105, CA 110, CA 200, and CA 269.
  6. CA 195 has a prerequisite if CA 190.
  7. CA 269 has a prerequisite of CA 105, CA 110, and CA 200.
  8. Choose from any 100-level or above mathematics course. MAT 137 is suggested.

# ONE-YEAR CERTIFICATES

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## MICROSOFT CERTIFIED IT PROFESSIONAL (MCITP) CERTIFICATE

### **Program Description:**

As a leading Microsoft IT Academy, Mountwest Community & Technical College offers the Network Systems Administration option to help prepare students for the Microsoft Certified IT Professional (MCITP) certification examinations. The curriculum and course materials are designed by Microsoft, and the College's instructors are Microsoft Certified IT Professionals (MCITP) with industry experience that take a personal interest in mentoring students through every step of the certification process.

### **Career Outlook:**

The U.S. Department of Labor – Bureau of Labor Statistics states that computer-related jobs (IT) hold numerous positions within the Top-20 Fastest Growing Occupations in the country. Additionally, IT jobs are reported to have the highest earning of any of the occupations in the list. Computer occupations are expected to be some of the fastest growing in the U.S., and will account for 5 out of the 20 fastest growing occupations over the next decade through 2015. Employment growth will be driven by the increasing reliance of businesses on information technology and the continuing importance of maintaining system and network security. In addition to high growth rates, computer and healthcare occupations combined will add more than 1.5 million new jobs. High growth rates among computer occupations reflect projected rapid growth in the computer and data processing industries. Management, scientific and technical consulting services will grow very rapidly, by 55.4%, spurred by the increased use of new technology and the growing complexity of business.

### **Salary Forecast:**

For the most current salary information please refer to the Bureau of Labor Statistics "Occupational Outlook Handbook" found at [www.bls.gov/ooh/](http://www.bls.gov/ooh/).

### **Employment Opportunities:**

- Network administrator
- Network engineer
- Systems support technician
- Network designer
- Network security systems designer

### **Program Admission Requirements:**

The college adheres to an open admission policy which means applicants with a high school diploma or a GED are eligible for admission. Applicants with neither a high school diploma nor a GED may be admitted on a conditional basis.

### **Career Description:**

The Microsoft Certified IT Professional (MCITP) credential is the premier certification for professionals who analyze the business requirements, and design and implement the infrastructure for business solutions based on the Microsoft Windows platform and Microsoft server software. It is one of the most widely recognized and sought after technical certifications in the IT industry demonstrating to employers, clients and colleagues that an individual has achieved expertise in the area in information technology.

# ONE-YEAR CERTIFICATES

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## MICROSOFT CERTIFIED IT PROFESSIONAL (MCITP)

MAJOR CODE – C20 • CONCENTRATION CODE<sup>1</sup> – CM60

ENL 111	Written Communication <sup>2</sup>	3
IT 210	Networking Administration I <sup>3,4,5</sup>	3
IT 211	Networking Administration II <sup>3,5</sup>	3
IT 216	Networking Administration III <sup>3,5</sup>	3
IT 217	Networking Administration IV <sup>3,5</sup>	3
IT 219	Networking Administration V <sup>6,7,8</sup>	3
IT 222	Networking Administration VI <sup>6,8</sup>	3
IT 223	Networking Administration VII <sup>6,8</sup>	3
IT 224	Fundamentals of Network Security <sup>9</sup>	3
	Approved Math Elective <sup>10</sup>	3

**Hours required for graduation: 30**

### Earn a Degree and Graduate Early (EDGE):

This program provides students the opportunity to receive credit for their high school EDGE courses.

### Contact Information:

Patrick Smith • Room 209 • Phone: (304) 710-3398 or 1-866-N-ROLLED (1-866-676-5533) • E-mail: smith288@mctc.edu

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1. The one-year certificate in the Microsoft Certified IT Professional Program will allow the student to apply 30 academic credits toward the Information Technology A.A.S. degree in Network Administration.
  2. ENL 111 has a prerequisite of REA 098, ACT 18, SAT 421, or appropriate reading placement.
  3. Networking Administration classes IT 210, IT 211, IT 216 and IT 217 must be taken concurrently. These classes cannot be taken individually.
  4. IT 210 has a prerequisite of IT 120 or permission, and corequisites of IT 211, IT 216, and IT 217.
  5. IT 210, IT 211, IT 216 and IT 217 are offered fall semesters only.
  6. IT 211 has corequisites of IT 210, IT 216, and IT 217.
  7. Networking administration classes IT 219, IT 222 and IT 223 must be taken concurrently. These classes cannot be taken individually.
  8. IT 219 has a prerequisite of IT 217, and corequisites of IT 222, and IT 223.
  9. IT 222 has a prerequisite of IT 217, and corequisites of IT 219, and IT 223.
  10. Approved math electives are MAT 145, MAT 146, MAT 205 and MAT 215 (select one based on program track – see advisor).

# ONE-YEAR CERTIFICATES

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## PUBLIC LIBRARY TECHNOLOGY CERTIFICATE

### **Program Description:**

The Public Library Technology Program provides critical and comprehensive training for individuals interested in a career in libraries. Students will learn about topics such as cataloging and technical services, library technology, children's and adult programming and services, collection development, and general education skills needed to work in a library environment. Electronic resources in libraries enable library technicians to perform tasks once performed by professional librarians. Because opportunities will be best for those with specialized postsecondary library training, the Public Library Technology Program prepares workers for current trends in the library field to meet more sophisticated information and computer literacy needs. This program is available 100% online so individuals in rural locations, and around the country, can take these courses without having to leave their libraries or their homes.

### **Career Outlook:**

Job opportunities are favorable as retirements among baby boomers will impact a significant portion of the estimated 113,000 workers employed as library technicians nationally. In 2006, the US Department of Labor reported an estimated 8% increase in jobs available to library employees pursuing paraprofessional positions in public and academic library settings over the next decade. West Virginia employs over 450 individuals in this job category.

### **Salary Forecast:**

For the most current salary information please refer to the Bureau of Labor Statistics "Occupational Outlook Handbook" found at [www.bls.gov/ooh/](http://www.bls.gov/ooh/).

### **Employment Opportunities:**

- Library assistants
- Library technicians

# ONE-YEAR CERTIFICATES

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## PUBLIC LIBRARY TECHNOLOGY

### MAJOR CODE – CL20

PLT 100	Careers in Libraries	3
PLT 250	Public Library Technology	3
PLT 275	Information Literacy	3
PLT	Approved Elective	3
PLT	Approved Elective <sup>1</sup>	3

COL 101	New Student Seminar	3
COM 112	Oral Communications <sup>2</sup>	3
ENL111	Written Communication <sup>3</sup>	3
IT 101	Fundamentals of Computers	3
MAT	MAT (100 or above) Mathematics (MAT 145 is recommended as it will transfer to Northern Kentucky University)	3

### Hours required for graduation: 30

- All PLT courses are offered only online and are included in the course schedule every semester (fall-spring-summer).
- PLT courses are offered in the eight-week format unless otherwise stated.
- The complete PLT A.A.S. degree may be obtained online.
- Course substitutions or an independent study option will be made for PLT majors in lieu of PLT 215, 265 and 280 if they are not offered.
- Students may take PLT courses in any sequence except when prerequisites are listed.

### Earn a Degree and Graduate Early (EDGE):

This program provides students the opportunity to receive credit for their high school EDGE courses.

### Contact Information:

Zana Durst • Room 104A • Phone: (304) 710-3465 or 1-866-N-ROLLED (1-866-676-5533) • E-mail: [durst2@mctc.edu](mailto:durst2@mctc.edu)

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1. Two additional PLT electives approved by advisor
  2. COM 112 Oral Communication or COM 125 Interpersonal Communication
  3. ENL 111 has a prerequisite of REA 098, or placement in 100-level reading.

# ONE-YEAR CERTIFICATES

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## TECHNICAL STUDIES CERTIFICATE

### **Program Description:**

The Certificate in Applied Science degree program in Technical Studies is designed to provide: integration into the formal higher education curriculum of business, agency, labor or industry based education and training programs which are of sufficient quality to merit the granting of college credit; provision of a vehicle to facilitate direct educational partnerships with business, industry, labor and agencies which are designed to assist in enhancing and maintaining efficiency and effectiveness and, where appropriate, their competitiveness in the regional, national and international marketplaces; enhancement and broadening of quality industry-based educational and training programs through the addition and integration of a collegiate level general education component in a certificate program format; encouragement of program participants to embrace the philosophy and practice of continuing, lifelong education; enhancement of the general education, technical, and occupational skills of West Virginia's workforce and, consequently, of West Virginia's climate for economic development; provision of a timely and efficient mechanism to address the training and educational needs of business, industry and agencies through the delivery of customized programs based on documented needs; and, improvement in the efficiency and effectiveness levels of higher education by using resources in the private sector to complement those of public higher education.

### **Program Focus:**

Business, industry, labor, and government organizations interested in furthering the education and training of their employees/members constitute the target audience of this degree program. By providing a program of study designed to enhance and maintain employee knowledge and skills, it is expected that such individuals will enjoy greater job security and job flexibility while providing employers with more highly skilled and educated workforce. For those just entering the job market, the program of study will include the education and training needed to assure basic entry level skills for the specific technical/occupational field.

### **Program Admission Requirements:**

The college adheres to an open admission policy which means applicants with a high school diploma or a GED are eligible for admission. Applicants with neither a high school diploma nor a GED may be admitted on a conditional basis.



# ONE-YEAR CERTIFICATES

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## TECHNICAL STUDIES

### MAJOR CODE – CT10

#### Component I: General Education (6-11 Credit Hours)

ENL/COM	Communication Skills (appropriate to Occupational Area)	3
MAT	Quantitative Skills/Laboratory Science/Experience (at least one college-level course must be in mathematics)	3
	Optional General Education Electives	0-5

#### Component II: Technical/ Occupational Specialty (Maximum of 24 credit hours)

This component consists of technical specialty courses specific to an occupational area. Technical courses developed by the college, approved courses included in a business, industry, labor, or agency-based education/training program, or combinations of credit courses and/or non-credit training modules evaluated for credit equivalency by an identified college body can be included in this component. Externally based education and training programs which are equivalent to college level classroom/laboratory courses are to be converted to college credit hours at no less ratio than 15:1 contact to credit hours for lecture, and at a rate consistent with the lab contact hour/credit hour ratio of the degree granting institution for laboratory credit. Credit equivalencies for non-credit training modules will be converted at no less ration than 30:1 contact to credit hours. Credit for externally based education and training will be awarded upon completion of the college work required in Component 1, above.

#### Component III: Supervised Worksite-Based Learning (Maximum of 6 credit hours)

Credit for worksite-based training is optional in the certificate in Technical Studies program. When incorporated, such training consists of a paid or unpaid internship, practicum, or OJT experience performed in a business, industry, labor, or agency setting in the occupational area related to the certificate. The credit value of internships included in the CP in Technical Studies will be determined by the same process and contact to credit hour ratio as that in traditional programs. Business, industry and agency-based on-the-job training experience is to be converted to credit hours at a ratio of 160:1, with a maximum of 960 contact hours allowable. A statement of the total number of contact hours experienced in this component may be placed on the college record. This credit may be recorded immediately prior to graduation from college

**Minimum hours required for graduation: 30**

#### Earn a Degree and Graduate Early (EDGE):

This program provides students the opportunity to receive credit for their high school EDGE courses.

#### Contact Information:

Steven Brown • Room 229A • Phone: (304) 710-3393 or 1-866-N-ROLLED (1-866-676-5533) •  
E-mail: brown175@mctc.edu



# College Skill Set



## **ALLIED HEALTH**

Allied Health  
EMT for Health Professionals  
Personal Training  
Point of Care Technician

## **BUSINESS & INFORMATION TECHNOLOGY**

Administrative Technology - Executive  
Administrative Technology - Legal  
Administrative Technology - Medical  
Entrepreneur  
Medical Office Receptionist  
Microsoft Office Suite  
Office Assistant  
Records Clerk

## **OCCUPATIONAL DEVELOPMENT**

Law Enforcement  
Machinist

# COLLEGE SKILL SET: ALLIED HEALTH

## ALLIED HEALTH

CERTIFICATE REQUIREMENT			CREDIT HOURS
AH	151	Medical Terminology (EDGE).	3
BIOL	257	Introduction to Anatomy & Physiology <sup>2</sup> (EDGE)	3-8
ENL	111	Written Communication.	3
IT	101	Fundamentals of Computers (EDGE).	3
MAT	145	Applications in Algebra <sup>1</sup> .	3
TOTAL HOURS REQUIRED.			15-20

Individuals who complete the above required courses will receive a Certificate of Successful Completion in Allied Health.

1. MAT 150 may be substituted for MAT 145.
2. BIOL 260 and BIOL 265 may be substituted for BIOL 257.

### Earn a Degree and Graduate Early (EDGE):

This program provides students the opportunity to receive credit for their high school EDGE courses.

### Contact Information:

Janet B. Smith • Room 433 • Phone: (304) 710-3516 or 1-866-N-ROLLED (1-866-676-5533) • E-mail: smithjan@mctc.edu

## EMT FOR HEALTH PROFESSIONALS

CERTIFICATE REQUIREMENT			CREDIT HOURS
EME	109	Emergency Medical Technician . . . . .	10
TOTAL HOURS REQUIRED.			10

Individuals who complete the above required courses will receive a Certificate of Successful Completion from Mountwest.

Individuals who successfully complete the above required courses will be eligible for the National Registry of EMT's Basic Exam.

### Contact Information:

Edward Bays • Room 431 • Phone: (304) 710-3528 or 1-866-N-ROLLED (1-866-676-5533) • E-mail: bays@mctc.edu

# COLLEGE SKILL SET: ALLIED HEALTH

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## PERSONAL TRAINING

CERTIFICATE REQUIREMENT			CREDIT HOURS
AH	151	Medical Terminology (EDGE).	3
AH	217	Personal Fitness Training.	4
BIOL	257	Introduction to Anatomy & Physiology.	3
EME	105	First on Scene.	3
TOTAL HOURS REQUIRED.			13

Individuals who complete the above required courses will receive a Certificate of Successful Completion in Personal Training. National certification as a personal trainer may be obtained through national accrediting agencies.

### Earn a Degree and Graduate Early (EDGE):

This program provides students the opportunity to receive credit for their high school EDGE courses.

### Contact Information:

Janet B. Smith • Room 433 • Phone: (304) 710-3876 or 1-866-N-ROLLED (1-866-676-5533) • E-mail: smithjan@mctc.edu

# COLLEGE SKILL SETS: BUSINESS/INFORMATION TECHNOLOGY

## ADMINISTRATIVE TECHNOLOGY - EXECUTIVE

CERTIFICATE REQUIREMENT			CREDIT HOURS
AT	265	Administrative Office Procedures (EDGE) <sup>1</sup>	3
ENL	231	Technical Report Writing	3
MG	101	Introduction to Business (EDGE) <sup>2</sup>	3
MG	202	Business Organization & Management <sup>3</sup>	3
TOTAL HOURS REQUIRED			12

The Executive Office Skill Set is of value to office workers who need executive office skills for cross-training and/or to increase employment opportunities. Upon completion of the courses, students should notify Billie Brooks, Dean of Student Services (304) 710-3363.

Individuals who complete the above required courses will receive a Certificate of Successful Completion from Mountwest.

### Earn a Degree and Graduate Early (EDGE):

This program provides students the opportunity to receive credit for their high school EDGE courses.

### Contact Information:

Wylma Skean • Room 223 • Phone: (304) 710-3406 or 1-866-N-ROLLED (1-866-676-5533) • E-mail: skean@mctc.edu

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1. AT 265 has a prerequisite of AT 136.
  2. MG 101 has a prerequisite of REA 098 or ACT Reading 18 or SAT Reading 421 or Accuplacer Reading 80.
  3. MG 202 has a prerequisite of MG 101.

## ADMINISTRATIVE TECHNOLOGY - LEGAL

CERTIFICATE REQUIREMENT			CREDIT HOURS
AT	242	Legal Terminology and Transcription <sup>1</sup>	3
LAS	101	General Law I <sup>2</sup>	3
LAS	102	General Law II (PR: LAS 101)	3
LAS	213	Computer Applications to the Law Office (PR: AT 136)	3
TOTAL HOURS REQUIRED			12

The Legal Office Skill Set is of value to office workers who need legal office skills for cross-training and/or to increase employment opportunities.

Individuals who complete the above required courses will receive a Certificate of Successful Completion from Mountwest.

### Earn a Degree and Graduate Early (EDGE):

This program provides students the opportunity to receive credit for their high school EDGE courses.

### Contact Information:

Wylma Skean • Room 223 • Phone: (304) 710-3406 or 1-866-N-ROLLED (1-866-676-5533) • E-mail: skean@mctc.edu

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1. AT 242 has a prerequisite of AT 136.
  2. LAS 101 has a prerequisite of REA 098 or ACT Reading 18 or SAT Reading 421 or Accuplacer Reading 80.

# COLLEGE SKILL SETS: BUSINESS/INFORMATION TECHNOLOGY

## ADMINISTRATIVE TECHNOLOGY - MEDICAL

CERTIFICATE REQUIREMENT			CREDIT HOURS
AT	253	Medical Transcription (PR: AT 136 and AH 151) . . . . .	3
AT	265	Administrative Office Procedures (EDGE) <sup>1,4</sup> . . . . .	3
AT	221	Medical Terminology for Transcription (EDGE) <sup>2,5</sup> . . . . .	3
LAS	248	Medical Law (PR: LAS 101 or Permission) . . . . .	3
<b>TOTAL HOURS REQUIRED. . . . .</b>			<b>15</b>

The Medical Office Skill Set is of value to office workers who need medical office skills for cross-training and/or to increase employment opportunities. The state of West Virginia has classified the administrative assistant field as being in “high demand” because the number of anticipated qualified employees is significantly lower than the number of expected job openings in the state.

Individuals who complete the above required courses will receive a Certificate of Successful Completion from Mountwest.

### Earn a Degree and Graduate Early (EDGE):

This program provides students the opportunity to receive credit for their high school EDGE courses.

### Contact Information:

Wylma Skean • Room 223 • Phone: (304) 710-3406 or 1-866-N-ROLLED (1-866-676-5533) • E-mail: [skean@mctc.edu](mailto:skean@mctc.edu)

1. Students may substitute MA 206 for AT 265.
2. Students may substitute AH 151 for AT 221.
3. Students may substitute AH 204 for LAS 248.
4. AT 265 has a prerequisite of AT 136.
5. AT 221 has a prerequisite of REA 098 or ACT Reading 18 or SAT Reading 421 or Accuplacer Reading 80.

# COLLEGE SKILL SETS: BUSINESS/INFORMATION TECHNOLOGY

## ENTREPRENEUR

CERTIFICATE REQUIREMENT			CREDIT HOURS
AC	103	Introduction to Accounting (EDGE) <sup>1</sup> . . . . .	3
LAS	110	Business Organization to Government Regulations . . . . .	3
MG	101	Introduction to Business (EDGE) <sup>1</sup> . . . . .	3
MK	130	Fundamentals of Marketing <sup>1</sup> . . . . .	3
		Entrepreneur Elective (from list below) . . . . .	3
<b>TOTAL HOURS REQUIRED. . . . .</b>			<b>15</b>

ENTREPRENEUR ELECTIVE		
AT	104	Records Management <sup>1</sup>
AT	265	Administrative Office Procedures <sup>2</sup>
IT	212	Publishing on the Internet <sup>3</sup>
IT	242	Advanced Internet <sup>4</sup>
IT	270	Computer Essentials and Application
MG	181	Retailing <sup>1</sup>
MG	202	Business Organization & Management <sup>5</sup>

Individuals who complete the above required courses will receive a Certificate of Successful Completion from Mountwest.

### Earn a Degree and Graduate Early (EDGE):

This program provides students the opportunity to receive credit for their high school EDGE courses.

### Contact Information:

Gerald Doyle • Room 245 • Phone: (304) 710-3409 or 1-866-N-ROLLED (1-866-676-5533) • E-mail: doyle@mctc.edu

1. AC 103, MG 101, MK 130, AT 104 and MG 181 have a prerequisite of REA 098 or ACT Reading 18 or SAT Reading 421 or Accuplacer Reading 80.
2. AT 265 has a prerequisite of AAT 136.
3. IT 212 has a prerequisite of IT 107.
4. IT 242 has a prerequisite of IT 212.
5. MG 202 has a prerequisite of MG 101.

## MEDICAL OFFICE RECEPTIONIST

CERTIFICATE REQUIREMENT			CREDIT HOURS
AT	104	Records Management <sup>3</sup> . . . . .	3
AT	221	Medical Terminology for Transcription (EDGE) <sup>1,3</sup> . . . . .	3
AT	265	Administrative Office Procedures (EDGE) <sup>2,4</sup> . . . . .	3
IT	101	Fundamentals of Computers . . . . .	3
<b>TOTAL HOURS REQUIRED. . . . .</b>			<b>12</b>

The Medical Office Receptionist Skill Set is designed to prepare students for entry-level medical office support positions.

Individuals who complete the above required courses will receive a Certificate of Successful Completion from Mountwest.

1. Students may substitute AH 151 for AT 221.
2. Students may substitute MA 206 for AT 265.
3. AT 104 and AT 221 101 have a prerequisite of REA 098 or ACT Reading 18 or SAT Reading 421 or Accuplacer Reading 80.
4. AT 265 has a prerequisite of AT 136.



# COLLEGE SKILL SETS: BUSINESS/INFORMATION TECHNOLOGY

## MICROSOFT OFFICE SUITE

CERTIFICATE REQUIREMENT			CREDIT HOURS
AT	104	Records Management (Access) <sup>1,2</sup>	3
AT	136	Comprehensive Word Processing (Word) (EDGE)	3
AT	160	Introduction to Presentation Graphics (PowerPoint) (EDGE) <sup>2</sup>	3
IT	150	Applications to Spreadsheets (Excel) (EDGE) <sup>3</sup>	3
TOTAL HOURS REQUIRED.			12

Individuals who complete the above required courses will receive a Certificate of Successful Completion from Mountwest.

### Earn a Degree and Graduate Early (EDGE):

This program provides students the opportunity to receive credit for their high school EDGE courses.

### Contact Information:

Wylma Skean • Room 223 • Phone: (304) 710-3406 or 1-866-N-ROLLED (1-866-676-5533) • E-mail: skean@mctc.edu

1. Participants may substitute AT 105, Computerized Database Management, for the AAT 104 requirement.
2. AT 104 and AT 160 have a prerequisite of REA 098 or ACT Reading 18 or SAT Reading 421 or Accuplacer Reading 80.
3. IT 150 has a prerequisite of IT 101.

## OFFICE ASSISTANT

CERTIFICATE REQUIREMENT			CREDIT HOURS
AT	136	Comprehensive Word Processing (EDGE)	3
AT	160	Introduction to Presentation Graphics (EDGE)	3
AT	265	Administrative Office Procedures (EDGE) <sup>2</sup>	3
IT	150	Applications to Spreadsheets (EDGE) <sup>3</sup>	3
MG	101	Introduction to Business (EDGE)	3
TOTAL HOURS REQUIRED.			15

This Office Assistant Skill Set offers students participating in the EDGE initiative the opportunity to complete a skill set that provides entry-level job skills.

Upon completion of the courses, students should notify Billie Brooks, Dean of Student Services • (304) 710-3363.

Individuals who complete the above required courses will receive a Certificate of Successful Completion from Mountwest.

### Earn a Degree and Graduate Early (EDGE):

This program provides students the opportunity to receive credit for their high school EDGE courses.

### Contact Information:

Wylma Skean • Room 223 • Phone: (304) 710-3406 or 1-866-N-ROLLED (1-866-676-5533) • E-mail: skean@mctc.edu

1. AT 160 and MG 101 have a prerequisite of REA 098 or ACT Reading 18 or SAT Reading 421 or Accuplacer Reading 80.
2. AT 265 has a prerequisite of AT 136.
3. IT 150 has a prerequisite of IT 101.

# COLLEGE SKILL SETS: BUSINESS/INFORMATION TECHNOLOGY

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## RECORDS CLERK

CERTIFICATE REQUIREMENT		CREDIT HOURS
AT	104 Records Management <sup>1</sup> .....	3
TOTAL HOURS REQUIRED.....		3

This Records Clerk Skill Set is designed to prepare students for entry-level office support positions. Records Clerks file correspondence, invoices, receipts, and other records in alphabetical or numerical order or according to the filing system and may utilize database software to manage records.

Upon completion of the courses, students should notify Billie Brooks, Dean of Student Services • (304) 710-3363.

Individuals who complete the above required courses will receive a Certificate of Successful Completion from Mountwest.

### Earn a Degree and Graduate Early (EDGE):

This program provides students the opportunity to receive credit for their high school EDGE courses.

### Contact Information:

Wylma Skean • Room 223 • Phone: (304) 710-3406 or 1-866-N-ROLLED (1-866-676-5533) • E-mail: [skean@mctc.edu](mailto:skean@mctc.edu)

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1. AT 104 has a prerequisite of REA 098 or ACT Reading 18 or SAT Reading 421 or Accuplacer Reading 80.

# COLLEGE SKILL SETS: OCCUPATIONAL DEVELOPMENT

## LAW ENFORCEMENT

CERTIFICATE REQUIREMENT		CREDIT HOURS
CJS 111	Law Enforcement Orientation).	3
CJS 122	Police Arsenal and Weapons.	3
CJS 231	Fundamentals of Criminal Law.	2
CJS 233	Fundamentals of Criminal Investigation.	3
CJS 239	Criminal Evidence and Procedure.	3
CJS 244	Introduction to Criminalistics.	2
CJS 248	Traffic Administration and Enforcement.	2
<b>TOTAL HOURS REQUIRED.</b>		<b>18</b>

This Law Enforcement Skill Set is only available to basic cadets enrolled at the West Virginia State Police Academy. Individuals who complete the above required courses will receive a certificate of successful completion.

### Contact Information:

Jenna Parker • Room 255 • Phone: (304) 710-3414 • E-mail: [parker54@mctc.edu](mailto:parker54@mctc.edu)

## MACHINIS/CNC TECHNOLOGY

CERTIFICATE REQUIREMENT		CREDIT HOURS
MT 105	Industrial Safety . . . . .	2
MT 121	Introduction to Machinery . . . . .	4
MT 200	Blueprint Reading . . . . .	3
MT 205	Precision Measurement . . . . .	3
MT 215	Metalworking Theory & Application . . . . .	12
MT 223	Advanced Technical Specialization . . . . .	6
MT 233	NIMS Credentialing . . . . .	6
<b>TOTAL HOURS REQUIRED.</b>		<b>36</b>

The above skill set courses are taken as a block by Robert C. Byrd Institute machinist students during a school year. After completion of these courses students will have earned their National Institute Metalworking Skill Level I (NIMS I) certification.

### Contact Information:

Steven Brown • Room 229 • Phone: (304) 710-3393 • E-mail: [brown175@mctc.edu](mailto:brown175@mctc.edu)



# Continuing & Corporate Education



## OVERVIEW

CAPSTONE & CUSTOMIZED TRAINING

INDUSTRY-RECOGNIZED SKILL SET  
TRAINING & CERTIFICATES

CONTINUING & COMMUNITY EDUCATION

INLAND WATERWAYS ACADEMY

SMALL BUSINESS DEVELOPMENT CENTER

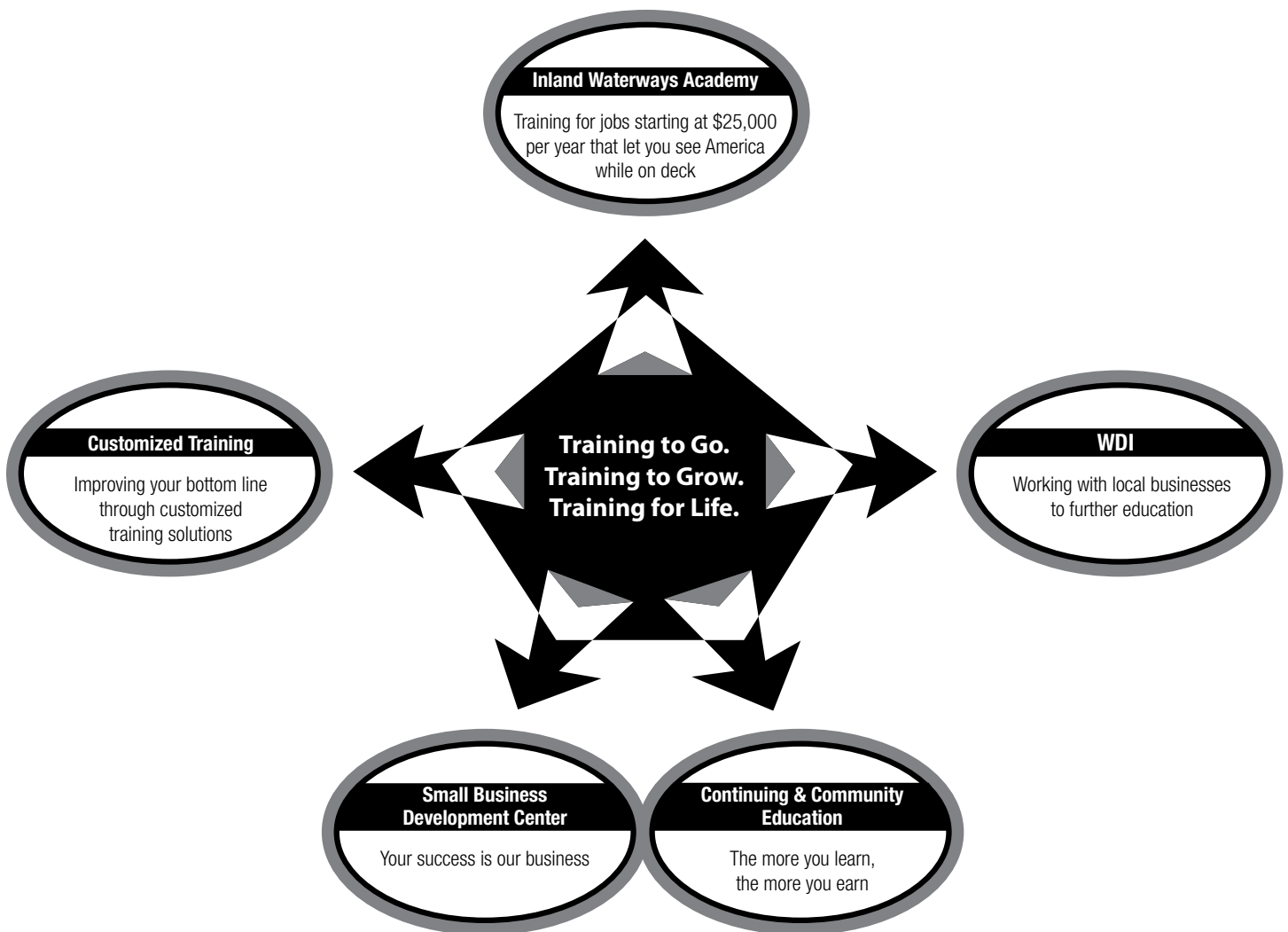
# CONTINUING & CORPORATE EDUCATION

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## DIVISION OF CONTINUING & CORPORATE EDUCATION

Community & Corporate Education offers a wide range of short-term, non-credit, skills training that can provide you or your family members with opportunities for professional development and personal enrichment. Call (304) 525-1466 for more information on these and other training programs offered through the Division of Community & Corporate Education at Mountwest Community & Technical College. Or visit [www.mctc.edu](http://www.mctc.edu) for more information on current course schedules, costs, or a complete listing of professional development and personal enrichment classes.

## GET YOUR CAREER MOVING WITH SKILL SET TRAINING THROUGH CONTINUING & CORPORATE EDUCATION



# CONTINUING & CORPORATE EDUCATION

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## DIVISION OF CONTINUING & CORPORATE EDUCATION OVERVIEW

Mountwest Community & Technical College is the training provider of choice for professional development, industry-recognized training solutions, and personal enrichment.

The Division of Continuing & Corporate Education at Mountwest Community & Technical College connects businesses and workforce professionals to traditional and nontraditional training solutions that meet the continual change in economic conditions, technology, government mandates, and community needs.

### Customized Training

The Division of Continuing & Corporate Education provides customized training to business and industry. It proactively assists business in identifying organizational goals, training needs, and appropriate solutions to keep pace with changes. The Division also provides added value by assisting businesses in the identification of collaboration and grant opportunities through its involvement in local, statewide and national organizations dedicated to economic and workforce development.

Staff of the Division of Continuing & Corporate Education design training programs that meet the specific working environment skill sets and knowledge needed by entrepreneurs, industry, agencies or professional organizations. The Division provides research capability, technical assistance, training and linkage to other resources and funding as needed. Services include assessment of training needs, identification of organizational goals, gaps that can be corrected by training, prioritization of training needs, delivery and evaluation of training. Cost-effective training is provided by Mountwest Community & Technical College staff or contracted training specialists at a time and place convenient to the customer.

### Basic Medical Coding Course

This basic and beginning medical coding program teaches the individual the skills needed to work in an entry level position within a medical office, hospital, or insurance company to submit HCFA forms. The course is set up for those individuals who have no previous experience within the medical field. Course topics includes instruction on Medical Terminology, Basic Anatomy and Physiology, Basic ICD-9 Coding and CPT Coding. Graduates from this course will be eligible to continue and be eligible to attend the Professional Medical Coding Course to prepare them to take the National Certification exam. Cost of this course is \$1,200.

### Comprehensive Medical Coding Certification Course

This half of the course is set up and offered to students who have no prior experience in the medical field and teaches the individual the skills needed to work in an entry level position within a medical office, hospital, or insurance company to submit HCFA forms. Course topics includes instruction on Medical Terminology, Basic Anatomy and Physiology, Basic ICD-9 Coding and CPT Coding. The second half of the course is designed to prepare these individuals to pass the American Academy of Professional Coders exam. Classes will meet one night a week. Cost of this course of \$3,050.

### Fluid Power Training Program

This is a 240 contact hour, 3 module training program that teaches students Fluid Power module I, which includes the Fundamentals of Hydraulics, Fluid Power module II, which includes the Fundamentals of Pneumatics and the last module, Principles of Maintenance, Repair, and Hydraulics and Pneumatics: Troubleshooting. This course will be taught at the Spring Valley Academic Career Center. Cost is \$6,000 for all three modules.

### Electrical Training Program

A 240 contact hour, 3 module training program that teaches students Basic Electricity module which includes: Atomic structure and electron theory, electrical quantities, Ohm's Law, AC/DC circuit analysis, Alternating Current theory, and introduction to transformers, Motors and Generators module in which students apply the material learned in Basic Electricity to study: AC polyphase motors, AC single phase motors, DC Machines, and transformer arrangements. The third module is Basic Electronics which allow students to move into multiple careers such as industrial electronics technicians, PLC techs, robotics maintenance specialists, or industrial process instrumentation technicians. The curriculum for this module includes: the diode, power supplies, transistors, IGBT's, integrated circuits, operational amplifiers, encoders and decoder, digital computer fundamentals. This course will be taught at the Spring Valley Academic Career Center. Cost is \$6,000 for all three modules.

### Professional Medical Coding Certificate

This program is an intensive curriculum for students with previous medical experience or coding to prepare for and pass the American Academy of Professional Coders exam. A certified coder helps medical professionals to prevent legal difficulties and ensure that they receive full reimbursement in a timely manner. Classes will meet one night a week and include: Medical Terminology, Basic Human Anatomy, ICD-9 and CPT Coding and insurance billing procedures. Cost of this course is \$1,850.

# CONTINUING & CORPORATE EDUCATION

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## **Additional business services resources include:**

- The Small Business Development Center at Mountwest promotes economic development through a program of practical, interrelated services, providing assistance to existing small businesses and the emerging entrepreneur.
- The Division of Workforce Development is an active member of the Region 2 Business Service Team that identifies existing state and local agency resources that meet the needs of business, and creates the linkage to that asset.
- Linkages to Distance Education are available from a number of resources connected to Mountwest.
- Industry Consortiums are facilitated by the Division of Continuing & Corporate Education to identify and solve the business needs for the emerging workforce and current employees.

For more information contact John Whiteley at (304) 697-5616 or visit [www.mctc.edu](http://www.mctc.edu).

## **Industry-Recognized Skill Set Training and Certifications**

The rapidly changing demands placed on business require continuous improvement and training to stay current and competitive in a global economy. The Division of Continuing & Corporate Education insures quality training by developing and implementing training solutions that meet local, state and national certification requirements of industry and government agencies. The following specific skill set training, preparatory classes, testing and assessments prepare individuals for occupational licensures and certifications required by local, state and national government agencies and industry.

## **Inland Waterways Academy**

The Inland Waterways Academy provides 25 U.S. Coast Guard-approved licensure-training programs for the inland maritime industry.

## **West Virginia Fast Track Jobs Programs**

The Division of Workforce Development Fast Track Jobs Programs meet the requirements for 90 days or less training that leads to immediate, direct employment in industry. The programs are:

- Marine Industry Technology Deckhand Training
- Bank Teller Program
- Medical Billing and Coding Program

Other training programs can be developed as needed.

## **Preparatory Classes**

Preparatory classes are taught at multiple locations for ACT, SAT, LSAT, GRE and other special personal and professional tests.

## **CONTINUING & COMMUNITY EDUCATION**

The driving forces in today's ever-changing economy are information and technology. These forces are so dominant and the advancements so continuous that "lifelong learning" has become a requirement for continued employment, qualifying for promotions or just for personal enrichment. The Continuing Education Program offers a wide range of instructor-led professional development and enrichment workshops, classes and seminars at convenient times. Continuing education classes are offered at the Huntington, Mason County, Teays Valley and Charleston campuses and are formatted as short courses, seminars, conferences, and workshops. The Division staff facilitates the identification of desired performance levels expected of professionals in the workforce. Division partners with highly qualified instructors that implement training solutions that improve individual performance. Many of the professional development courses include earning credit toward one-year Certificate, two-year Associate Degrees or Continuing Education Units that may be required by professional associations. Personal enrichment courses are also offered.

## **Mission Statement**

The Division of Continuing & Community Education at Mountwest Community & Technical College extends credit and non-credit courses for professional improvement, workforce development and personal enrichment to the community and beyond.

## **Continuing Education Units**

The Division of Continuing & Community Education provides Continuing Education Units (CEU) Certificates for courses that meet the educational requirements required by government or industry organizations. Continuing Legal Education (CLE) units and other types of CEU's are provided to meet the educational requirements of associations and industries.

## **Preparatory Classes**

A wide range of classes is provided to help individuals prepare for entrance tests, licensures and exams required by industry, education and government agencies. Some examples are educational prep classes for ACT, SAT, LSAT and GRE entrance exams. Industry prep classes include WorkKeys, ASE, CDR and NMTCB.

**The Division of Continuing & Corporate Education strives to provide quality educational opportunities that meet the professional development and certification needs of entrepreneurs, industry, agencies or professional organizations, as well as the personal enrichment needs of individuals.**

For more information, call (304) 399-1281 or visit [www.mctc.edu](http://www.mctc.edu).



# Course Descriptions



Academic Skills Center (ASC)  
Accounting (AC)  
Administrative Technology (AT)  
Allied Health (AH)  
American Sign Language (ASL)  
Art (ART)  
Aviation Technology (AVT)  
Biological Sciences (BIOL)  
Biomedical Instrumentation Technology (BMT)  
Business (BUS)  
Chemistry (CHEM)  
Clinical (CLIN)  
College Studies (COL)  
Communication (COM)  
Computer Aided Design (CAD)  
Computer Science (CS)  
College Studies (COL)  
Criminal Justice Studies (CJS)  
Culinary Arts (CA)  
Dental Assistant (DA)  
Dental Laboratory Technology (DLT)  
Interior Design (DSGN)  
Economics (EC)  
Education (EDUC)  
Electronics Technology (ELT)

Emergency Medical Technology (EME)  
English (ENL)  
Environment (ENV)  
Finance and Banking (FN)  
Geography (GEO)  
Health Information Technology (HIT)  
History (HIST)  
Hospitality Management (HM)  
Humanities (HMN)  
Human Services (HUSR)  
Industrial Supervision and Management (ISM)  
Information Technology (IT)  
Inland Waterways (IW)  
Interior Design (ID)  
Kentucky Virtual University (KYV)  
Paralegal Studies (LAW)  
Machinist Technology (MT)  
Maintenance Technology (MTEC)  
Management (MG)  
Manufacturing Engineering Tech (MFE)  
Marketing (MK)  
Massage Therapy (MAS)  
Mathematics (MAT)  
Medical Assisting (MA)  
Mid-Atlantic Maritime (MMA)  
Military Science (MILS)

Mining Information Technology (MIT)  
Multi-Craft Technology (MTEC)  
Music (MUSI)  
Occupational Development (OD)  
Painting and Allied Trades (PAT)  
Paramedic Science (PAR)  
Pharmacy Technician (PHT)  
Physical Education (PE)  
Physical Therapist Assistant (PTA)  
Political Science (POLS)  
Psychology (PSYC)  
Public Health (PH)  
Public Library Technology (PLT)  
Radiographic Science (RS)  
Radiology (RAD)  
Reading (REA)  
Respiratory (RTT)  
Safety (SFT)  
Science (SCI)  
Social Science (SS)  
Spanish (SPAN)  
Technical Studies (TS)  
Technical Training for Adults (TTA)  
Transportation Systems (TRAN)  
Veterinary (VET)  
Workforce Development (WFD)

# COURSE DESCRIPTIONS

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**PR** = Prerequisite (must have this course before taking listed course)

**CO** = Co requisite (may take this course at the same time as the listed course)

**CR/NC** = Credit/No Credit

## ACADEMIC SKILLS CENTER (ASC)

### **ASC 096 – Academic Skills Center for Algebra I.** 1 Credit (CR/NC).

This course provides the student the opportunity to work on academic skills and assignments and fulfill academic goals using a variety of supplemental materials including one-on-one assistance in MAT 096 and other general education learning outcomes by an ASC instructor or student tutor, computer programs and tutorial videos. (CR: MAT 096)

**ASC 099 – Academic Skills Center.** 1 Credit (CR/NC). This course provides the student the opportunity to work on academic skills and assignments, as well as fulfilling academic goals using a variety of supplemental materials, including one-on-one assistance in MAT classes and other general education learning outcomes by ASC instructors, computer programs, and tutorial videos.

## ACCOUNTING (AC)

**AC 103 – Introduction to Accounting.** 3 Credits. This course will provide an introduction to basic accounting concepts and generally accepted accounting principles. It will include a focus on the accounting cycle and accounting terms. (PR: REA 098 or ACT Reading 18 or SAT Reading 421 or ACCUPLACER Reading 80)

**AC 108 – Accounting for Business.** 3 Credits. To provide students with a basic knowledge of accounting terms, concepts and procedures. Students will study procedures related to payroll, bank reconciliation, accounts payable, and accounts receivable. Offered Spring Semester only. (PR: REA 098 or ACT Reading 18 or SAT Reading 421 or ACCUPLACER Reading 80)

**AC 201 – Financial Accounting I.** 3 Credits. Study of accounting practices and procedures in accordance with generally accepted accounting principles and concepts. The technical bookkeeping procedures of analyzing, recording and reporting accounting information are presented from an external perspective. (PR: AC 103 or Permission)

**AC 202 – Financial Accounting II.** 3 Credits. A continuation of Financial Accounting I, AC 202 is a study of accounting principles and procedures relating to capital budgeting and cost systems of corporations and partnerships from an external perspective. (PR: AC 201 or AC 108)

**AC 210 – Managerial Accounting.** 3 Credits. Presentation and application of the concepts and procedures of managerial accounting to enhance critical thinking and analytical skills. The course focuses on the use of accounting information to make internal managerial decisions. (PR: AC 103 or AC 108 or AC 201)

**AC 221 – Computerized Accounting I.** 3 Credits. Application of the small business computer and existing accounting software programs to the solution of accounting problems. Emphasis on extension of previously learned accounting principles. (PR: AC 103, AC 108 or AC 201 and IT 101)

**AC 222 – Computerized Accounting II.** 3 Credits. Application of accounting principles and procedures utilizing current accounting software. This course in computerized accounting offers in-depth analysis and practical application of the accounting procedures related to payroll, accounts receivable, accounts payable and inventory. (PR: IT 101 or IT 101E and AC 103; IT 101 or IT 101E or AC 108; and IT 101 or IT 101E and AC 201; or Permission)

**AC 234 – Taxation I.** 3 Credits. Study of federal income tax law as applied to income, deductions, expenses and tax Credits relating to an individual and small business. Emphasis is placed on application of the tax law through preparation of the proper schedules and forms of a federal income tax return. (PR: AC 201, AC 103, AC 108; or ACC 215)

**AC 235 – Federal Taxation II.** 3 Credits. A study of federal income tax rules and laws to determine income, expenses, gains and losses for business entities. Forms of business organizations, C corporations, S corporations, partnerships and limited liability companies and other taxable entities are examined to ascertain the appropriate forms to file as established by the Internal Revenue Service. (PR: AC 234)

## ADMINISTRATIVE TECHNOLOGY (AT)

**AT 104 – Records Management.** 3 Credits. Fundamental principles of records management including the creation, storage, retrieval, deletion, filing, and organization of information in a records management system. Applicable database management software will be introduced. (PR: REA 098 or ACT Reading 18 or SAT Reading 421 or ACCUPLACER Reading 80)

**AT 105 – Computerized Database Management.** 3 Credits. Use of database management software to create and maintain databases. (PR: REA 098 or ACT Reading 18 or SAT Reading 421 or ACCUPLACER Reading 80)

**AT 113 – Keyboarding I.** 3 Credits. Presentation and practice of fundamental keyboarding techniques. Development of rapid and accurate keyboarding skills and application of these skills to basic business documents. (PR: REA 098 or ACT Reading 18 or SAT Reading 421 or ACCUPLACER Reading 80)

**AT 114 – Keyboarding II.** 3 Credits. Training in keying business letters, multiple-page reports, tables, and special business forms. Attention to building speed with control. Student who cannot key 35 WPM with fewer than 5 errors on the first day of class will need to transfer to AT 113. (PR: AT 136 or AAT 136)

**AT 136 – Comprehensive Word Processing.** 3 Credits. Provides hands-on training in the use of word processing software. (PR: AT 113 or permission)

**AT 160 – Introduction to Presentation Software.** 3 Credits. This course will concentrate on learning and applying presentation concepts and practices to create presentations using computer software. (PR: REA 098 or ACT Reading 18 or SAT Reading 421 or ACCUPLACER Reading 80)

# COURSE DESCRIPTIONS

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**AT 220 – Anatomy and Physiology for Transcription.** 3 Credits. An introduction to the structure and function of the human body, by body system and on the cellular level. (PR: REA 098 or ACT Reading 18 or SAT Reading 421 or ACCUPLACER Reading 80)

**AT 221 – Medical Terminology for Transcription.** 3 Credits. An introduction to prefixes, suffixes, root words, combining forms, Latin and Greek forms, spelling, and pronunciation, with emphasis on building a working medical vocabulary based on body systems. (PR: REA 098 or ACT Reading 18 or SAT Reading 421 or ACCUPLACER Reading 80)

**AT 222 – Pharmacology for Transcription.** 3 Credits. An introduction to the principles of pharmacology and a comprehensive study of drug action, routes of administration, classes of drug by body system, as well as antibiotics, antiviral drugs, IV fluids, blood products, anesthetics, emergency drugs, vaccines, and immunizations.

**AT 223 – Beginning Laboratory Medicine for Transcription.** 1 Credit. A comprehensive study of laboratory and pathology tests and procedures by body system, Part I.

**AT 224 – Advanced Laboratory Medicine for Transcription.** 1 Credit. A comprehensive study of laboratory and pathology tests and procedures by body system, Part II. (PR: AT 223)

**AT 225 – Human Diseases for Transcription.** 3 Credits. A comprehensive study of disease processes, organized by body system.

**AT 226 – Surgical Procedures for Transcription.** 1 Credit. A comprehensive study of surgical techniques, instruments, and operative procedures.

**AT 240 – Comprehensive Transcription and Dictation.** 3 Credits. Comprehensive course covering basic and intermediate skills in transcribing general dictation from several fields of employment, advanced skills in transcribing legal and medical dictation, practice in dictation, and use of speech recognition. (PR: AT 114)

**AT 242 – Legal Terminology and Transcription.** 3 Credits. Provides training in legal terminology and transcription. (PR: AT 114 and AT 136)

**AT 244 – Beginning Medical Transcription.** 6 Credits. Transcription of authentic physician-dictated reports organized by body systems with emphasis on development of accuracy and medical knowledge for transcription of letters, chart notes, history and physical examination reports, consultations, emergency room reports, and discharge summaries. Use of reference materials and other resources, techniques for proofing and editing, discussion of professional issues in medical transcription, and review of grammar and punctuation are integrated in the content. (PR: Permission or CR: AT 220, 221, 222, 223)

**AT 245 – Pathology Transcription.** 2 Credits. Transcription of authentic physician-dictated reports related to pathology with emphasis on development of accuracy and medical knowledge for transcription of autopsies, gross descriptions, and microscopic descriptions. Use of reference materials and other resources, techniques for proofing and editing, and review of grammar and punctuation are integrated in the content (PR: AT 224, and AT 225 and AT 244 or Permission) (CR: AT 224, 225)

**AT 246 – Radiology Transcription.** 2 Credits. Transcription of authentic physician-dictated reports related to radiology with emphasis on development of accuracy and medical knowledge for transcription of soft tissue and bone x-rays, contrast material and interventional radiology, nuclear medicine, ultrasound, computerized tomography, and magnetic resonance imaging. Use of reference materials and other resources, techniques for proofing and editing, and review of grammar and punctuation are integrated in the content. (PR: AT 224, 225, 244 or permission) (CR: AT 224, AT 225)

**AT 247 – Combination of General Surgery/Gastroenterology Transcription.** 2 Credits. Transcription of authentic physician-dictated reports related to gastroenterology with emphasis on development of accuracy and medical knowledge for transcription of admission notes, emergency room notes, history and physical examinations, consultations, operative reports, and discharge summaries. Use of reference materials and other resources, techniques for proofing and editing, and review of grammar and punctuation are integrated in the content. (PR: Student must complete AT 244 with a grade of C or better)

**AT 248 – Cardiology Transcription.** 2 Credits. Transcription of authentic physician-dictated reports related to cardiology with emphasis on development of accuracy and medical knowledge for transcription of autopsies, gross descriptions, and microscopic descriptions. Use of reference materials and other resources, techniques for proofing and editing, and review of grammar and punctuation are integrated in the content. (PR: Students must complete AT 244 with a grade of C or better)

**AT 249 – Orthopedics Transcription.** 2 Credits. Transcription of authentic physician-dictated reports related to orthopedics with emphasis on development of accuracy and medical knowledge for transcription of autopsies, gross descriptions, and microscopic descriptions. Use of reference materials and other resources, techniques for proofing and editing, and review of grammar and punctuation are integrated in the content. (PR: Students must complete AT 244 with a grade of C or better)

**AT 250 – Medical Transcription Internship.** 1 Credit. The student is placed in a facility where medical transcription is performed (hospital, clinic, physician's office, transcription company, or a combination of these sites). The student transcribes under the supervision of the site's medical transcription administrator. (PR: Permission)

**AT 251 – OB/GYN Transcription.** 2 Credits. Transcription of authentic physician-dictated reports related to obstetrics and gynecology with emphasis on development of accuracy and medical knowledge for transcription of history and physical examinations, discharge summaries, and operative reports. Use of reference materials and other resources, techniques for proofing and editing, and review of grammar and punctuation are integrated in the content. (PR: Students must complete AT 244 with a grade of C or better)

# COURSE DESCRIPTIONS

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**AT 252 – Specialty Transcription.** 2 Credits. Transcription of a variety of authentic physician-dictated reports related to urology; nephrology; ears, nose, and throat (ENT); general surgery; neurology; ophthalmology; and plastic surgery. Use of reference materials and other resources, techniques for proofing and editing, and review of grammar and punctuation are integrated in the content. (PR: Students must complete AT 244 with a grade of C or better)

**AT 253 – Medical Transcription.** 3 Credits. Preparation of medical documents dictated on electronic media. (PR: AT 136 and AH 151)

**AT 255 – Desktop Publishing.** 3 Credits. Study of desktop publishing concepts and techniques, and application of basic principles of design and layout using desktop publishing software. (PR: IT 101 or IT 101E)

**AT 261 – Integrated Document Formatting.** 3 Credits. Production of integrated documents with an emphasis on formatting, proofreading, and editing techniques and practices. (PR: AT 114)

**AT 265 – Administrative Office Procedures.** 3 Credits. This course focuses on promoting an understanding of office procedures, providing information on business principles, and promoting a high standard of ethics applicable to any business environment. Students are required to use e-mail, Internet, make a presentation, design their resume, and complete other office simulations. (PR: AT 136)

**AT 280-287 – Special Topics.** 1 to 4 Credits. Study of content not normally covered in other courses. (PR: Enrollment with permission of program coordinator or course instructor.)

**AT 290 – Internship.** 3 Credits (CR/NC). Supervised on-the-job training for Administrative Technology students. Student must successfully complete 200 hours of appropriate office experience. (PR: Complete 45 credit hours toward AT degree, or permission) Offered Spring Semester only.

## ALLIED HEALTH (AH)

**AH 100 – Careers in Health Care.** 3 Credits. This course is designed to educate the student with respect to the healthcare profession, along with specific programs offered by Mountwest. This course covers subjects such as healthcare economics/management, employee relations, informal organizations, communications, and the work environment. Guest Speakers from the healthcare field, are featured for an open forum of discussion.

**AH 101 – Personal Health and Wellness.** 1 Credit. This cap course is designed to allow the student to set up their own personal health and wellness plan using resources available to the student. These resources may involve use of an organized recreation center, outside activities (tennis, walking, running), inside activities (bowling, racquetball, dancing) or other activities the student chooses.

**AH 103 – Entrepreneurship in Health Professions.** 3 Credits. This class introduces the allied health professional to entrepreneurship. Topics include choosing, starting, and running a healthcare business, as well as, marketing, pricing, and sales. (PR: REA 0098 or ACT Reading 18 or SAT Reading 421 or ACCUPLACER Reading 80)

**AH 151 – Medical Terminology.** 3 Credits. Introduction to basic techniques of medical word building principles and to the language used within health care systems. (PR: REA 098 or ACT Reading 18 or SAT Reading 421 or ACCUPLACER Reading 80.)

**AH 200 – Intro to Health Care Organization.** 3 Credits. This course is designed for students who seek an understanding of the administration, organization, and delivery of health care in the United States. This course studies the organizational structures, type of governance, types of diversity, and management issues of the American health care system. (PR: REA 098)

**AH 204 – Legal and Ethical Issues in Health Occupations.** 3 Credits. Legal and Ethical Issues in Health Occupations provides allied health students with knowledge and references on legal issues in health care, ethical issues and common areas of liability and litigation. This course covers issues in both administrative and medical records, clinical laboratory, medical equipment, patient care and conflict management. This class focuses on legal and ethical dilemmas to aid the health care professional developing critical thinking skills to resolve issues commonly encountered in the workplace. (PR: REA 098 or ACT Reading 18 or SAT Reading 421 or ACCUPLACER Reading 80.)

**AH 205 – Principles of Disease.** 3 Credits. This course has been designed to introduce students to the principles and issues of disease in a manner that will be both significant for understanding the disease process and relevant to allied health careers. Students will learn the cause and transmission of diseases, host response to the disease process, and their impact on social and political issues. (PR: BIOL 257, 258, 260)

**AH 207 – Infection Control for Health Professionals.** 3 Credits. This course will provide the learner with an overview and understanding of the fundamentals of communicable diseases. Students will be presented with information on the microbiology of contagious pathogens, disease transmission, and infection control measures to prevent or stop the spread of communicable diseases. Emphasis will be placed on the pathogens that are likely to be encountered in new or re-emerging infectious diseases.

**AH 216 – Basic Pharmacology.** 3 Credits. An introduction to the study of drugs, including mechanisms of actions, therapeutic effects, and their role in treating disease. (PR: REA 098 or ACT Reading 18 or SAT Reading 421 or ACCUPLACER Reading 80.)

**AH 217 – Personal Fitness Trainer.** 4 Credits. This course is designed to prepare and qualify students to work as personal trainers. The course bridges the gap between exercise science related course work and the practical application skills of personal training. The students will learn how to properly screen and evaluate clients for safe successful goal attainment; and successfully sell and manage personal trainer services. Information on eligibility for a Personal Training Certification is provided. (PR: REA 098 or ACT 18 or SAT Reading 421 or ACCUPLACER Reading 80)

**AH 220 – Basic Nutrition.** 3 Credits. Introduction to nutrition, stressing characteristics of nutrients and their food sources. Examines digestion, absorption and metabolism of nutrients. Covers individualized diet analysis and current interest topics such as weight management and some disease therapies. (PR: REA 098 or ACT Reading 18 or SAT Reading 421 or ACCUPLACER Reading 80.)

# COURSE DESCRIPTIONS

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**AH 226 – Respiratory Therapy Pharmacology.** 3 Credits. Study of general principles of respiratory pharmacology, including drug types, drug groups, methods of administration, dosage, effects, indication, contraindication, and regulations. (PR: Admission to Respiratory Therapy Program and AH 151) (Offered Fall Semester only)

**AH 280-281 – Special Topics.** 1 to 4 Credits. Study of content not normally covered in other courses. (PR: Enrollment with permission of program coordinator or course instructor)

**AH 284-289.** 1-5 Credits. These courses are designed to present various topics in the field of Allied Health.

**AH 299 – Health Science Capstone.** 1 Credit. This course guides students in the completion and documentation of the general education portfolio.

## AMERICAN SIGN LANGUAGE (ASL)

**ASL 101 – American Sign Language I.** 3 Credits. This course takes a functional-notational approach to learning American Sign Language (ASL), a language used by Deaf people in North America. Materials on basic conversational aspects in ASL will be introduced, such as introducing oneself, exchanging personal information, talking about surroundings, where you live, and your family and various activities. Students will acquire skills in receptive and expressive language functions in interactive contexts, in getting attention, negotiating a signing environment, and exchanging, confirming and correcting information, using appropriate phonological, lexical, syntactical, semantical, and pragmatic aspects of American Sign Language. (PR: REA 098 or ACT Reading 18 or SAT Reading 421 or ACCUPLACER Reading 80.)

**ASL 101L – ASL Lab I.** 2 Credits. This course provides an opportunity to enhance acquisition of the fundamental elements of American Sign Language. Emphasis is placed on the progressive development of basic expressive and receptive skills through the use of supplementary learning media and materials. (CR: ASL 101)

**ASL 102 – American Sign Language II.** 3 Credits. This course is a continuation of ASL I. Materials on basic conversational aspects in ASL will be introduced, such as giving directions, describing others, making requests, talking about family and occupations, attributing qualities to others, and talking about routines. Students will acquire skills in receptive and expressive language functions in interactive contexts, in not only getting attention, negotiating a signing environment, and exchanging, confirming and correcting information, but also expressing degrees of uncertainty, and asking for clarification and repetition, using appropriate phonological, lexical syntactical, and pragmatic aspects of American Sign Language. (PR: ASL 101)

**ASL 102L – ASL Lab II.** 1 Credit. This course provides an opportunity to enhance acquisition of the fundamental elements of American Sign Language. Emphasis is placed on the progressive development of basic expressive and receptive skills through the use of supplementary learning media and materials. (PR: ASL 101, ASL 101L; CR: ASL 102)

**ASL 103 – ASL Fingerspelling.** 3 Credits. This course concentrates on developing expressive and receptive fluency in the usage of the American manual alphabet, a wide variety of numbering systems, lexically borrowed signs, and acronyms within natural American Sign Language discourse. The basic principles and skills of ASL are employed through the use of non-verbal instruction. Emphasis is placed on the fostering of fluid, proper production, as well as recognition and application of rules and common patterns related to fingerspelling, numbering, loan signs, and acronyms with ASL.

**ASL 105 – American Deaf Community.** 3 Credits. Students in this course will study and apply literary analysis and criticism to literary and artistic works on deafness by individuals who are deaf. Topics on the meaning of deafness, presentations and representations of deafness. American Sign Language, and Deaf people in society are explored through literary approaches. Through examination and application of literary theories, students will develop an appreciation of the complexities of meanings that deaf individuals develop during the course of experiencing, living and identifying with, and reflecting on deafness. This class uses an all discussion format, with students analyzing literary and artistic works and developing ideas. (PR: REA 108 or ACT Reading 18 or SAT Reading 421 or ACCUPLACER Reading 80)

**ASL 110 – American Deaf Culture.** 3 Credits. This course provides an overview of concepts and studies on American Deaf culture, and current issues facing the American Deaf culture.

**ASL 115 – Deaf and ASL Art & Literature.** 3 Credits. This course will study and apply literary analysis and criticism to literary and artistic works on deafness by individuals who are deaf. Topics on the meaning of deafness, presentations and representations of deafness, American Sign Language, and deaf people in society are explored through literary approaches. Through examination and application of literary theories, students will develop an appreciation of the complexities of meanings that deaf individuals develop during the course of experiencing, living and identifying with and reflecting on deafness. This class uses a discussion format, with students analyzing literary and artistic works and developing ideas.

**ASL 120 –** 1 Credit. Introduces the fundamentals of Religious ASL signs used by the Deaf Community, including basic vocabulary, syntax, fingerspelling, and non-manual signals. Course focuses on communicative competence. Introduces cultural knowledge and increases understanding of the Deaf Community within the religious setting.

**ASL 125 – Medical Signs.** 3 Credits. Introduces the fundamentals of Medical ASL signs used by the Deaf Community, including basic vocabulary, syntax, fingerspelling, and non-manual signals. Course focuses on communicative competence. Introduces cultural knowledge and increases understanding of the Deaf Community within the medical setting.

**ASL 201 – American Sign Language III.** 3 Credits. This course is a continuation of ASL II. It covers topics on locating things around the house; complaining, making suggestions and requests, and provides a cumulative review of the units studies. (PR: ASL 101 and ASL 102 and ASL 201)

# COURSE DESCRIPTIONS

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**ASL 202 – American Sign Language IV.** 3 Credits. The course is a continuation of ASL 102. It covers topics on times of employment, work, relationships, personal job experiences, job market, and Deaf employment. (PR: ASL 101, ASL 102 and ASL 201)

**ASL 202L – ASL Lab IV.** 1 Credit. This course provides an opportunity to enhance acquisition of the fundamental elements of American Sign Language. Emphasis is placed on the progressive development of basic expressive and receptive skills through the use of supplementary learning media and materials. (PR: ASL 201/201L; CR: ASL 202)

**ASL 205 – American Deaf Community History.** 3 Credits. This course provides a historical overview of deaf community history in America from the seventeenth to the twenty-first centuries. (ASL 103)

**ASL 210 – Deaf People in American History.** 3 Credits. This course provides an overview of deaf people in American history from the eighteenth to the twenty-first centuries. (PR: ASL 105, ASL 110 and ASL 105)

**ASL 215 – ASL Visual Music.** 2 Credits. Course will teach students how to perform songs in ASL. Techniques including Visual Vernacular, Mouthing Morphemes, Acting and visual gestural skills and use of classifiers will be addressed. (PR: ASL 101 and 102)

**ASL 220 – Resources for the Deaf Community.** 3 Credits. This course provides an overview of resources concerning the American deaf community. Course will include guest speakers and field trips.

**ASL 280-285 – Special Topics.** 1-6 Credits. Study of content not normally covered in other courses. Enrollment with permission of the Associate Dean, Program Coordinator or course instructor. (PR: Permission)

**ASL 290 – Applied Issues Concerning the Deaf Community.** 3 Credits. This course provides an overview of research issues concerning the American Deaf community and its history, American Deaf culture and its history, and American Sign Language and its history. (PR: ASL 101, ASL 102, ASL 105, ASL 110, ASL 115, AL 201, AL 205, and AL 220)

## ART

**ART 101 – Introduction to the Visual Arts.** 3 Credits. This course is an introduction to the understanding of visual art by exploring ways in which works of art are made and discovering the language used to discuss them. The course provides definitions of relevant terms that students will use to learn the processes of art making and the historical and cultural contexts for their development.

## AVIATION TECHNOLOGY (AVT)

**AVT 100 – Aviation Technology.** 3 Credits. Designed to provide the student with the basic knowledge, skills, and attitudes about aviation that will enable them to function in an aerospace society.

**AVT 101 – Fundamentals of Aviation.** 3 Credits. An overview class designed to expose the students to an aviation career. It includes an orientation

to career opportunities, forces of flight, the airframe and power plant, navigation techniques, history of flight and initial flight training. (PR/CO: Program Coordinator Permission)

**AVT 110 – Principles of Navigation.** 3 Credits. A study of navigational methods and techniques as applied to air transportation. Included is a study of navigation symbols, plotting of air routes for aircraft, the E6B navigation computer, enroute low altitude charts, sectional aeronautical charts, flight logs for VFR and IFR flights, pilotage techniques, radio aids to navigation, VOR navigation, and dead reckoning.

**AVT 125 – Aviation Meteorology.** 3 Credits. Designed to give the student an understanding of weather phenomena as it affects the aviation environment. (PR: AVT 100 or Permission)

**AVT 130 – Basic Aerodynamics.** 3 Credits. A study of airplane and helicopter aerodynamics. Included are an analysis of the design of an airfoil, forces acting on an airfoil, angle of attack and lift, forces acting on the airplane, thrust, drag, weight, lift, and wingtip vortices. Additional study will include Newton's Laws of Motion and Force, and Bernoulli's Principle of Pressure.

**AVT 150 – Private Pilot Ground and Flight Training.** 6 Credits (CR/NC). A review of elementary flight operations including basic aircraft control, elementary radio navigation, or traffic control procedures, cross-country operations, and solo flight. Associated ground instruction includes a review of knowledge areas required for completion of the Private Pilot written Certificate with Airplane Single Engine Land Class rating. At the successful completion of this course the student will have gained the aeronautical knowledge and experience necessary to apply for an FAA Private Pilot Certificate. Students must acquire the FAA Private Pilot license to receive course credit. (PR: Students must have current FAA flight physical and permission from Program Coordinator.)

**AVT 151 – Private Pilot Ground and Flight Training I.** 2 Credits. A review of elementary flight operations including basic aircraft control, elementary radio navigation, air traffic control procedures, cross-country operations, and solo flight. Associated ground instruction includes a review of knowledge areas required for completion of the Private Pilot when Certificate with Airplane Single Engine Land Class rating. At the successful completion of this course the student will have gained the aeronautical knowledge and experience necessary to advance to Private Pilot II. (PR: Students must have current FAA flight physical and permission of the Program Coordinator)

**AVT 152 – Private Pilot Ground and Flight Training II.** 2 Credits. A review of elementary flight operations including basic aircraft control, elementary radio navigation, air traffic control procedures, cross-country operations, and solo flight. Associated ground instruction includes a review of knowledge areas required for completion of the Private Pilot when Certificate with Airplane Single Engine Land Class rating. At the successful completion of this course the student will have gained the aeronautical knowledge and experience necessary to advance to Private Pilot II. (PR: Students must have current FAA flight physical, grade of C or higher for AVT 151 and permission of the Program Coordinator)

# COURSE DESCRIPTIONS

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**AVT 153 – Private Pilot Ground and Flight Training III.** 2 Credits. A review of elementary flight operations including basic aircraft control, elementary radio navigation, air traffic control procedures, cross-country operations, and solo flight. Associated ground instruction includes a review of knowledge areas required for completion of the Private Pilot when Certificate with Airplane Single Engine Land Class rating. At the successful completion of this course the student will have gained the aeronautical knowledge and experience necessary to advance to Private Pilot II. (PR: Students must have current FAA flight physical, grade of C or higher for AVT 152 and permission of the Program Coordinator)

**AVT 175 – Instrument Flight Training.** 4 Credits (CR/NC). Flight and simulator training in those instrument pilot operations necessary to safely and accurately operate an airplane under instrument flight rules within the National Airspace System. Associated ground instruction includes completion of the instrument pilot written examination. At the successful completion of this course the student will have gained the aeronautical knowledge necessary for the addition of an instrument-airplane rating to his/her existing pilot certificate. Students must acquire the FAA instrument rating to receive course credit. (PR: FAA Private Pilot Certificate and Program Coordinator permission)

**AVT 176 – Instrument Flight Training I.** 2 Credits. Flight and simulator training in those instrument pilot operations necessary to safely and accurately operate an airplane under instrument flight rules within the National Airspace System. Associated ground instruction includes completion of the instrument pilot written examination. At the successful completion of this course the student will have gained the aeronautical knowledge necessary for the addition of an instrument-airplane rating to advance to Instrument Ground and Flight Training II. (PR: FAA Private Pilot Certificate and permission of the Program Coordinator)

**AVT 177 – Instrument Flight Training II.** 2 Credits. Flight and simulator training in those instrument pilot operations necessary to safely and accurately operate an airplane under instrument flight rules within the National Airspace System. Associated ground instruction includes completion of the instrument pilot written examination. At the successful completion of this course the student will have gained the aeronautical knowledge necessary for the addition of an instrument-airplane rating to his/her existing pilot certificate. (PR: FAA Private Pilot Certificate, a grade of C or better in AVT 176 and Program Coordinator permission.)

**AVT 200 – Commercial Pilot Flight Training.** 6 Credits (CR/NC). Instruction covering advanced navigation, FAA regulations, aircraft construction and performance data including solo and dual cross-country and complex airplane time. Students must acquire the FAA commercial pilot's license to receive course credit. (PR: FAA Private Pilot Certificate or Program Coordinator permission)

**AVT 201 – Commercial Pilot Flight Training I.** 2 Credits. Beginning instruction covering advanced navigation, FAA regulations, aircraft construction, and performance data including solo and dual cross-country and complex airplane time. (PR: FAA Private Pilot Certificate or Program Coordinator permission)

**AVT 202 – Commercial Pilot Flight Training II.** 2 Credits. Intermediate instruction covering advanced navigation, FAA regulations, aircraft construction, and performance data including solo and dual cross-country and complex airplane time. (PR: FAA Private Pilot Certificate, a grade of "C" or higher in AVT 201, or Program Coordinator permission)

**AVT 203 – Commercial Pilot Ground and Flight Training III.** 2 Credits. Instruction covering advanced navigation, FAA regulations, aircraft construction, and performance data including solo and dual cross-country and complex airplane time. Students must acquire the FAA commercial pilot's license to receive course credit. (PR: FAA Private Pilot Certificate, a grade of C or higher in AVT 201 or Program Coordinator permission)

**AVT 210 – Airport Management and Operations.** 3 Credits. Designed to give the students the fundamentals of management in the aviation environment. (PR: BUS 202 or Permission)

**AVT 215 – Airplane Power Plant and Systems.** 3 Credits. A comprehensive review basic airplane design, systems and power plants. A study of the airframe, flight controls, wing flap system, landing gear, engines, propeller, fuel system, electrical system, airplane lighting, pilot-static system, avionics, vacuum system and instruments, and weight and balance.

**AVT 220 – Aviation Safety.** 3 Credits. A study of ground safety and flight safety aspects of aviation. Ground safety will include accident cause factors and prevention. Flight safety will include wake turbulence, hazards to flight, and pilot responsibility. Pilot reports will include a study of the aviation safety reporting program, aircraft accident and incident reporting, and midair collision reporting.

**AVT 230 – Multi-Engine Rating (ME).** 4 Credits. Instruction, flight training and practice dealing with those subjects and flight operations pertinent to a multi-engine rating. Associated ground instruction will include exploring the multi-engine rating, human factors, normal operations, aircraft systems, weight and balance, and performance issues. Flight elements will include multi-engine operations, basic maneuvers (day and night), engine out operations, emergency operations, cross country flight (day and night), approaches all engines and one engine off. (PR/CO: Permission)

**AVT 231 – Multi-Engine Rating (ME) I.** 2 Credits. The first of two courses containing: instruction, flight training, and practice dealing with those subjects and flight operations pertinent to a multi-engine rating. Associated ground instruction will include exploring the multi-engine rating, human factors, normal operations, aircraft systems, weight and balance, and performance issues. Flight elements will include multi-engine operations, basic maneuvers (day and night), engine out operations, emergency operations, cross country flight (day/night), approaches all engines and one engine off. (PR/CO: Permission)

**AVT 232 – Multi-Engine Rating (ME) II.** 2 Credits. The second of two courses containing: instruction, flight training, and practice dealing with those subjects and flight operations pertinent to a multi-engine rating. Associated ground instruction will include exploring the multi-engine rating, human factors, normal operations, aircraft systems, weight and balance, and performance issues. Flight elements will include multi-engine operations, basic maneuvers (day and night), engine out operations, emergency operations, cross country flight (day and night), approaches all engines and one engine off. (PR/CO: Permission)

# COURSE DESCRIPTIONS

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**AVT 235 – Human Fact Affecting Fit.** 3 Credits. A comprehensive study of fitness for flight, effects of altitude, hyperventilation in flight, carbon monoxide poisoning in flight, illusions in flight, vision in flight, judgement aspects of collision avoidance, fatigue, stress, illness, medication, alcohol, hypoxia, smoking, ear block, sinus block, motion sickness, disorientation (vertigo) and aeromedical factors.

**AVT 240 – Multi-Engine Instructor Rating.** 4 Credits. Flight and simulator training in those instrument pilot operations necessary to safely and accurately operate a multi-engine airplane under instrument flight rules within the National Airspace System. Flight elements will include multi-engine operations, basic maneuvers (day and night), engine out operations, emergency operations, cross country flight (day and night), approaches all engines and one engine off in an instrument flight environment. (PR/CO: Permission)

**AVT 241 – Multi-Engine Instructor Rating I.** 2 Credits. The first of two courses incorporating flight and simulator training in those instrument pilot operations necessary to safely and accurately operate a multi-engine airplane under instrument flight rules within the National Airspace System. Flight elements will include multi-engine operations, basic maneuvers (day and night), engine out operations, emergency operations, cross country flight (day and night), approaches all engines and one engine off in an instrument flight environment. (PR/CO: Permission)

**AVT 242 – Multi-Engine Instructor Rating II.** 2 Credits. The second of two courses incorporating flight and simulator training in those instrument pilot operations necessary to safely and accurately operate a multi-engine airplane under instrument flight rules within the National Airspace System. Flight elements will include multi-engine operations, basic maneuvers (day and night), engine out operations, emergency operations, cross country flight (day and night), approaches all engines and one engine off in an instrument flight environment. (PR/CO: Permission)

**AVT 250 – Airline Transport Rating (ATP).** 6 Credits (CR/NC). An Airline Transport Pilot Certificate (ATP) is the highest level of aircraft pilot certificate/license. Those certified are authorized to act as pilot-in-command of a scheduled air carrier's aircraft. Instruction deals with those subjects and flight operations pertinent to an airline transport rating to include multi-engine time, weight and balance, performance issues, flight maneuvers (day and night), engine out operations, emergency operations, cross country flight (day and night), instrument flight and landing approaches. (PR/CO: Permission)

**AVT 251 – Airline Transport Rating (ATP) I.** 2 Credits. The first of three courses for students wishing to obtain an Airline Transport Pilot Certificate (ATP). Those certified are authorized to act as pilot-in-command of a scheduled air carrier's aircraft. Instruction deals with subjects and flight operations pertinent to an airline transport rating to include multi-engine time, weight and balance, performance issues, flight maneuvers (day and night), engine out operations, emergency operations, cross country flight (day and night), instrument flight and landing approaches. (PR/CO: Permission)

**AVT 252 – Airline Transport Rating (ATP) II.** 2 Credits. The second of three courses for students wishing to obtain an Airline Transport Pilot Certificate (ATP). Those certified are authorized to act as pilot-in-command of a scheduled air carrier's aircraft. Instruction deals with subjects and flight operations pertinent to an airline transport rating to include multi-engine time, weight and balance, performance issues, flight maneuvers (day and night), engine out operations, emergency operations cross country flight (day and night), instrument flight and landing approaches. (PR/CO: Permission)

**AVT 253 – Airline Transport Rating (ATP) III.** 2 Credits. The third of three courses for students wishing to obtain an Airline Transport Pilot Certificate (ATP). Those certified are authorized to act as pilot-in-command of a scheduled air carrier's aircraft. Instruction deals with subjects and flight operations pertinent to an airline transport rating to include multi-engine time, weight and balance, performance issues, flight maneuvers (day and night), engine out operations, emergency operations, cross country flight (day and night), instrument flight and landing approaches. (PR/CO: Permission)

**AVT 254 – ATP Advanced Training.** 2 Credits. This course is designed as a capstone course to the Airline Transport Pilot Certificate (ATP). The ATP is the highest pilot rating obtainable. Those certified are authorized to act as pilot-in-command of a scheduled air carrier's aircraft. Course instruction will be tailored to new and revised flight requirements and regulations required by the Federal Aviation Authority (FAA) (PR/CO: Permission)

**AVT 260 – Certified Flight Instructor.** 4 Credits. (CR/NC) Instruction, flight training, and practice teaching dealing with those subjects and flight operations pertinent to a flight instructor rating. Associated ground instruction includes completion of the Flight Instructor written examination. At the successful completion of this course the student will have gained the aeronautical knowledge and experience necessary to apply for the addition of an Instructor-Airplane rating to his/her existing pilot certificate. Students must acquire the FAA instrument rating to receive course credit. (PR: AVT 200 or Program Coordinator Permission)

**AVT 261 – Certified Flight Instructor (CFI).** 2 Credits. (CR/NC) Instruction, flight training, and practice teaching dealing with those subjects and flight operations pertinent to a flight instructor rating. Associated ground instruction includes completion of the Flight Instructor written examination. At the successful completion of this course the student will have gained the aeronautical knowledge and experience necessary to advance to Certified Flight Instructor II. (PR: AVT 200 or Permission)

**AVT 262 – Certified Flight Instructor (CFI) II.** 2 Credits. Instruction, flight training, and practice teaching dealing with those subjects and flight operations pertinent to a flight instructor rating. Associated ground instruction includes completion of the Flight Instructor written examination. At the successful completion of this course the student will have gained the aeronautical knowledge and experience necessary to apply for the addition of an Instructor-Airplane rating to his/her existing pilot certificate. (PR: AVT 200, grade of C or higher in or AVT 261 or Permission)



# COURSE DESCRIPTIONS

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## **AVT 270 – Certified Flight Instructor Instrument (CFII).** 4 Credits.

Instruction, flight training and practice teaching dealing with those subjects and flight operations pertinent to a flight instrument instructor rating. At the successful completion of this course the student will have gained the aeronautical knowledge and experience necessary to apply for the addition of an Instrument Instructor-Airplane rating to his/her existing pilot certificate. Students must acquire the FAA Instrument Instructor rating to receive course credit. (PR/CO: Permission)

## **AVT 271 – Certified Flight Instructor Instrument (CFII) I.** 2 Credits.

The first of two courses providing instruction, flight training, and practice teaching dealing with those subjects and flight operations pertinent to a flight instrument instructor rating. At the successful completion of this course the student will have gained the basic aeronautical knowledge and experience leading toward an Instrument Instructor – Airplane rating on his/her existing pilot certificate. (PR/CO: Permission)

## **AVT 272 – Certified Flight Instructor Instrument (CFII) II.** 2 Credits.

The second of two courses providing instruction, flight training, and practice teaching dealing with those subjects and flight operations pertinent to a flight instrument instructor rating. At the successful completion of this course the student will have gained the basic aeronautical knowledge and experience leading toward an Instrument Instructor – Airplane rating on his/her existing pilot certificate. (PR/CO: Permission)

**AVT 280-283 – Special Topics.** 1-4 Credits. Lectures, laboratories, independent studies, or combinations of selected topics in aviation management, flight, aeronautics, and airport operations. (PR: Consent of the professor and approval of the program leader)

**AVT 291 – Aviation Practicum.** 2 Credits (CR/NC). Designed as a refresher course for those flight students who require remedial flight instruction up to and including Commercial Pilot License. Instruction will focus on returning the student to the level of pilot competency obtained prior to a justified extended absence from flight training. Upon the successful completion of this course, the student will have gained the aeronautical knowledge and experience necessary to continue flight training for the aviation rating or license being pursued. (PR/CO: Permission)

**AVT 296 – Advanced Aviation Practicum.** 2 Credits (CR/NC). Designed as a refresher course for those flight students who require remedial flight instruction beyond the Commercial Pilot License up to and including the Airline Transport Pilot License utilizing multi-engine or high performance aircraft. Instruction will focus on returning the student to the level of pilot competency obtained prior to a justified extended absence from flight training. Upon the successful completion of this course, the student will have gained the aeronautical knowledge and experience necessary to continue flight training for the aviation rating or license being pursued. (PR/CO: Permission)

## **BIOLOGICAL SCIENCES (BIOL)**

**BIOL 101 – Unified Principles of Biology.** 3 Credits. A consideration of how processes of life are related and how the principles of biology are important in the everyday life of man. Emphasis will center on current scientific issues that face human life. (PR: REA 098 or ACT Reading 18 or SAT Reading 421 or ACCUPLACER Reading 80.)

**BIOL 101L – Unified Principles of Biology Laboratory.** 1 Credit. The laboratory component of Unified Principles of Biology is an introductory biology lab course. Basic biological principles and how these principles affect the everyday life of man will be examined. (CO: BIOL 101)

**BIOL 102 – Introduction to Human Biology.** 3 Credits. This course explores the principles of biology as it relates to humans. This concept provides the student with a practical understanding of their bodies, as well as, their role in the environment. Emphasis is placed on scientific method, all biology, human anatomy, human physiology, genetics, disease and the aging process.

**BIOL 140 - Age of Dinosaurs.** 3 Credits. This course introduces students to the scientific principles behind dinosaur paleontology. The study of dinosaurs is a vehicle for such topics as, the scientific method, fossilization and deep time, skeletal anatomy, evolutionary theory, and climate change. Students will learn to think critically and recognize that science is more about asking questions than giving answers.

**BIOL 210 – Introduction to Clinical Microbiology.** 3 Credits. An introduction to the role of microorganisms in the disease process.

**BIOL 211 – Microbiology for Respiratory Care.** 3 Credits. An introduction to the role of microorganisms in the disease process for the respiratory therapy student.

**BIOL 221 – Structural Kinesiology.** 4 Credits. This course presents a working knowledge of biomechanical principles for use in the evaluation and treatment of musculoskeletal dysfunction. It will address the biomechanics of musculoskeletal tissues and structures, the biomechanics of the most commonly injured human joints, and applied biomechanics. Special emphasis will be placed on musculoskeletal anatomy and physiology as each student will be responsible for learning origins, insertions, and actions of the prime movers of the primary articulation. (PR: BIOL 260)

**BIOL 240 – Principles in Cell Biology.** 4 Credits. This course is an introduction to the aspects of cell biology and biochemistry in bioscience and allied health. Topics include organic chemistry, enzymology, biochemistry, molecular biology, proteomics, and genetics. (PR: BIOL 101 and BIOL 101L)

**BIOL 245 – Physiology of Exercise.** 3 Credits. This course presents a working knowledge of the physiology of exercise as it relates to the function of the body in the state of, and the adaptations from, the application of exercise. Emphasis will be placed on bioenergetics and energy metabolism as well as the contributions and adaptations of the nervous, skeletal, muscular, circulatory, and respiratory systems. A review of testing for adaptation as well as various population will also be assessed. (PR: BIOL 265)

# COURSE DESCRIPTIONS

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**BIOL 255 – Introduction to Histology.** 3 Credits. An introduction to the study of cellular structure and physiology in human tissues and the arrangement of tissues in organ systems. (PR: BIOL 257 or BIOL 260 and BIOL 265)

**BIOL 257 – Introduction to Anatomy & Physiology.** 3 Credits. This course is designed to build the student's understanding of the most basic body structures, how these structures function, dysfunction of the structures, common disease, testing and terminology. This course, using a systems approach, will provide the student with the basic understanding of anatomical structure and function/dysfunction.

**BIOL 258 – Principles of Anatomy and Physiology.** 4 Credits. This course is designed to build the student's understanding of the most basic body structures, common disease, testing, and terminology. This course, using a systems approach, will provide the student with the basic understanding of anatomical structure and function/dysfunction. Laboratory component included.

**BIOL 259 – Basic A & P Lab Module.** 1 Credit. This is an introductory anatomy and physiology laboratory course. Case studies based on anatomical dysfunction will be examined. Basic physiological principles will be applied in a laboratory setting. (PR: BIOL 257 or equivalent)

**BIOL 260 – Applied Human Anatomy.** 4 Credits. This course is designed for the student to acquire a basic working knowledge of the functional structure of the human body. It is designed for students in pursuit of professional health programs such as nursing, med tech, dietetics, cardiac rehab, and physical therapy assistant. (PR: Successful completion of BIOL 257 with a "C" or better or ACT 19)

**BIOL 265 – Applied Human Physiology.** 4 Credits. This course is designed to introduce the student to the function of the various physiological systems in humans and have the student perform lab exercises to demonstrate these concepts. (PR: Passing grade of C or better in BIOL 257 or BIOL 260 or a minimum composite score of 18 on the ACT)

**BIOL 280-285 – Biology Special Topics.** 1-8 Credits. Study of content not normally covered in ordinary courses.

**BIOL 286-289 – Special Topics in Biology.** 1-5 Credits. These courses are designed to present various topics in the field of Biology.

## BIOMEDICAL INSTRUMENTATION TECHNOLOGY (BMT)

**BMT 110 – Safety in Healthcare.** 3 Credits. This course is a study of safe operative procedures that are required to be performed in the workplace. Students will be instructed on how to interpret OSHA safety standards as they pertain to industry.

**BMT 223 – Biomedical Instrumentation.** 3 Credits. This course is designed to help prepare the student to address biomedical instrumentation, calibration and measurement by blending electrical fundamental with the unique demands of the patient care and laboratory environment. Students will experience hands-on training with various patient care monitors and sensors as well as many types of diagnostic therapeutic and clinical laboratory equipment.

**BMT 225 – Biomedical Instrumentation II.** 3 Credits. This course will prepare students with the skills to work with biomedical instrumentation, calibration, maintenance, and repair by blending the electrical fundamental with the unique demands of the patient care and laboratory environment. Students will experience hands-on training with various patient care monitors and sensors as well as many types of diagnostic, therapeutic and clinical laboratory equipment. (PR: BMT 223)

**BMT 299 – Biomedical Internship.** 3 Credits. This course places the student in a work situation in order to gain practical work experience prior to seeking permanent employment. It correlates classroom instruction with real-world experience. (PR: Permission)

## BUSINESS (BUS)

**BUS 100 – Careers in Business.** 3 Credits. This course is designed to assist the student in recognizing and identifying specific business careers with respect to his/her individual interests and skills. The course and careers offered by Mountwest are examined and explored. (PR: REA 098 or ACT Reading 18 or SAT Reading 421 or ACCUPLACER Reading 80.)

**BUS 105 – Career Preparation.** 3 Credits. This course introduces students to the skills needed for workplace employability. Students will be introduced to critical workplace readiness skills such as: communication and reasoning, teamwork, personal finance, work place ethics, employer expectations, and proper career selection. Individuals will engage in role playing exercises, career interest inventories, draft a resume and participate in mock interviews. (PR: REA 098 or ACT Reading 18 or SAT Reading 421 or ACCUPLACER Reading 80.)

## CHEMISTRY (CHEM)

**CHEM 220 – General Chemistry.** 4 Credits. An introduction to chemical properties, basic concepts, and relationships demonstrated by laboratory experiments. (PR: MAT 120, MAT 121, MAT 144 or MAT 145)

## CLINICAL (CLIN)

**CLIN 101 – Clinical Practice I.** 1.33 Credits - This course is designed to introduce the student to the clinical facility and to clinical education. Opportunity is given for observation of the various aspects of respiratory care. Practice in gathering information from the patient record, patient evaluation, oxygen administration, and record keeping is provided. Techniques of cardiopulmonary resuscitation are covered with laboratory practice and evaluation. (CO: RTT 101 and RTT 101L)

**CLIN 102 – Clinical Practice II.** 2.670 Credits. This course is designed to introduce the student to aspects of Respiratory Procedures I and in Cardiopulmonary Evaluation I. Opportunity of respiratory care techniques such as oxygen therapy, humidity and aerosol therapy, aerosol drug therapy, and lung inflation therapy is provided. Opportunities for observation and supervised practice in the techniques used in electrocardiography are provided. (PR: CLIN 101)

# COURSE DESCRIPTIONS

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**CLIN 103 – Clinical Practice III.** 2.670 Credits. This course is designed to provide the student with additional experience in the practice of fundamental respiratory care techniques. Emphasis is given to the development of efficiently in the practice of these techniques. Opportunities for observation and strictly supervised practice in the techniques of arterial blood gas sampling and analysis are also provided. Also included is critical care observation. (PR: CLIN 102)

**CLIN 204 – Clinical Practice IV.** 4 Credits. This course is designed to provide opportunity for supervised practice of techniques used in electrocardiography and observation of hemodynamic measurement and monitoring are provided, as are those used in the critical care of cardiopulmonary patients. Additional experiences in the application of all previously covered respiratory care techniques are also provided. (PR: CLIN 103)

**CLIN 205 – Clinical Practice V.** 2.67 Credits. This course is designed to provide experiences and skill development in critical care of adult and neonatal patients is provided. The student will gain the experiential base for improved clinical problem solving skills within the scope of the respiratory therapist. Additional practice in the performance of pulmonary function testing and sleep studies. Emphasis is placed on Neonatal/Pediatric assessment and care. (PR: CLIN 204)

**CLIN 206 – Clinical Practice VI/Lab** 1.330 Credits. This course is designed to provide the student to practice techniques and procedures previously learned with limited supervision. Special attention is given with close supervision in the following areas: mechanical ventilation, airway management, ABG Sampling and analysis, and critical care respiratory therapy, pulmonary function testing and sleep studies. Emphasis will be placed in pulmonary rehab/home care and neonatal/pediatric respiratory care. (PR: CLIN)

**CLIN 207 – Clinical Practice VII.** 2.670 Credits. This course provides the student the opportunity to practice techniques and procedures previously learned with limited supervision. Special attention is given with close supervision in the following areas: mechanical ventilation, airway management, ABG sampling and analysis, and critical care respiratory therapy, pulmonary function testing and sleep studies. Emphasis is placed in pulmonary rehab/home care and neonatal/pediatric respiratory care. The student of this course will maintain daily records of all activities. Students will actively develop special rotations in such areas as pulmonary rehab, home care, sleep apnea labs, PFT labs, or other specific areas of interest. This specialty rotation will be a minimum of 40 hours. All other areas of clinical rotation will continue. (PR: CLIN 205)

## COLLEGE STUDIES (COL)

**COL 101 – New Student Seminar.** 3 Credits (CR/NC). COL 101 is designed as an introduction to college life and is intended for freshmen and new transfer students. The course provides students with an opportunity to adjust to the academic and social environment of college under the guidance of a faculty/staff mentor and in the presence of a small group of peers.

**COL 105 – Career Exploration.** 3 Credits. College 105 is a career orientation course specifically for high school students. The course is designed to assist students in developing career goals and designing a postsecondary educational pathway that will lead them into careers. This course will provide students with active orientation to career pathways, interpersonal communication skills, business writing skills, critical thinking and problem-solving skills and self-management skills. (PR: COL 101)

**COL 138 – College Study Skills.** 3 Credits. COL 138 provides academic preparation to help students improve study methods including textbook reading skills, note taking skills, listening procedures, and test taking skills. (PR: REA 098 or ACT Reading 18 or SAT Reading or ACCUPLACER Reading 80.)

**COL 280-285 – Special Topics.** 1-6 Credits. This course will consist of study of content not normally covered in other courses.

## COMMUNICATION (COM)

**COM 112 – Oral Communication.** 3 Credits. This course provides instruction and experience in preparation and delivery of presentations in public settings and group discussions. Emphasis is placed on research, preparation, delivery, and evaluation of extemporaneous, informative, persuasive, and special occasion public speaking. Upon completion, students will be able to design and deliver well-organized presentations and participate in group discussions with appropriate audiovisual support. (PR: READ 098 or ACT Reading 18 or SAT Reading 421 or ACCUPLACER Reading 80)

**COM 125 – Interpersonal Communication.** 3 Credits. This course is designed to give students the interpersonal skills to communicate effectively in the workplace. It will help build and enhance communication skills through active listening, verbal and nonverbal communication, managing conflict, critical thinking, understanding diversity and the effects of culture, and understanding how the imbalance of power can lead to difficulties within a workplace. (PR: REA 098 or ACT Reading 18 or SAT Reading 421 or ACCUPLACER Reading 80.)

**COM 130 – Mass Communication and Culture.** 3 Credits. This course is an overview of mass communication, which focuses on media history and critical media literacy. Students will investigate the relationship between mass culture and mass communication while learning the evolution of major US media channels (newspaper, TV, radio, internet, etc.). Students will also learn to distinguish between objective/critical and subjective/consumer relationships with the media. (PR: REA 098 or ACT Reading 18 or SAT Reading or ACCUPLACER Reading 80.)

**COM 230 – Principles of Public Relations.** 3 Credits. This course provides an overview of the public relations (PR) profession from its historic beginnings to its contemporary role in society. This course provides a foundation the public relations by exploring its definitions, history, theories, principles, strategic planning, management practices, and career possibilities (PR: REA 098 or ACT Reading 18 or SAT Reading 421 or ACCUPLACER Reading 80.)

**COM 280-283 – Special Topics.** 1 to 4 Credits. Study of content not normally covered in other courses. (PR: Enrollment with permission of division director or course instructor.)

# COURSE DESCRIPTIONS

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## COMPUTER AIDED DESIGN (CAD)

(Classes are taught at Cabell County Career Technology Center)

**CAD 111 – Computer-Aided Drafting for Interior Design.** 3 Credits. Introductory computer drafting using CAD incorporating fundamental drafting components, file management, floor plans, elevations, and 3-D model.

**CAD 211 – Advanced Computer Aided Interior Design.** 3 Credits. Advanced computer 3-D drawings in perspective and elevations. (PR: CAD 111)

## COMPUTER SCIENCE (CS)

**CS 100 – Introduction to IT Careers.** 3 Credits. An introduction to the Information Technology profession and career paths. The primary focus will be on programs offered by Mountwest and industry certifications as they relate to careers.

## CRIMINAL JUSTICE STUDIES (CJS)

**CJS 101 – Introduction to Public Safety.** 3 Credits. This course will teach students the philosophy, history, development of public safety institutions in a democratic society. The course introduces various public safety agencies and their organization and jurisdiction, reviews court processes, orients the student to a career in public safety, and identifies and explores current trends in the field. (PR: REA 098 or ACT Reading 18 or SAT Reading 421 or ACCUPLACER Reading 80)

**CJS 102 – Introductions to Corrections.** 3 Credits. This course will teach students the knowledge and skills necessary to enter the field of corrections. Students will learn about professional and ethical behavior, the structure of the American corrections system, law and corrections procedure, and possible career opportunities. (PR: REA 098 or ACT Reading 18 or SAT Reading 421 or ACCUPLACER Reading 80)

**CJS 111 – Law Enforcement Orientation.** 3 Credits. Philosophy, history, and development of law enforcement in a democratic society. Introduces various law enforcement agencies and their organization and jurisdiction, reviews court processes, orients the student to a law enforcement career, and identifies and explores current trends in the field.

**CJS 113 – Police Defense Tactics.** 2 Credits. Demonstration of methods of physical protection from persons armed with dangerous weapons and restraint of prisoners and mentally ill persons. Drills in a limited number of holds and come alongs and training in the use of baton and other special, disarmament, and defensive techniques. A practical application of the methods of self-protection.

**CJS 120 – Patrol Operations and Procedures.** 3 Credits. Covers the duties, extent of authority, and responsibilities of a uniformed law enforcement officer. Patrol philosophy and practices are outlined, and field techniques and their practical application are presented.

**CJS 122 – Police Arsenal and Weapons.** 3 Credits. Handling, care and use of firearms in police work. Lectures supplemented by an intensive range program in deliberate, point, and defense shooting.

**CJS 231 – Fundamentals of Criminal Law.** 3 Credits. Study of the elements of law and proof in crimes of frequent concern in law enforcement. Rules of criminal liability; elements of specific, commonly violated laws; and development and application of local, state, and federal laws. (PR: REA 098 or ACT Reading 18 or SAT Reading 421 or ACCUPLACER Reading 80)

**CJS 233 – Fundamentals of Criminal Investigation.** 3 Credits. Analysis of theory and techniques of an investigation, conduct at crime scenes, collection and preservation of physical evidence and testing employed by the police science laboratory. Emphasizes fingerprints, ballistics, documents, serology, photography, crime scenes and duties of a criminal investigator. (PR: REA 098 or ACT Reading 18 or SAT Reading 421 or ACCUPLACER Reading 80)

**CJS 234 – Criminology.** 3 Credits. This course examines the question of crime causation from legal, social, political, psychological, and theoretical perspectives. It introduces the nature of crime, statistics of criminal behavior, and explanations of criminal sanctions. (PR: CJS 101)

**CJS 235 – Police Organization and Administration.** 2 Credits. Principles of organization and management of law enforcement agencies. Concepts of organizational behavior and an understanding of the departmental planning process. The role of and components involved in responsible planning and executing procedures related to personnel, equipment budget, records, communications, and management.

**CJS 237 – Crime and Delinquency.** 3 Credits. Study of the development and causes of criminal behavior, social deviancy and crime. Criminological theories and the extent, variation and patterns of crime. Crime prevention techniques and specific pathological problems related to enforcement. Individual personality differences and their relationships to crime as well as recognizing and handling emotionally and mentally disturbed persons. (PR: CJS 101)

**CJS 239 – Criminal Procedure.** 3 Credits. Study of the rules of evidence at the operational level in law enforcement and criminal procedure in such areas as arrest, force, search and seizure, collection of evidence and discretion. Rules and types of evidence, constitutional law and criminal procedure most often affecting police personnel. (PR: CJS 101)

**CJS 242 – Community Relations in Criminal Justice.** 3 Credits. General orientation to the concepts of criminal justice professionals and community relations and the need to establish good working relations between them and the public. Offers an understanding of the complex factors involved in human relations: the nature of prejudice and discrimination, its effects, the interactions of changing society, the requirements of individual rights, the maintenance of peace and order and the changing police role. (PR: CJS 101)

**CJS 244 – Introduction to Criminalistics.** 2-4 Credits. Scientific aspects of criminal investigation. The role of the crime laboratory in the law enforcement organization, the value of physical evidence, and the need for understanding scientific crime detection. Emphasis on recording the crime scene; collection, identification, preservation and transportation of evidence and techniques of examining physical evidence.

# COURSE DESCRIPTIONS

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**CJS 246 – Criminal Justice Reports.** 3 Credits. Comprehensive familiarization with types and functions of criminal justice records, the role of research in the planning process and establishment and administration of a record bureau in criminal justice agencies. Includes form records, analysis and report writing; role and use of uniform crime reporting system forms and essential data required. Review of electronic data processing and the computer as related to criminal justice planning and operation. (PR: CJS 101)

**CJS 248 – Traffic Administration and Enforcement.** 2 to 3 Credits. History, development, and economics of the modern transportation system. Coping with traffic problems to include use of modern technology in accident investigation and reporting. Police responsibilities as they relate to traffic engineering, education, enforcement, and enactment.

**CJS 249 – Security in Organizations.** 3 Credits. This course covers the philosophies and principles related to security and loss prevention within organizations. Other topics include security vs. law enforcement, basic security law, internal and external theft, protection and surveillance systems, insurance, occupational health and safety, and workplace violence. (PR: CJS 101)

**CJS 251 – Criminal Justice Ethics.** 3 Credits. This course explores ethical considerations and dilemmas facing criminal justice professionals. Topics covered include identifying appropriate moral and ethical behavior, ethics and law enforcement, ethics and the courts, ethics and corrections, the ethics of punishment, and professionalism. (PR: CJS 101)

**CJS 254 – Constitutional Law.** 3 Credits. This course examines the powers of the government as they are allocated and defined by the United States Constitution with an intensive analysis of United States Supreme Court Decisions as they impact the criminal justice system. (PR: CJS 101)

**CJS 256 – Private Investigation.** 3 Credits. This course explores the fundamental components of private investigators' interviewing and investigations techniques and practices. The course includes a discussion of investigative practices in insurance, civil, criminal, background checking, and surveillance cases. (PR: CJS 101)

**CJS 261 – Digital Forensics.** 3 Credits. This course covers the basic concepts used in a digital forensics examination; and introduces techniques required for conducting a forensic analysis on systems and data. The course also explores methods of recovering and restoring data for various situations ranging from litigation to fraud based investigations. (PR: CJS 101)

**CJS 263 – Probation and Parole.** 3 Credits. This course is a study of the history, development, use, and value of both probation and parole as alternatives to incarceration for convicted criminal defendants as part of the Criminal Justice System. Students will also study the role of the professional agents who supervise probationers and parolees. (PR: CJS 101)

**CJS 265 – Narcotics Investigation.** 3 Credits. This course is the study of narcotics identification and investigation from the criminal justice professional's viewpoint. Topics include investigative techniques, identification of drugs, and legal aspects of narcotic investigations and enforcement. (PR: CJS 101)

**CJS 271 – Police Executive Command School.** 6 Credits. Leadership skills and executive police agency processes discussed in great detail. Emphasis will be on the development of executive communications, dealing with the media, critical incident management, crime monitoring trends, case oversight, crisis management, budgeting in the public sector and human resource issues. The leadership instruction will focus heavily on Situational Leadership Theory, the 7 Habits of Highly Effective Police Officers.

**CJS 275 – Law Enforcement On-the-Job Training.** 1-12 Credits. This course consists of supervised paid OJT, internship or practicum performed in a law enforcement setting. Students will apply law enforcement theory in real life situations by performing patrols, investigating accidents and crime scenes, writing reports and providing written and verbal evidence in courts of law. On-the-job credit hours are earned at a ratio of 200:1 with the maximum of 12 credit hours allowed. Successful completion of on-the-job training and achievement of program learning outcomes will be verified by an employer.

**CJS 280-283 – Special Topics.** 1 to 4 Credits. Content not normally covered in other courses. (PR: Permission)

**CJS 290 – Law Enforcement Internship.** 9 Credits. Placement with area law enforcement agencies is designed to blend classroom education with practical experience. Flexibility of designing individual programs for students is accomplished through the development of cooperative training agreements among the agency and the training station supervisor and the college. (PR: Permission)

**CJS 291 – Police Science Internship I.** 5 Credits. This course is designed to blend classroom education with practical experience. Students will apply law enforcement theory in real life situations by performing patrols, investigating accidents and crime scenes, writing reports, and providing written and verbal evidence in courts of law. Interns must complete the on-the-job training under the supervision of a law enforcement officer. (PR: Permission)

**CJS 292 – Police Science Internship II.** 4 Credits. This course is designed to blend classroom education with practical experience. Students will apply law enforcement theory in real life situations by performing patrols, investigating accidents and crime scenes, writing reports, and providing written and verbal evidence in courts of law. Interns must complete the on-the-job training under the supervision of a law enforcement officer.

**CJS 298 – Internship.** 3 Credits (CR/NC). Places students in a criminal justice related field for a specific period to gain experience prior to employment. Correlates theory and classroom instruction with experience. (PR: Permission)

## CULINARY ARTS (CA)

**CA 105 – Knife Skills and Fabrication.** 3 Credits. This course covers the principles of basic knife skills and the techniques for the production and fabrication of meats, game, poultry and seafood in the culinary industry to the standards present in the field. Students will learn recipe conversions and proper measuring skills in both standard U.S. measurements and metric measurements. (CO: CA 110, and CA 200)(PR: REA 098 or ACT Reading 18 or SAT Reading 421 or ACCUPLACER Reading 80)

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**CA 110 – Mise en Place.** 3 Credits. This introductory course covers the principles of food service operations, basic sauces, stocks, salads, and sandwiches and other food preparation techniques and procedures. Students will apply knowledge of rules and laws referencing sanitation and safety regulations. Proper equipment and knife handling principles will be demonstrated. (CO: CA 105 and CA 200) (PR: REA 098 or ACT Reading 18 or SAT Reading 421 or ACCUPLACER Reading 80)

**CA 111 – Mise en Place II.** 3 Credits. This course is a continuation of the principles covered in CA 110. (PR: CA 110)

**CA 112 – Garde Manger.** 3 Credits. The focus of this course is to develop skills in providing a variety of cold food products. Students will also learn to prepare appropriate buffet presentations and decorative pieces. (PR: Pass CA 105/ CA 110, CA 200, CA 269 with a letter grade of C or higher)

**CA 116 – Introduction to Breads and Doughs.** 3 Credits. An introduction to the fundamentals of baking science in the preparation of a variety of products. Use and care of equipment normally found in the bake shop or baking area. (PR: CA 112)

**CA 120 – A la Carte Dining Room Service I.** 2 Credits. Dining room service will involve the basic understanding of traditional service styles used in dining room operations. The course focuses on service organization, American service, French services and quick service as it pertains to restaurant operations. (PR: REA 098 or ACT Reading 18 or SAT Reading 421 or ACCUPLACER Reading 80)

**CA 135 – International Cuisine.** 3 Credits. This course will explore various international cuisines along with special features of geography, climate and culture that influence regional cooking. (PR: CA 116)

**CA 190 – Hospitality Lab Practicum I.** 1 Credit. This course provides the student an opportunity to apply knowledge and practice the skills developed during the first semester from introductory courses such as: CA 105, CA 110, CA 120 and CA 200. The student will complete 50 hours of service, practice and preparation at The Cooking and Culinary Institute and selected events chosen by the program coordinator. 200 hours are required for graduation.

**CA 195 – Hospitality Lab Practicum I.** 1 Credit. This course provides for the practical application of culinary production techniques in a catering setting. Participation in an observation of production and management controls in a culinary venue will provide an opportunity to hone skills. Students will gain enhanced competency in performance of skills covered to date from courses CA 112, CA 269, CA 270 and CA 275. The student will complete 50 hours of service, practice preparation at The Cooking and Culinary Institute and selected events chosen by the program coordinator. 200 hours are required for graduation.

**CA 200 – Culinary Sanitation and Safety.** 2 Credits. This course focuses on the sanitation aspects of the food service industry. Additional subject matter will include establishing the food safety system, keeping food safe in storage facilities and sanitary equipment, accident prevention, crisis management and dealing with sanitation regulations and standards. (CR: CA 105 and CA 110) (PR: REA 098 or ACT Reading 18 or SAT Reading 421 or ACCUPLACER Reading 80)

**CA 205 – A la Carte Dining Room Service II.** 3 Credits. This course covers advance dining room procedures. Students are exposed to advanced table service techniques, table side preparation and the importance of guest satisfaction. (PR: CA 116)

**CA 224 – Intermediate Cooking and Artistry.** 3 Credits. This course covers the principles of intermediate food preparation and identification as well as manufacturing of products. Students will learn presentation skills and menu development (PR: CA 110 and CA 111)

**CA 225 – Advanced Cooking and Artistry.** 3 Credits. This course will focus on the more advanced techniques of culinary arts and menu planning for chefs or restaurant owners. Students will become familiar with the advanced techniques of food selection, storage, menu planning, preparation and service. This course will introduce the students to the requirements necessary to successfully compete in culinary competition. American Culinary Federation culinary standards will be discussed and practiced for product development. Capstone Class. (PR: CA 135)

**CA 235 – Menu Planning.** 2 Credits. This course focuses on the principles of menu planning, lay-out, and development for a variety of facilities and services. It also provides a foundation in costing, marketing, and merchandising a menu. (PR: REA 098 or ACT Reading 18 or SAT Reading 421 or ACCUPLACER Reading 80)

**CA 245 – Culinary Nutrition.** 2 Credits. This course is an introduction to nutrition using dietary recommendations, food guides, food labels and My Pyramid Guide to plan menus. Complex carbohydrates, lipids (fats and oils), protein, vitamins, water and minerals will be reviewed. Development of nutritional menus and recipes, marketing healthy menu options, light beverages and foods for the beverage operation, nutrition and health, weight management and exercise, and nutrition over the life span, from pregnancy to the infant, child, adolescent and older adult will be studied. (PR: REA 098 or ACT Reading 18 or SAT Reading 421 or ACCUPLACER Reading 80)

**CA 255 – Advanced Pastries.** 3 Credits. This course will focus on advanced baking and pastry techniques. Emphasis will be placed on wedding cakes, individual pastries, plated desserts, frozen desserts, light desserts, charlottes, Bavarian creams, mousses, soufflés, modernist desserts, chocolate artistry, sugar works and marzipan figures. (PR: CA 110 and 116)

**CA 260 – Culinary Selection and Procurement.** 2 Credits. An overview of the purchasing function, ordering, receiving, and storing purchases will be the emphasis of this hospitality course. Emphasis will be placed on how to purchase produce, eggs, poultry, fish and meat, dairy products, beverages, equipment and other non-food items. (PR: REA 098 or ACT Reading 18 or SAT Reading 421 or ACCUPLACER Reading 80)

**CA 269 – Soups, Stocks and Sauces.** 2 Credits. This course covers the principles of basic soups, stocks and sauces and their preparations, techniques, and procedures. Students will apply knowledge of rules and laws referencing sanitation and safety regulations. (PR: CA 200)

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**CA 270 – Managing Culinary Operations.** 2 Credits. This course will consider restaurant operations, the menu, cost control, and financial matters. It will explore legal issues specific to restaurant staff, customer service, laws and regulations, and sanitation. (PR: REA 098 or ACT Reading 18 or SAT Reading 421 or ACCUPLACER Reading 80)

**CA 275 – Cost Control and Revenue Management.** 2 Credits. An overview of financial management in food service. This course will explore food and beverage cost control, managing production, labor and expense cost control, analyzing financial data, managing security, and using computers in cost control. (PR: REA 098 or ACT Reading 18 or SAT Reading 421 or ACCUPLACER Reading 80)

**CA 280-289 – Culinary Arts Special Topics.** 1-3 Credits. Culinary Arts Special Topics courses available for majors and for non-majors as an introduction to the field of Culinary Arts.

**CA 290 – Hospitality Lab Practicum III.** 1 Credit. This course will provide an opportunity for shadowing hospitality instructors during skill development and service production labs. This experience will present situations where lab assistants can emulate the role of trainer within a controlled environment. The student will complete 50 hours of service, practice and preparation at The Cooking and Culinary Institute and selected events chosen by the program coordinator. 200 hours are required for graduation.

**CA 298 – Cooperative Culinary Arts Work Experience.** 1-3 Credits. Supervised, paid, on-the-job training for students working in Culinary Arts occupational field. (PR: Permission)

## DENTAL ASSISTANT (DA)

**DA 241 – Dental Assisting Biomedical Sciences.** 4 Credits. This course reviews proper nutrition as it relates to preventative dentistry. Students examine basic structures and functions of the human body and their relevance to dental treatment. The course focuses on principles of disease transmission and prevention. Current technology is utilized to master course standards. Students are provided the opportunity to participate in a Career and Technical Student Organization (CTSCO).

**DA 242 – Dental Assistant Clinical Practices.** 4 Credits. This course focuses on knowledge and skills required for the dental assistant to function within the areas of radiography and emergency medical care. Current technology is utilized to master course standards. Students are provided the opportunity to participate in a Career and Technical Student Organization (CTSCO).

**DA 243 – Dental Assistant Clinical Sciences.** 4 Credits. This course focuses on the internal functions of the dental office as well as the pertinent legal and ethical responsibilities. Current technology is utilized to master course standards. Students are provided the opportunity to participate in a Career and Technical Student Organization (CTSO).

**DA 244 – Dental Assistant General Studies.** 3 Credits. This course explores the career of dental assisting along with opportunities for higher education. After a review of professional organizations associated with this career area, the content focuses on basic knowledge and skills needed as the dental assistant interacts with clients and dental team members. Current technology is utilized to master course standards. Students are provided the opportunity to participate in a Career and Technical Student Organization (CTSO).

**DA 245 – Dental Assistant Clinical Mentoring.** 6 Credits. In this course, the student participates in a school and community partnership that affords practical "hands-on" training under the supervision of a career-related professional. The partnership takes place in a clinical facility, which shares insight, knowledge, and skills instruction. Current technology is utilized to master course standards. Students are provided the opportunity to participate in a Career and Technical Student Organization.

**DA 246 – Dental Science.** 4 Credits. Students explore the dental anatomy and physiology of the face and neck as they relate to dental health. The course includes pathophysiology of the face and neck, charting methods, dental pharmacology and appropriateness of dental related dental procedures.

**DA 247 – Dental Specialty I.** 2 Credits. This course examines the general dental anatomy and physiology along with corresponding pathology. Students learn to recognize duties of general assistant, to demonstrate skills in surgical procedures, to demonstrate skills necessary for treatment of endodontic patients and to demonstrate skills in instrumentation use.

**DA 248 – Dental Terminology I.** 2 Credits. This course covers the necessary medical terminology related to dental science. Students learn the necessary communication skills needed to work in a dental clinic. Topics include terminology relating to infection control, clinical chair side assisting, radiology and dental laboratory material.

**DA 249 – Supervised Dental Experience.** 3 Credits. This course focuses on instructional components that will enable a student to work as an effective member of the dental team. Students are introduced to the specialties of dentistry and the requirements necessary to function as an administrative and chair-side assistant in a dental office. Current technology is utilized to master course standards. Students are provided the opportunity to participate in a Career and Technical Student Organization (CTSO).

**DA 250 – Dental Specialty II.** 2 Credits. This course is a continuation of DA 247 Dental Specialty I. This course continues to examine the general dental anatomy and physiology with corresponding pathology. Students demonstrate computer literacy, capacity to solve real-world problems as they relate to dental health and learn key aspects of entrepreneurial success and performance.

**DA 251 – Dental Terminology II.** 2 Credits. This course is a continuation of DA 250 Dental Terminology I. This course continues to cover the necessary medical terminology related to dental science. Topics include dental terminology in the areas of pharmacology, emergency care, business office procedures and specialty areas of dental clinics.

# COURSE DESCRIPTIONS

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## DENTAL LABORATORY TECHNOLOGY (DLT)

(Classes are taught at Putnam County Technical Center in Eleanor, WV)

**DLT 101 – Introduction to Dental Technology.** 6 Credits. Introduces students to various dental materials and provides hands-on experience in the construction of basic dental appliances. Safety hazards in the lab are discussed and prevention of accidents stressed. (PR: Admission to Program) (Offered Fall Semester only)

**DLT 104 – Complete Dentures.** 9 Credits. Students will be introduced to oral land masks, muscles, bones, tissues, and procedures involved with dental appliances that are substitutes for all lost natural teeth and associated structures of the upper and lower arches. (Offered Fall Semester only)

**DLT 108 – Partial Dentures.** 9 Credits. Students will build upon previously learned dental laboratory skills to survey and design the framework for partial dentures. (Offered Spring Semester only)

**DLT 112 – Inlays/Crowns/Bridges/Ceramics.** 10 Credits. Students will learn advanced dental laboratory skills including pouring stone dyes and working casts, determining margins and define the dyes, demonstrating knowledge of tooth morphology. (Offered Spring Semester only)

**DLT 116 – Clinical Experience.** 1 Credit. The clinical consists of 10 days of on the job training in one commercial dental laboratory location. In the lab they will work in several different departments and jobs to enhance their clinical experience. Students will utilize skills learned in the classroom while completing their clinical training. (PR: DLT 101, DLT 104, DLT 108; CO: DLT 112)

## DESIGN (DSGN)

**DSGN 120 – Graphic Design I.** 3 Credits. The principles and possibilities of graphic design are introduced. The principles and elements of graphic design, the history of graphic design, form/symbol development, typography, and color theory are explored. Emphasis on the structure and organization of visual communication in both traditional and digital environments will be examined through a variety of assignments. (CO: IT 110 or Permission)

**DSGN 150 – Graphic Design II.** 3 Credits. The integration of typography and imagery from planning, conceptualization, and creation is explored, with organization of information, and interplay of form and typography to effectively communicate ideas. Students learn to think critically make aesthetic judgements, and become familiar with a variety of tools and techniques used to produce professional work. Page design and layout, multipage documents, and digital publishing for both traditional and digital environments are emphasized. (PR: DSGN 120)

**DSGN 210 – Digital Illustration.** 3 Credits. This course focuses on conceptual and technical development of illustrations for editorial, advertising, artistic and educational purposes. Students utilize hand-drawn techniques combined with digital processes such as scanning; and Adobe Creative Suite applications such as Photoshop, Illustrator, and InDesign. Students work in a problem-based learning environment with regularly assigned projects, presentations, and discussions to develop a greater understanding of the creative

and problem-solving process and production of professional works for graphic design, visual communication and layout.

**DSGN 220 – Typography.** 3 Credits. This course provides an overview of the history of typography and extensively explores different typefaces. The course reviews historic and contemporary uses of typography and micro and macro typography concepts, finding and using specialty fonts from various sources, modifying text, adding special effects, and using letterforms effectively as part of a design layout, utilizing both manual and digital skills.

**DSGN 230 – New Media.** 3 Credits. This course focuses on art and design considerations in creating Web sites, apps, eBooks, graphics, video and audio for the Web; and the interplay among technology, images and sound.

**DSGN 250 – Graphic Design III.** 3 Credits. This course continues the study of graphic design, with particular emphasis on exploring career possibilities in various fields. Students, both individually and on teams, create a variety of works in an assortment of media. Students research the top designers and firms to explore best practices, and refine their speaking and presentation skills as well as professional writing and client communication skills. Students review real life case studies, explore various career possibilities, develop their own brand identities and collateral and refine their digital and physical portfolios. The course reviews the different titles, roles and responsibilities, and salary ranges in different branches of design practice. Students are introduced to the concept of systems thinking in solving design problems and are exposed to the business practices of graphic design. At the end of the course, students present their portfolios to a panel of select faculty and professionals for feedback and critique.

**DSGN 260 – Interactive Design.** 3 Credits. This course emphasizes consideration of the user's experience in applying technology creatively and inventing new approaches to interaction and design. Students are encouraged to design interactions that are useful, innovative and user-friendly – blending context, personality, and message with technological components of design. Students create a fully functioning Web site implementing these attributes.

**DSGN 270 – Brand Identity Design.** 3 Credits. This course explores the process of researching the client, generating ideas, and creating unique and effective brand applications through graphic design and advertising. From research and analysis through brand strategy and design development, this course covers the processes for creating and implementing effective brand identity. This class provides students with a detailed look at traditional methods as well as the latest trends in branding, including social networks, mobile devices, apps, and video.

## ECONOMICS (EC)

**EC 102 – Basic Economics.** 3 Credits. An introduction to basic microeconomic and macroeconomic concepts and institutions, key economic relationships and terms. (PR: REA 098 or ACT Reading 18 or SAT Reading 421 or ACCUPLACER Reading 80)



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**EC 201 – Fundamentals of Microeconomics.** 3 Credits. The purpose of this course is to provide an introduction to the study of microeconomics as it examines the decision making processes of allocating scarce resources for specific segments of the economy. Topics that will be covered include supply and demand, production, pricing, taxes, distribution, market structures, labor markets, marginal utility, public goods, externalities, and international trade. (PR: REA 098 or ACT Reading 18 or SAT Reading 421 or ACCUPLACER Reading 80.)

**EC 202 – Fundamentals of Macroeconomics.** 3 Credits. The purpose of this course is to provide an introduction to the study of macroeconomics as it examines the decision making processes of allocating scarce resources in the overall economy. Topics that will be covered include an overview of basic economic concepts, gross domestic product and economic growth, inflation, unemployment, aggregate supply and demand, fiscal policy, money and monetary policy, national deficits and debt, and international trade. (PR: REA 098 or ACT Reading 18 or SAT Reading 421 or ACCUPLACER Reading 80.)

## EDUCATION (EDUC)

**EDUC 101 – Healthy Environment for Young Children.** 3 Credits. This course is an introduction to the basic requirements and regulations for health, safety in early childhood programs serving young children. This course is intended to prepare students to follow the practices required of all individuals who participate in early childhood programs. (PR: 098 or ACT Reading 18 or SAT Reading 421 or ACCUPLACER Reading 80)

**EDUC 105 – Computer Instruction Technology in the Classroom.** 3 Credits. This is a course in skill development using computer-generated media. An emphasis will be placed on computer skills and their application to young children and the early childhood classroom. This course will also explore administrative technology and assistive technology in the early childhood classroom. This course will be taught utilizing 3 components. (PR: IT 101)

**EDUC 120 – Foundations of Early Childhood.** 3 Credits. This is an introductory course of the history, philosophy and theoretical foundations of early childhood programs with specific attention to current programs serving children prior to school entry. Concepts for providing developmentally appropriate practices are introduced. Observation hours in an early childhood classroom outside of classroom instruction will be required. (PR: ENL 094 or 095; Placement in ENL 101, 111)

**EDUC 204 – Parenting.** 3 Credits. This course exams parenting from a sociocultural and developmental perspective using a systems model. This course is in no way meant to be manual for child rearing, but a study of parenting. (PR: EDUC 120 and ENL 111)

**EDUC 210 – Observation and Assessment of Young Children.** 3 Credits. Examines the skills and methods used to observe and assess young children in various early childhood environments. An emphasis will be placed on authentic assessment practices, the appropriate use of assessment and observation strategies to document the development, play, and learning of young children. Observation and participation in an early childhood setting is required. (PR: ENL 110 and grade C or better in EDUC 120)

**EDUC 215 – Child, Family and Community.** 3 Credits. This course examines the relationships of the young child, the family and community programs. An emphasis will be placed on family lifestyles and cultures and family centered practices. (PR: ENL 111 and grade C or better in EDUC 120)

**EDUC 220 – Infant & Toddler Development.** 3 Credits. This course will examine the application of the theories of child development and research. Course emphasis will be placed on prenatal development and the physical, social, emotional, cognitive and language development of the child from conception to age three. Observation in an infant/toddler classroom required. (PR: EDUC 120 and ENL 111)

**EDUC 225 – Development of Young Children.** 3 Credits. This course examines the physical, emotional, cognitive and intellectual development of young children. This course will examine relationships with parents and peers and growth in self-direction with a primary focus on young children birth through five years of age. Observation and participation in an early childhood classroom required. (PR: EDUC 120 and ENL 111)

**EDUC 230 – Early Language and Literacy.** 3 Credits. An overview of the foundations of early childhood language and emergent literacy within an emphasis on developmentally appropriate environments.

**EDUC 232 – Classroom Management in Education.** 3 Credits. This course is an introduction to classroom management strategies and techniques to utilize inside the classroom environment. This course will allow students to examine a variety of classroom strategies and comprehensive approaches to discipline in the field of education. (PR: ENL 111)

**EDUC 250 – Parenting.** 3 Credits. This course exams the current challenges, problems, and issues in the field; analysis of effective strategies for parenting. This course is in no way meant to be manual for child rearing, but a study of parenting. (PR: EDUC 225)

**EDUC 261 – The Exceptional Child.** 3 Credits. This is an introductory course of children who differ from the average child in mental, physical and emotional characteristics. The purpose of this class is to provide educators with an overview of children with exceptional needs, focusing on historical, legal and multi-cultural issues, high-incidence disabilities and giftedness: including characteristics and adaptations of educational procedures. (PR: EDUC 225 and ENL 115)

**EDUC 270 – Level I Clinical Experience.** 2 Credits. A clinical experience for Early Childhood Education majors. This field experience will provide opportunities for observations and participation with young children under the supervision of qualified professionals. Students must successfully complete the field experience to pass the course. (CO: EDUC 225 or SS 215 for ACDS students)

**EDUC 275 – Level II Clinical Experience.** 1 Credit. This course will provide students with field experience inside an infant/toddler and preschool classroom. Students will conduct observation and have an opportunity to obtain hands on learning experiences with young children under the supervision of a qualified professional. (CO: EDUC 295)

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**EDUC 290 – Introduction to curriculum and Assessment in Early Childhood.** 3 Credits. This course will provide students with an introduction to authentic assessment practices for young children and explore the historical and contemporary curriculum and methods with an emphasis on best practice. (PR: EDUC 225 and ENL 111)

**EDUC 280-284 – Special Topics.** 1 to 4 Credits. Study of content not normally covered in other courses. (PR: Enrollment with permission of program coordinator or course instructor)

**EDUC 295 – Early Childhood Curriculum & Methods.** 3 Credits. This course will examine how to prepare and implement a developmentally appropriate curriculum for young children. Students will have hands on experience in the classroom with infants, toddlers and preschool children. (PR: ENL 111 and a grade C or better in EDUC 225; CO: EDUC 270)

**EDUC 299 – Capstone.** 4 Credits. This course involves the application of coursework, theories, and practice. Places the student in a practicum based experience where classroom instruction applies to real experiences in the field. (PR: EDUC 295)

## ELECTRONICS TECHNOLOGY (ELT)

**ELT 110 – Basic Electronics.** 3 Credits. Course focuses on fundamental concepts of electronics. Designed for the first-time student of the principles and applications of electricity and electronics. (Classes offered at Cabell County Career Technology Center – Fall Semester only)

**ELT 111 – Direct Current Circuit Analysis.** 3 Credits. Direct current circuits, electrical and magnetic phenomena, utilization of circuit theorems for the solution of circuits and networks, conductors, insulators and magnetic materials. (PR: MAT 145 or MAT 145E)

**ELT 111L – Direct Current Electronics Lab.** 1 Credit. Focus of this course is to develop knowledge and skills relevant to the concepts of electronics. The principles and applications of Direct Current Theory in electricity and electronics are studied. (CO: ELT 111)

**ELT 121 – Alternating Current Circuit Analysis.** 3 Credits. Course focuses on alternating current circuits and includes peak average and effective values, capacitors, inductors and transformers, reactance, impedance, resonance and filters. (PR: ELT 111)

**ELT 121L – Alternating Current Electronics Lab.** 1 Credit. Focus of course is to develop knowledge and skills relevant to the concepts of electronics. The principles and applications of AC Circuit Theory in electricity and electronics are studied. (CO: ELT 121)

**ELT 131 – Analog Circuits.** 3 Credits. Focus of course is to develop knowledge and skills relevant to the concepts of electronics. The principles and applications of Analog Circuit Theory in electricity and electronics are studied. (PR: ELT 121)

**ELT 131L – Analog Circuits Lab.** 2 Credits. Focus of course is to develop knowledge and skills relevant to the concepts of electronics. The principles and applications of Analog Circuit Theory in electricity and electronics are studied. (PR/CO: ELT 131)

**ELT 141 – Analog Circuits II.** 4 Credits. Continuation of the study of semiconductor devices and circuits to include thyristors, FET's, linear IC's. Emphasis on circuit analysis and troubleshooting (PR: ELT 131)

**ELT 209 – Basic Networking.** 3 Credits. This course is designed to give the student a basic understanding in maintaining, upgrading and troubleshooting LANs and WANs. (PR: Permission)

**ELT 210 – Basic Motors.** 3 Credits. This course is designed to give the student a basic understanding of AC and DC motor operation and the circuits control motor function. (PR: ELT 121 and ELT121L or Permission)

**ELT 211 – Combinational Logic Circuits.** 3 Credits. Analysis of combinational digital devices, circuits, and systems through the study of logic waveforms, numbering, systems, gates, with emphasis on troubleshooting. (PR: MAT 215) (Offered Spring Semester Only)

**ELT 211L – Combinational Logic Circuits Lab.** 1 Credit. Focus of course is to develop knowledge and skills relevant to the concepts of electronics. The principles and applications of Logic Circuit Theory in electricity and electronics are studied. (CO: ELT 211)

**ELT 221 – Sequential Logic Circuits.** 4 Credits. Analysis of sequential digital devices, circuits, and systems through the study of waveforms, timing diagrams, state tables, truth tables, and Karnaugh maps as a foundation for microprocessor system study. (PR: ELT 211 and CO: ELT 221L)

**ELT 221L – Sequential Logic Circuits Lab.** 2 Credits. Focus of course is to develop knowledge and skills relevant to the concepts of electronics. The principles and applications of sequential logic circuit theory in electricity and electronics are studied. (CO: ELT 221)

**ELT 222 – Introduction to Microprocessors.** 4 Credits. A combination of classroom and lab experience designed to teach the student how to work with microprocessors as they apply to consumer, industrial and business equipment. (PR: ELT 211)

**ELT 280-283 – Special Topics.** 1 to 4 Credits. Study of content not normally covered in other courses. (PR: Permission)

**ELT 299 – Electronic Technology Internship.** 3 Credits. Supervised on-the-job training for Electronics Technology students. Students must successfully complete 150 hours of appropriate experience.

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## EMERGENCY MEDICAL TECHNOLOGY (EME)

**EME 090 – EMT Basic Refresher.** 1 Credit. A course designed to prepare students for entrance into a Paramedic-level program by review of basic life support and procedures in a classroom setting. The student is also required to perform clinical time with a designated preceptor to gain field experience in EMS.

**EME 101 – CPR/First Aid.** 1 Credit. This course is designed to give laypersons and professionals the education and confidence they need to effectively provide emergency care.

**EME 105 – First on Scene.** 3 Credits. This course is designed to teach the student to manage a medical/trauma emergency until other EMS personnel arrive. An emphasis is placed on victim/patient stabilization using supplies available to the layperson.

**EME 109 – Emergency Medical Technician.** 10 Credits. A lecture/lab course designed to teach basic emergency medical care and transportation for critical and emergent patients who access the emergency medical system. Students will learn basic knowledge and skills necessary to provide patient care and transportation. Students will also learn how to function as part of the comprehensive EMS response, under medical oversight and perform interventions with the basic equipment typically found on an ambulance. Students will learn how to perform as a link from the scene to the emergency health care system. Following completion, students will be eligible to take the National Registry of EMTs or the State of West Virginia EMT exam. (PR: none)

**EME 109L – Emergency Medical Technician Lab.** 1 Credit. A course designed to develop competency in practical skills covered in the Emergency Medical Technician class. This course follows the guidelines set forth by the Department of Transportation and the West Virginia Office of Emergency Medical Services. (CO: EME 109)

**EME 125 – Rescue Operations.** 3 Credits.

**EME 130 – Introduction to EMS System.** 3 Credits. An introductory course for students undertaking careers in emergency medical services. This course introduces the student to basic concepts of EMS organization, management and daily operation. Includes sections on legal and ethical issues, basic system design, communications, medical control quality assurance and mass casualty response.

**EME 280-283 – Special Topics.** 1 to 4 Credits. Study of content not normally covered in other courses. (PR: Permission)

## ENGLISH (ENL)

**ENL 010-019 – Special Topic: Developmental Writing.** 1-6 Credits. Study of content not normally covered in other courses. (PR: Permission)

**ENL 071 – Reading and Writing Support for History.** 2 Credits. This is an integrated developmental reading and developmental writing course that is designed to accelerate a student's developmental study through its attachment to a college level companion course. Academically supportive, this course may be used to fulfill the requirement of developmental reading and developmental writing. (PR: ACCUPLACER Reading 65 or higher) (CO: HIST 104 or 105 or 114 or 115)

**ENL 073 – Reading and Writing Support for Psychology.** 2 Credits. This is an integrated developmental reading and developmental writing course that is designed to accelerate a student's developmental study through its attachment to a college level companion course. Academically supportive, this course may be used to fulfill the requirement of developmental reading and developmental writing. (PR: ACCUPLACER Reading 65 or higher) (CO: PSYC 200 or PSYC 215)

**ENL 095 – Developmental Writing.** 3 or 5 Credits (CR/NC). This course combines a review of grammar skills and introduction to the written essay. Prepares students for ENL 111. ENL 095 is a three or five credit-hour course that counts toward full-time enrollment status and financial aid eligibility but does not count toward the number of hours required to complete any degree program. (PR: Appropriate placement score)

**ENL 096 – Integrated Developmental English: Reading and Writing Improvement.** 4 Credits. This is a developmental English course that combines developmental reading and developmental writing into one course. It is designated to assist students in developing and improving reading and writing proficiency by emphasizing basic reading comprehension skills, reading strategies, vocabulary development grammar, and writing skills related to paragraph and essay development. (PR: Write Placer 4; ACT 14-17)

**ENL 111 – Written Communication.** 3 Credits. This course provides instruction and experience in preparation and delivery of written communication in workplace and personal settings. Emphasis is placed on the writing process including production of unified, coherent, well-developed essays, letters and memos using standard written English. (PR: REA 098 or ACT Reading 18 or SAT reading 421 or ACCUPLACER Reading 80 and ENL 095 or COM 095 or COM 095E or ACT Verbal 18 or SAT Verbal 450 or WRITEPLACER 6)

**ENL 115 – Written Communication II.** 3 Credits. This is a research-based writing course designed to help the student develop advanced skills in composition, editing, and critical thinking needed for other college courses and professional careers. (PR: COM 111; a C or better in ENL 111)

**ENL 201 – Introduction to Literature.** 3 Credits. This course is an introduction to literature through original works of prose, fiction, poetry and drama. It introduces students to the interpretive approaches to literature, and to some of the specialized terms, such as sonnet, antagonist, and epiphany, that will help them articulate their thoughts and observations about what they read. (PR: ENL 115)

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**ENL 231 – Business and Technical Writing.** 3 Credits. A course designed to prepare students to write technical reports. Emphasis is on good writing principles and the use of supplementary illustrations as they apply to technical reports. (PR: 098 or ACT Reading 18 or SAT reading 421 or ACCUPLACER Reading 80 and ENG 095 or COM 095 or COM 095E or ACT Verbal 18 or SAT Verbal 450 or WRITERPLACER 6)

**ENL 245 – Elements of the Short Story.** 3 Credits. This course will examine the art of short fiction in American History. It will delineate the structure of short story writing, theme, and characterization with information on the authors studied. (PR: ENG 115)

**ENL 251 – Appalachian Writers.** 3 Credits. A survey of the various literary genres, with a focus on classical and contemporary Appalachian writers.

**ENL 260 – Introduction to Creative Writing.** 3 Credits. This course is designed to facilitate the student's creative faculties and abilities. The course serves as an introduction to the writing of original poetry, short fiction, and drama. Instruction in literary techniques will direct the student's writing. In addition to working with literary conventions to produce manuscripts, students will be exposed to exemplary texts by selected authors. Students will learn to critique their own work and the work of others by participating in writing workshops. Students will be introduced to markets for creative writing and be encouraged to submit some work for publication. (PR: ENL 111)

**ENL 280-289 – Special Topics.** 1-6 Credits. Study of content not normally covered in other courses. Enrollment with permission of division chair or course instructor. (PR: Permission)

## ENVIRONMENT (ENV)

### **ENV 250 – Solar Energy and Photovoltaic Glass Installation.**

3 Credits. This course covers the photovoltaic (PV) component theory, system design, industry codes and standards for PV systems, and unique design problems and solutions. Emphasis is placed on developing skills for design and installation of a complete PV system. Practical experience in designing a PV system and hands on training, is gained using a demo size indoor roof. This course consists of lecture, hands on installation, demonstration, class activities, presentation, and an opportunity to take the NABCEP Entry Level Certificate of Knowledge Exam.

## FINANCE AND BANKING (FN)

**FN 141 – Real Estate Principles and Practices.** 3 Credits. General introduction to real estate as a business and as a profession. Designed to acquaint the student with the wide range of subjects and terminology necessary to the practice of real estate. This introductory course in fundamentals includes the nature of real estate and ownership, principles and concepts of title transfer, title insurance, real estate marketing, financing, leasing, taxation, insurance development, appraising, and state license law. (PR: REA 098 or ACT Reading 18 or SAT Reading 421 or ACCUPLACER Reading 80)

**FN 151 – Principles of Bank Operations.** 3 Credits. Fundamentals of bank functions presented in a descriptive fashion so that the beginning banker

may acquire a broad perspective of the banking operation so as to prepare for career advancement in the banking industry. (PR: REA 098 or ACT Reading 18 or SAT Reading 421 or ACCUPLACER Reading 80)

**FN 163 – Trust Functions and Services.** 3 Credits. Provides a complete picture of the services rendered by institutions engaged in trust business. Gives an introduction to the services and duties involved in trust operations and is intended for all banking majors. Offers a clear distinction between business and legal aspects of trust functions. (PR: FN 151)

**FN 231 – Business Finance.** 3 Credits. This course will focus on the methods of financial analysis. Emphasis is given to the time value of money, evaluation of financial statements, international issues, the stock market, investing, and consumer credit issues. (PR: AC 103; AC 108; AC 201; or ACC 215)

**FN 248 – Real Estate Law.** 3 Credits. Study of the principles of law governing interests in real estate including acquisition, encumbrance, transfer rights and obligations of parties, and state and federal regulations thereof. This course is approved as a prerequisite for licensure examination as a salesperson by the West Virginia Real Estate Commission. (PR: REA 098 or ACT Reading 18 or SAT Reading 421 or ACCUPLACER Reading 80)

**FN 250 – Computer Applications to Banking.** 3 Credits. Study of software programs applicable to current banking systems. (PR: IT 101 or IT 101E)

**FN 251 – Consumer Lending.** 3 Credits. This course provides an overview of consumer credit and an in-depth look at consumer credit products and services, the consumer lending process and consumer credit administration. (PR: FN 151)

**FN 252 – Law and Banking.** 3 Credits. Introduction to rules of American law that underlie banking. Topics include jurisprudence, the court system and civil procedure, contracts, quasi-contracts, property, torts and crimes, agencies, partnerships, corporations, sales of personal property, commercial papers, bank deposits and collections, documents of title, and secured transactions. Emphasis is on the Uniform Commercial Code. (PR: FN 151) (Offered Fall Semester only)

**FN 254 – Bank Investments.** 3 Credits. Describes the primary reserve needs of commercial banks. Sources of reserves and their random and cyclic fluctuations are analyzed in relation to their influence on investment policy. Included is a study of yield changes as they affect a bank's long-term holdings. (PR: FN 151)

**FN 258 – Home Mortgage Lending.** 3 Credits. Designed for mortgage loan offices from the viewpoint of developing a sound mortgage portfolio. Overview of the mortgage market, acquisition of a mortgage portfolio, mortgage plans and procedures, mortgage loan processing and servicing, and obligations of the mortgage loan offices in portfolio management are covered. (PR: FN 151)

**FN 259 – Commercial Lending.** 3 Credits. This course provides a conceptual framework for the study of commercial lending. It focuses on the organization of this business, its contribution to bank profitability and the commercial lending process. (PR: FN 151)

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**FN 264 – Analyzing Financial Statements.** 3 Credits. Acquaints student with basic considerations in statement analysis, details of financial statements, basic ratios, analysis of internal comparison, analysis by external comparison, consolidated statements, budgets and projections. (PR: AC 108 and FN 151)

## GEOGRAPHY (GEO)

**GEO 150 – Introduction to Geography.** 3 Credits. This is an introductory survey course to many of the major human and physical geographic themes, including environment, landscape, climate, culture, economics, spatial interactions, population, urbanization and globalization. (PR: REA 098 or ACT 18 or SAT Reading 421 or ACCUPLACER Reading 80)

**GEO 155 – Economic Geography.** 3 Credits. This course introduces the student to geographical tools and methods while exploring fundamental concepts of geography from an economic standpoint. Lecture material, exercises, assignments focus on spatial elements of economic activities and their change over time, the goal of which is to provide students with a basic understanding of the economic systems of the world in which they live and work. (PR: REA 098 or ACT Reading 18 or SAT Reading 421 or ACCUPLACER Reading 80)

**GEO 250 – Global Issues.** 3 Credits. This course is an introduction to many of the most important environmental, economic, social, and political concerns of modern life. Students should have some background or experience from such courses as geography, environmental science, political science, economics and other social sciences. (PR: REA 098 or ACT Reading 18 or SAT Reading 421 or ACCUPLACER Reading 80)

## HEALTH INFORMATION TECHNOLOGY (HIT)

**HIT 201 – Health Information Technology I.** 3 Credits. Introduction to the health information and medical assistant profession. Emphasis on health record design, content, and analysis. (PR: Admission to HIT or MA program and CO: HIT 201L) (Offered Fall Semester only)

**HIT 201L – Health Information Technology I Lab.** 1 Credit. Lab setting with emphasis on health record design, content, analysis, release and completion. (PR: Admission to HIT or MA program and CO: HIT 201)

**HIT 202 – Health Information Technology II.** 3 Credits. Continuation of HIT 201 with emphasis on management of health record departments, record completion, record retention, and release of information. Includes study of indexes and registers. (PR: HIT 201 and HIT 201L and CO: HIT 202L) (Offered Spring Semester only)

**HIT 202L – Health Information Technology II Lab.** 1 Credit. Lab setting with emphasis on management of health record departments, record completion, record retention and release of information. Includes use of indexes and registers. (PR: HIT 201 and HIT 201L and CO: HIT 202)

**HIT 205 – ICD-10 CM Diagnostic Coding.** 3 Credits. This course will introduce the student to the ICD-10 CM classification system with an emphasis on the correct process of utilizing the alphabetic index and tabular list for code assignment. The focus will be on rules, conventions, and instructions of ICD-10 CM as well as chapter specific guidelines. The criteria for the proper

assignment of principal and additional diagnosis in all applicable patient settings will be addressed. Proper code assignment and impact on MS-DRGs and reimbursement will also be discussed. Coding scenarios will also be utilized to determine sequencing and optimization. (PR: Admission to HIT or CCS programs)

**HIT 206 – Healthcare Statistics.** 3 Credits. Descriptive healthcare statistics for all types of healthcare facilities utilizing statistical applications with healthcare data. Will cover data selection, interpretation and presentation. (PR: Admission to program and completion or test out of MAT 096)

**HIT 207 – ICD-10 PCS Procedural Coding.** 3 Credits. Students will be introduced to the ICD-10 PCS coding/classification system with an emphasis on the current tables to assign procedure codes. Coding characteristics, conventions, and guidelines will be applied in identifying procedural codes. Reimbursement systems such as DRG's will be covered. Coding scenarios will also be utilized to determine sequencing and optimization techniques. (PR: Admission to HIT or CCS coding program)

**HIT 208 – Quality Improvement in Health Care.** 2 Credits. Provides student with skills necessary to evaluate the quality of care and potential for liability in various health care settings. Emphasis on evaluating health care in light of accrediting and licensing requirements. (Offered Spring Semester only)

**HIT 209 – CPT-Procedural Coding.** 3 Credits. Students will be introduced to Current Procedural Terminology (CPT) coding/terminology system which is a listing of descriptive terms and identifying codes for reporting medical services and procedures performed by physicians and healthcare providers. This procedural coding system is used in the outpatient setting for reimbursement of patient care and is one of the most widely used systems for reporting medical services to health insurance carriers. (PR: Admission to HIT or CCS coding program)

**HIT 210 – Computerized Health Information System.** 3 Credits. Evaluation of hardware and software components of computers for health information systems. Emphasis on computerized health records, record linkage, data sharing and methods of controlling accuracy and security. Includes all phases of the development of the electronic health record (EHR) and policies and procedures associated with EHR (Offered Fall Semester only)

**HIT 212 – Health Information Tech Seminar.** 2 Credits. Students learn methods of preparing resumes and interviewing techniques. Provides a comprehensive review for the RHIT examination. (PR: HIT 201, 201L, 202, 202L, 203, 204, 206, 208, 210)

**HIT 214 – Directed Practice I.** 1 Credit. Places the student in a health care facility providing the opportunity for the practical application of classroom knowledge and skills. (CO: HIT 201)

**HIT 215 – Directed Practice II.** 2 Credits. Places the student in a health care facility providing the opportunity for the practical application of classroom knowledge and skills. Continuation of Directed Practice I. (PR: HIT 214 for HIT students or HIT 203 and HIT 204 for CCS students)

**HIT 217 – Coding for Certified Coding Specialist.** 3 Credits. Coding with emphasis on advanced outpatient and CPT coding.

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**HIT 218 – Directed Practice III.** 2 Credits. Places the student in a health care facility providing the opportunity for the practical application of classroom knowledge and skills. Continuation of Directed Practice II. (PR: HIT 203 and 204)

**HIT 220 – Coding for CCS Exam.** 3 Credits. This class is a review and preparation for students taking the Certified Coding Specialist Exam through the American Health Information Management Association. (PR: Completion of CCS courses; CO: HIT 217)

**HIT 280-283 – Special Topics.** 1-4 Credits. Study of content not normally covered in other courses. (PR: Enrollment with permission of program coordinator of course instructor)

**HIT 284-289 – Special Topics.** 1-5 Credits. These courses are designed to present various topics in the field of Health Information Technology.

## HISTORY (HIST)

**HIST 103 – United States History to 1877.** 3 Credits. This analytical survey course examines the social, cultural, economic, and political developments of United States history from approximately 1492 to 1877. (PR: REA 098 or ACT 18 or SAT 421 or PREA 098)

**HIST 104 – United States History Since 1877.** 3 Credits. This analytical survey course examines the social, cultural, economic, and political developments of United States history from 1877 until the present. (PR: REA 098 or ACT 18 or SAT Verbal 421 or PREA 098)

**HIST 114 – World History Until 1500.** 3 Credits. This analytical survey course examines the social, cultural, economic, and political developments of World History until approximately 1500. (PR: REA 098 or ACT 18 or SAT 421. PREA 098)

**HIST 115 – World History Since 1500.** 3 Credits. This analytical survey course examines the social, cultural, economic, and political developments of World History since approximately 1500. (PR: REA 098 or ACT 18 or SAT 421 or PREA 098)

**HIST 210 – American Legal History.** 3 Credits. This analytical course examines the social, cultural, political, and economical causes and effects of landmark United States' legal cases, spanning from approximately 1800 to the present. (PR: REA 098 or ACT Reading 18 or SAT Reading 421 or ACCUPLACER Reading 80)

**HIST 240 – West Virginia History.** 3 Credits. This course examines the social, cultural, economic, and political developments of West Virginia history from the time exploration and settlement until the present. (PR: REA 098 or ACT Reading 18 or SAT Reading 421 or ACCUPLACER Reading 80)

**HIST 280-289 –** 1-6 Credits. Study of content nor normally covered in other courses (PR: Permission)

## HOSPITALITY MANAGEMENT (HM)

**HM 101 – Travel, Tourism, & Hospitality Industry.** 2 Credits. This course is a comprehensive survey of the hospitality industry: Travel and tourism; lodging; food and beverage service; meetings and conventions; and leisure and recreation. Other ancillary subjects will involve hospitality marketing, human resources (HR), and leadership and management. This course is designed for aspiring hospitality management professionals of tomorrow, due to the increase in hospitality markets globally. (PR: REA 098 or ACT Reading 18 or SAT Reading 421 or ACCUPLACER Reading 80)

**HM 137 – Trends in the Hospitality Industry.** 3 Credits. This course provides an examination of issues and topics affecting the hospitality industry. Current and future trends in the industry will be discussed. Possible topics include but are not limited to technological advancement, gaming and casinos, interest marketing and industry globalization. (PR: REA 098 or ACT Reading 18 or SAT Reading 421 or ACCUPLACER Reading 80)

**HM 145 – Hotel Front Office.** 3 Credits. This course presents a systematic approach to hotel front office procedures by detailing the flow of business. This course examines the various elements of effective front office management and covers in detail the procedures and duties of the manager, desk agent, night auditor, reservations, credit and cash handling. Interdepartmental roles are also discussed. (PR: REA 098 or ACT Reading 18 or SAT Reading 421 or ACCUPLACER Reading 80)

**HM 155 – Hospitality Information Systems.** 3 Credits. This course examines the use of information systems and e-commerce in the hospitality industry. A diverse sampling of industry examples will illustrate the influence of technology on management and customer service. (PR: REA 098 or ACT Reading 18 or SAT Reading 421 or ACCUPLACER Reading 80)

**HM 210 – Human Resources & Diversity Management.** 3 Credits. An introduction to hospitality human resources providing an overview of hospitality operations and supervision. The food service manager's role in human resources, recruiting and hiring food service employees, training and developing employees, and special challenges in food service management are explored. (PR: REA 098 or ACT Reading 18 or SAT Reading 421 or ACCUPLACER Reading 80)

**HM 220 – Managing Catering Operations.** 3 Credits. This course will consider the essential aspects of catering operations in the food service industry. It will include an overview of banquets and catering, food service and menu development, menu design, using computers, and marketing in catering management. (PR: REA 098 or ACT Reading 18 or SAT Reading 421 or ACCUPLACER Reading 80)

**HM 222 – Rooms Division Management.** 3 Credits. This course will focus on the rooms division of a hotel, including housekeeping, engineering, concierge and front office. All aspects of these departments will be emphasized in this course. (PR: HM 145)

**HM 230 – Facilities Operations Management.** 3 Credits. An overview of project planning, food service design and maintenance, work area organization and layout, facilities engineering, and interior design and layout of the culinary establishment. (PR: REA 098 or ACT Reading 18 or SAT Reading 421 or ACCUPLACER Reading 80)

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**HM 240 – Introduction to Vineyards and Breweries.** 2 Credits. This course introduces the history of alcoholic beverages, why beverages were created, and how they spread across cultures and socioeconomic lines. The earliest and the latest versions of fermentation, aging, brewing, and rectification will be discussed. The course also introduces wine making, major wine names and regions, proper wine service and accessories, wine storage guidelines, types of beers, beer making basics and the importance of ingredients, types of distilled spirits and how they are made. (PR: HM 101)

**HM 250 – Managing Hospitality Marketing.** 3 Credits. This course reviews marketing concepts as they apply to the hospitality industry. It will explore market research, market analysis, selling, pricing and the development of marketing plans. (PR: REA 098 or ACT Reading 18 or SAT Reading 421 or ACCUPLACER Reading 80)

**HM 284, 286-289 – Hospitality Management Special Topics.** 1-3 Credits. Hospitality Management Topics courses available for majors and for non-majors as an introduction to the field of Hospitality management.

**HM 285 – Legal Aspects of Hospitality Management.** 3 Credits. An overview of hospitality law, operations and civil rights, and food service and hotel operators' liability. Considers maintaining security, legal employment, contracts, property rights, forms of hospitality business and the courts system and working with lawyers. (PR: REA 098 or ACT Reading 18 or SAT Reading 421 or ACCUPLACER Reading 80)

**HM 298 – Cooperative Hotel/Lodging Work Experience.** 1-3 Credits. Supervised, paid, on-the-job training for students working in Hotel/Lodging occupational field. (PR: Permission)

**HM 299 – Internship/Apprenticeship.** 1 Credit (CR/NC). Places the student in a work situation in order to gain practical work experience prior to seeking permanent employment. Correlates classroom instruction with real-world experience. (PR: Permission)

## HUMANITIES (HMN)

**HMN 120 – Introduction to Theater.** 3 Credits. This course is designed to further an understanding and appreciation of the elements of drama. Students will explore the cultural and historical perspectives of theatre through an examination of the major periods of dramatic literature, from the Greeks to modern Broadway. Students will examine the role of the actor, director, playwright, designer, technician, and audience in a theatrical production. Class consists of lecture/discussion, group activities, and video examples that supplement course content.

**HMN 235 – Leadership Development Studies.** 3 Credits. This course provides students the opportunity to explore the concept of leadership while developing and improving leadership skills. Integrated humanities readings, experiential exercises, films and contemporary readings are used. (PR: COM 111, ENL 111 or ENG 101 with a grade of "C" or better)

**HMN 280-289 – Humanities Special Topics.** 1-6 Credits. Study of content not normally covered in other courses. (PR:Permission)

## HUMAN SERVICES (HUSR)

**HUSR 280 – Special Topics.** 1-4 Credits. Study of content not normally covered in other courses.

## INDUSTRIAL SUPERVISION AND MANAGEMENT (ISM)

**ISM 133–Principles of Supervision & Management.** 3 Credits. Fundamental principles of administrative, staff, and operating management with organizational structures, operative procedures, and systems emphasized. Includes responsibilities, duties, and relationships of supervisors and leaders. (Offered Spring Semester only)

## INFORMATION TECHNOLOGY (IT)

**IT 100 – Computer Skills for Nontraditional Students.** 3 Credits. This course will serve as the introductory course for the nontraditional student. In this course, the student will be instructed on how to utilize the computer usernames/ passwords; 942 and PIN; email; word processing and electronic presentation basic applications. (Upon successful completion of this course, the student will be required to take the IT 101 class in order to meet the computer literacy requirement in the general education courses.)

**IT 101 – Fundamentals of Computers.** 3 Credits. An introductory computer literacy course designed to enable the student to understand the terminology, applications, processes, and effects of computers and the environments in which they are utilized.

**IT 102 – Advanced Computer Applications.** 3 Credits. This course is a practical, project-driven course utilizing Microsoft Office programs such as Access, Project, and Visio. (PR: IT 101 or equivalent)

**IT 107 – Fundamentals of the Internet.** 3 Credits. This course deals with fundamentals of the Internet. Topics considered include electronic mail, sending and receiving data across networks, and navigating the Internet.

**IT 110 – Computer Skills for Designers.** 3 Credits. This course serves as an introduction to the concepts, structure, and methodologies of various digital media tools, such as Adobe Creative Suite: Photoshop, Illustrator, Flash, and InDesign with a basic introduction to web publishing (Dreamweaver). The course also reinforces the principles and foundations of art and design (line, color, composition, and ideation) through the use of digital media as a creative tool for art, communication, and expression. (PR/CO: none)

**IT 115 – Introduction to Programming.** 3 Credits. Use of the computer to teach C++ programming language from a problem –oriented approach. Emphasis on the professional way to design and write programs with computers (PR: IT 101 or IT 102)

**IT 120 – Network Operating Systems I.** 4 Credits. Introduction to multi-user, multi-tasking network operating systems. Focus on installation procedures, security issues, and troubleshooting. (PR: none)

# COURSE DESCRIPTIONS

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**IT 131 – Introduction to Networking.** 4 Credits. Introduction to Networking focuses on network terminology, protocols, and standards, Ethernet LAN technologies, introductory WAN technologies, TCP/IP addressing, cabling, and basic routing principles. (PR: none)

**IT 141 – Networking Systems II.** 4 Credits. This course focuses on basic router configuration and trouble shooting, managing IOS software, configuring routed and routing protocols, TCP/IP protocols, and router Access Control. (PR: IT 131)

**IT 150 – Applications to Spreadsheets.** 3 Credits. Application of current spreadsheet software to the solution of business problems. Emphasis on numerical analysis, forecasting, and business graphics. (PR: IT 101 or IT 102)

**IT 160 – Geographic Information System Concepts.** 3 Credits. This course introduces GIS application software and its uses. The course takes a hands-on approach to teaching how to create, edit, and manipulate georeferenced spatial and tabular data. It provides an introduction to geospatial concepts and tools for persons presenting data in maps, charts and reports. It introduces the student to the use of image processing and remote sensing technologies in his or her career fields.

**IT 165 – Spatial Analysis & 3D Modeling.** 3 Credits. This course will demonstrate how remote sensing and GIS integration within a database of imagery for multistage, multivariate sampling, and geobiophysical modeling, involving modeling systems and environmental development, may be used across the world wide web.

**IT 171 – Introduction to Gaming I.** 3 Credits. This course will introduce computer game theories, methods and practice. We will utilize Macromedia Flash to create web-based interactions and games at the beginner to intermediate level. Assigned readings and projects will cover various aspects of computer game production, thought and application.

**IT 210 – Networking Administration I.** 3 Credits. This provides students with the knowledge and skills necessary to install, configure, administer, and support Active Directory Domain Services in the Microsoft Windows Server operating system. Additional areas of focus include group policy, certificate services, and DFS. This is the first of four courses that prepare students to become MCITP: Server Administrator. (PR: IT 120; CO: IT 211, IT 216 and IT 217)

**IT 211 – Networking Administration II.** 3 Credits. This course provides students with the knowledge and skills to implement and manage a Microsoft Windows Server 2008 network infrastructure. Areas of focus include DHCP, DNS, RRAS, WINS and IPsec. This is the second of four courses that prepares students to become an MCITP: Server Administrator. (PR: IT 210 and IT 216 and IT 217; CO: IT 210, IT 216 and IT 217)

**IT 212 – Publishing on the Internet.** 3 Credits. This course will familiarize the student with issues related to publishing on the Internet. Topics covered include basic design skills, multimedia issues, and development of web pages. (PR: IT 107)

**IT 213 – Web Graphics/Design.** 3 Credits. Explores the use of a variety of tools and computer graphics techniques to produce professional graphic

designs. Utilizes various hardware and software to create visually-pleasing and professional-looking graphics for web pages. (PR: C or better in IT 155)

**IT 215 – Advanced Programming.** 3 Credits. This course provides advanced programming concepts and skills applied to problem-solving situations using current industry standards and programming languages. (PR: a C or better in IT 115)

**IT 216 – Networking Administration III.** 3 Credits. This course provides students with the knowledge and skills necessary to install, configure, administer, and support different types of application servers running Windows Server. Areas of focus include IIS, Terminal Services, Media Services, and File and Print Services. This is the third of four courses that prepares students to become an MCITP: Server Administrator. (CO: IT 210, IT 211, and IT 217)

**IT 217 – Networking Administration IV.** 3 Credits. This course provides students with the knowledge and skills to successfully plan, monitor, and manage deployments of Active Directory, Application Infrastructure, File and Print Services, Storage Solutions, High Availability options and Network Security. The course focuses on the Windows Server 2008 environment with an emphasis on planning and deploying the previously mentioned services. This is the fourth of four courses that prepares students to become an MCITP: Server Administrator. (CO: IT 210, IT 211, and IT 216)

**IT 219 – Networking Administration V.** 3 Credits. This course provides students with knowledge and skills necessary to install, configure, and maintain client operating systems in a Windows Server 2008 environment. This is the first of three additional courses that prepares students to become an MCITP: Enterprise Administrator. (PR: IT 217 and CO: IT 222 and IT 223)

**IT 221 – Advanced Operating Systems II.** 3 Credits. Focus of the course is to provide practical applications of specific system software in multi-tasking environments. Advance operating system concepts are presented from an application programmer's perspective. (PR: IT 120 or IT 131)

**IT 222 – Networking Administration VI.** 3 Credits. This course provides students with the knowledge and skills necessary to prepare the Exchange Server 2007 Infrastructure, install and transition to Exchange Server 2007, and how to manage an Exchange Server. The course also covers managing default, custom, and public folders, connectors, transport rules, and message compliance as well as accessing the Exchange Server remotely. This is the second of three additional courses that prepares students to become an MCITP: Enterprise Administrator. (PR: IT 217 and CO: IT 219 and IT 223)

**IT 223 – Networking Administration VII.** 3 Credits. This course teaches students how to design a Windows Server Network Infrastructure that meets varying business and technical requirements for network services. This course also teaches how to design core identify and access management components, support identity and access management components, and monitor business continuity and data availability. This is the third of three additional courses that prepares students to become an MCITP: Enterprise Administrator. (PR: IT 217 and CO: IT 219 and IT 222)



# COURSE DESCRIPTIONS

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**IT 224 – Fundamentals of Network Security.** 3 Credits. This course provides the knowledge and skills necessary to identify network security threats and vulnerabilities, and to respond and recover from security incidents. (PR: IT 101 or IT 102)

**IT 225 – Fundamentals of Wireless LANs.** 4 Credits. This course focuses on the design, planning, implementation, operation and troubleshooting of Wireless LANs. (PR: IT 131 or IT 230 or Permission )

**IT 226 - Network Security Solutions.** 3 Credits. This course focuses on overall security processes including security policy design and management and security features enabled by routers. (PR: IT 241 or Cisco Semester 4 with minimum grade of 78%)

**IT 227 – Network Security Firewalls.** 3 Credits. Network Security Firewalls focuses on securing and monitoring a network with hardware-based firewalls. (PR: IT 241 or Cisco Semester 4 with minimum grade of 78%)

**IT 231 – Networking Systems III.** 4 Credits. Networking Systems III focuses on LAN IP addressing including Variable Length Subnet Masking and configuring RIPv2, single-area OSPF, and EIGRP routing protocols, and Ethernet switching technologies including Virtual LANs (VLANs), the Spanning Tree Protocol (STP) and VLAN Trunking Protocol (VTP). (PR: IT 141 and CO: IT 241)

**IT 241 – Networking Systems IV.** 4 Credits. Networking Systems IV focuses on LAN IP addressing and network management techniques and WAN PPP, ISDN, DDR, and Frame Relay connections and protocols. (PR/CO: IT 231)

**IT 242 – Emerging Web Technologies.** 3 Credits. This course will investigate advanced Internet concepts and state-of-the-art technology in developing web pages. Emphasis will be on design, utilizing current industry standards. (PR: IT 212)

**IT 245 - Information Storage and Management.** 3 Credits. This course provides students with the knowledge and skills necessary to plan, implement, and deploy storage system and different storage system models - ranging from basic storage models such as Direct Attached Storage (DAS) to networked storage models such as Network Attached Storage (NAS), Storage Area Network (SAN) and Content Addressed Storage (CAS). (PR: IT 210 or permission)

**IT 250 – Applications to Databases.** 3 Credits. Study of information retrieval and database software. (PR: IT 101 or IT 102)

**IT 252 – Advanced Web Publishing.** 3 Credits. This course will provide students with the knowledge and skills for advanced publishing on the Internet. Students will learn how to use the latest technologies such as HTML5 elements and attributes to structure web content. They will learn how to create semantically meaningful page structures and use CSS to control design and layout properties. (PR/CO: IT 212)

**IT 255 - Virtualization Technologies.** 3 Credits. This course provides students with the knowledge and skills necessary to plan, implement, and deploy virtualization technologies. Various software options will be installed and explored, such as Virtual PC, Virtual Server, Hyper-V, VMWare, and Terminal Services. (PR: IT 210 or permission)

**IT 260 – Integration of GIS and RS Systems.** 3 Credits. This course is designed to integrate Geographic Information System (GIS) and Remote Sensing (RS) concepts utilized with GIS and Image Processing software. Various software systems such as ER Mapper, IDRISI / Kilimanjaro, and ArcGIS will be used to illustrate systems integration in solving geospatial problems with technical solutions. (PR: IT 160)

**IT 261 – Digital Forensics.** 3 Credits. This course covers the basic concepts used in a digital forensics examination; and introduces techniques required for conducting a forensic analysis on systems and data. The course also explores methods of recovering and restoring data for various situations ranging from litigation to fraud based investigations. (PR/CO: IT 101)

**IT 262 – Mobile Operating System Application Development.** 3 Credits. This course provides students with the knowledge and skills necessary to plan, implement, and deploy applications to be used on mobile devices ranging from applications used on platforms such as IOS to Android. Students will also learn the programming languages involved with the creation of these applications. (PR/CO: IT 215 or Permission)

**IT 266 – Image Web Server Development.** 3 Credits. This course will demonstrate how remote sensing and GIS integration within a database of imagery for multistage, multivariate sampling, and geobiophysical modeling, involving modeling systems and environmental development, may be used across the world wide web.

**IT 268 – CCNP 1-Advanced Routing.** 4 Credits. This course is designed to prepare the student to pass the Building Scalable Internetworks (BSCI) exam. Content includes advanced routing using Cisco equipment connected to LANS and WANS typically found at medium to large network sites. Upon completion, the student will be able to implement the appropriate IOS services required to build a scalable routed network. (PR: IT 241 or CCNA certification, and permission)

**IT 269 – CCNP 2 - Remote Access.** 4 Credits. This course is the second of four designed to prepare the student to pass the Building Cisco Remote Network Access (BCRNA) exam. Content includes WAN cabling, Asynchronous Connections with modems, PPP, Dial-up, ISDN, X.25, Frame Relay Access, network performance with queuing and compression, NAT, Access-control, and emerging remote access technologies. (PR: IT 241 or CCNA certification, and permission)

**IT 270 – Computer Essentials and Application.** 4 Credits. This course provides students with the basic skills needed to any entry-level service technician regardless of job environment and covers information on basic hardware and operating systems, including installation, repair, troubleshooting, preventative maintenance and security of computer hardware and systems; as well as the communication skills and professionalism now required of all entry-level IT professionals. (PR: IT 101 or IT 102)

**IT 271 – Introduction to Gaming II.** 3 Credits. This course is a follow-up course to Gaming 1. This course will continue computer game theories, methods and practices. We will utilize Macromedia Flash to create web-based interactions and games at the beginner to intermediate level. Assigned readings and projects will cover various aspects of computer game production, thought and application. (PR: A C or better in IT 171)

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**IT 272 – Introduction to 3-D Modular Programming.** 3 Credits. This course is a follow-up course to Advanced Programming. This course will continue computer game theories, methods and practices. We will utilize current programming tools such as Microsoft XNA, Alice, 3-D game engines, and DirectX programming. These resources will be used to create 3-D games and game environments. Assigned readings and projects will cover various aspects of computer game production, thought, and application. (PR: a C or better in IT 215)

**IT 277 – Management Information Systems.** 3 Credits. Provides understanding of information needs of management and information technology used by various business subsystems and demonstrates how technology can be utilized for competitive advantage. (CO: IT 299 or permission)

**IT 278 – CCNP 3 - Multilayer Switching.** 4 Credits. This course is to prepare the student to pass the Building Cisco Multilayer Switched Networks (BCMSN) exam. Content includes design criteria for multilayer switched networks, including the current Cisco recommendation for designing a campus network. The network is built from cabling connections to implementing VLANs, Spanning Tree, and routing. After the cable has been built, optimization of the network is made to ensure its availability. (PR: IT 241 or CCNA certification, and permission)

**IT 279 – CCNP 4 - Network Troubleshooting.** 4 Credits. This course is designed to prepare the student to pass the Cisco Internetwork Troubleshooting (CIT) exam. Content includes diagnosis and troubleshooting of WAN cabling, protocols, advanced routing configurations, switching, asynchronous connections with modems, PPP, Dialup, ISDN, X.25, and Frame Relay access, network performance with queuing and compression, NAT access control, and emerging network technologies. (PR: IT 268, IT 269, IT 278, and permission)

**IT 280-289 – Special Topics.** 1 to 4 Credits. Study of content not normally covered in other courses. (PR: Permission)

**IT 293 – Networking Practicum.** 3 Credits. This course provides students with the knowledge and hand-on troubleshooting skills necessary to work in a heterogeneous computing environment. This lab-based course will cover such topics as interoperability between PCs and Macs on a domain, working in a heterogeneous Windows Server environment, and working in a heterogeneous Exchange environment (PR: IT 210)

**IT 298 – Game and Design Internship.** 1 Credit. In this internship class the student works on a project in the Gaming and Design field. Emphasis is on the application of knowledge gained and skills attained in the classroom to a real-world job experience. (PR: Permission)

**IT 299 – Information Technology Internship.** 3 Credits. Places the student in a work situation in order to gain practical work experience prior to seeking permanent employment. Correlates classroom instruction with real-world experience. (PR: Permission)

## INLAND WATERWAYS (IW)

(Classes are taught at Tri-State Fire Academy)

**IW 100 – Deckhand Basic Training.** 3 Credits. This is an introductory training course for entry level workers in the inland maritime industry. It covers the unique jargon of the maritime industry, safe working practices, and basic skills such as line throwing, laying wires, and knot tying.

**IW 101 – Steersman of Towing Vessels - Western Rivers.** 6 Credits. This course is designed for experienced deckhands on the inland waterways who desire to obtain a license to pilot vessels on the Western Rivers. The 80-hour course includes training in deck general, safety and environmental subjects, theoretical and practical inland navigation and Rules of the Road. This course is approved by the U.S. Coast Guard. (PR: Permission)

**IW 102 – Basic Marine Firefighting.** 1 Credit. This is an entry level course for maritime workers designed to teach students the avoidance of fires on board boats and the science and theory of marine fire fighting at the awareness level. (PR: Permission)

**IW 103 – First Aid in Remote Locations.** 1 Credit. This course provides training in first aid procedures in situations where advanced medical assistance is not readily available.

**IW 104 – Tankerman-PIC Barge.** 3 Credits. Students learn the requirements and regulations regarding loading, transporting, and discharging dangerous liquids on barges. Classroom training is reinforced in a field environment. Upon successful completion of the course, students will be prepared to take the United States Coast Guard certification exam.

**IW 105 – Ship Construction.** 3 Credits. This course provides the student with the general knowledge of modern ship construction techniques that can be applied to loading and stability calculations and to emergency damage control procedures.

**IW 110 – Basic and Advanced Marine Fire Fighting.** 6 Credits. This course is designed for maritime personnel who operates vessels of any size in any location. It is a U.S. Coast Guard prerequisite for licensing as a Marine Engineer, and for licensing as a Deck Officer of any vessel of 200 Gross Registered Tons or more. Topics covered include chemistry of fire, theory of fire fighting, fire fighting equipment, and personal safety. Both classroom and hands-on training are provided, including live fire exercises. Training is conducted in accordance with NPPA regulations. The course is approved by the U.S. Coast Guard and the International Maritime Organization.

**IW 202 – Advanced Marine Firefighting.** 2 Credits. This course teaches maritime students advanced marine fire fighting theory. Students receive classroom instruction on the theory and principles of fire fighting and how to properly supervise a ship's crew to put out an on-board fire. Theoretical training will be reinforced through hands-on fire suppression practice on an on-site mock up trainer. (PR: IW 102)

**IW 207 – Steersman/Apprentice Mate of Towing Vessels.** 6 Credits. This course prepares the student in the academic subjects required for the first Coast Guard license in the progression to Master of Towing Vessels. This course is approved by the U.S. Coast Guard. (PR: Permission)

# COURSE DESCRIPTIONS

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**IW 209 – Marine Navigation Rules.** 3 Credits. This course covers the regulations that govern the marking, lighting, signaling and maneuvering of all vessels on U.S. rivers and international waterways. (PR: Permission)

**IW 211 – Piloting and Navigation.** 3 Credits. This course covers the art and science of navigation on inland and near coastal waters. Students learn how to pilot a vessel in open waters both with and without reference to landmarks avoiding known submerged and visible obstacles. Students are required to determine the vessel's position using navigation charts, visual references, and radar. (PR: Permission)

**IW 213 – Shipboard Dock Operations.** 3 Credits. This course teaches effective utilization and management of all resources to ensure the safe completion of a vessel's voyage. The course focuses on bridge officers' skills such as teamwork, team building, communication, leadership, decision making, and resource management and incorporates this into the larger picture of organizational and regulatory management. This course addresses issues such as a management of operational tasks, stress, attitudes and risk.

**IW 215 – Radar Observer (Inland).** 2 Credits. This course instructs students on how to utilize marine radar to safely navigate on inland waterways. Students learn how to use radar to navigate in good and inclement weather, as well as during periods of limited visibility, and upon discovery of an obstacle, take the appropriate action to avoid a collision. Students taking this course are eligible for a U. S. Coast Guard certification.

**IW 280-289 - Special Topics.** 1-6 Credits. This course presents various topics in marine transportation.

**IW 290 – Maritime OJT Training Phase I.** 1-6 Credits. This course consists of an entry level supervised paid on-the-job training (OJT), internship, or practicum performed in a maritime setting. Students will apply maritime science theory in real life situations while serving a member of a crew and by performing deckhand duties.

**IW 291 – Maritime OJT Training Phase II.** 1-6 Credits. This course consists of an advanced supervised paid on-the-job training (OJT), internship, or practicum performed in a maritime setting. Students will apply maritime science theory in real life situations with minimal supervision while serving a member of a crew and by performing deckhand duties. (PR: Permission)

## INTERIOR DESIGN (ID)

(Classes are taught at Cabell County Career Technology Center)

**ID 102 – Introduction to Design.** 3 Credits. This foundation course will introduce the visual/formal elements and principles of design as well as a range of problem solving strategies. Working with visual weight, scale, proportion, and contrast will help to further develop skills needed for more advanced design work. (PR: REA 098 or ACT Reading 18 or SAT Reading 421 or ACCUPLACER Reading 80)

**ID 110 – Perspective Drawing Techniques.** 3 Credits. This course explores freehand and perspective drawing techniques with an emphasis on accuracy, scale and presentation. It is appropriate for students who wish to increase their drawing skills. It begins with the fundamentals of drawing and

works through more complicated drawings with a hands-on approach. (PR: REA 098 or ACT Reading 18 or SAT Reading 421 or ACCUPLACER Reading 80)

**ID 111 – Interior Design Theory.** 3 Credits. Course will focus on professional practice including procedures for establishing a design business, business principles, communication skills, and professional ethics. Students will be introduced to the elements and principles of design that are related to the living environment and participate in discussions of the physiological effects that color has on the living space used in residential and commercial design.

**ID 112 – Design Graphics.** 3 Credits. Study of space planning, furniture placement and traffic flow incorporating design concepts of creativity, space, and methodology into a physical space. Interpret architectural symbols, elevations, blue prints, and building codes for both. Executing design concepts of space planning with required specification for special needs and identifying safety considerations for universal design.

**ID 115 – Visual Merchandising.** 3 Credits. The course will concentrate on integration of elements and principles of design to create effective and attractive displays. Students will be involved in model building and visual presentations to create the total image and selling package. Lighting will also be examined and how different types of lighting affect the interior environment. (PR: ID 111)

**ID 120 – Advanced Perspective Drawing.** 3 Credits. This course explores advanced freehand and perspective drawing techniques with an emphasis on accuracy, scale and presentation. This course is appropriate for students who wish to increase their drawing skill. It begins with the fundamentals of drawing from life and works through two-point perspective drawings in color. The Munsell Color model is studied and applied to perspective renderings. Project work outside the classroom is required, and all projects are developed to completion. (PR: ID 110)

**ID 201 – 3-D Design.** 3 Credits. This course is the study of form and structure in three-dimensional space and design. (PR: ID 102)

**ID 202 – 3-D Design.** 3 Credits. Intensive study of form and structure in three-dimensional space. Design with emphasis on three-dimensional form. (PR: ID 102)

**ID 205 – Interior Design Architecture.** 3 Credits. Historical study of architectural styles and embellishments from prehistoric through 21st century. Emphasis on interior architecture, architects, designers, cultural backgrounds, and current trends in architecture.

**ID 211 – Technical Drawing.** 3 Credits. This course will focus on human needs in the interior environment using methodology and problem solving techniques. Concentration will focus on floor plans, schematic drawings and elevations on graph paper, vellum and illustration board in pencil and ink and will apply knowledge of line-work, lettering, use of templates, and transfer letters and symbols. Good design principles in kitchen design will also be studied.

**ID 212 – Interior Textile Material.** 3 Credits. Course will examine the origins, qualities, productions, regulations and uses of natural and manufactured fibers; their advantages and disadvantages, and their uses in both residential and commercial spaces.

# COURSE DESCRIPTIONS

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**ID 215 – Floral Design and Application.** 3 Credits. Exploration of the history of floral design, the use and effects of color and basic elements of design in floral arranging and interpretation of landscape plans. (PR: ID 111)

**ID 220 – Window/Wall/Floor Treatments and Decorative Accessories.** 3 Credits. Course will concentrate on fundamentals in designing, measuring, calculating, fabricating, and installing soft and hard window treatments and appropriate textiles used. It will study the historical background of wall coverings, measurements and estimations in wall coverings, paint, paneling, tile and drywall. Students will study the functional and decorative accessories for residential and commercial use. A chronological study of visual arts in architecture, sculptures, painting, and various media from pre-historic to modern times will be included. The course also covers the production, construction, and calculations and usages of soft and hard floor coverings in residential and commercial interiors. (PR: ID 212)

**ID 225 – Furniture Construction/History.** 3 Credits. The study of wood types used in furniture construction, type and quality of furniture joints, methods and materials used in construction of upholstered furniture and a chronological study of furniture styles and their appropriate textiles from ancient time to present. (PR: ID 212)

**ID 280-287 – Special Topics.** 1-6 Credits. Study of content not normally covered in other courses. Enrollment with permission of program coordinator or course instructor. (PR: Permission)

**ID 299 – Internship.** 3 Credits. 90 hours training in the industry identifying requirements needed for the various careers in the interior design field. (PR: Must complete minimum 48 credit hours in Interior Design program)

## KENTUCKY VIRTUAL UNIVERSITY (KYV)

**KYV 280-285 – Special Topics.** 1 to 4 Credits. Online courses offered through an agreement between Community and Technical College System of West Virginia and Kentucky Virtual University.

## PARALEGAL STUDIES (LAW)

**LAW 101 – General Law I.** 3 Credits. Designed to teach the art of legal reasoning and analysis. Appellate court opinions are briefed in order to discern the legally relevant facts, the legal issues involved, the decision of the court and the reason for that decision. (PR: REA 098 or ACT Reading 18 or SAT Reading 421 or ACCUPLACER Reading 80)

**LAW 102 – General Law II.** 3 Credits. Continuation of General Law I, with emphasis on the general practice of law within the State of West Virginia, designed to give a broad overview of the various law specializations. (PR: REA 098 or ACT Reading 18 or SAT Reading 421 or ACCUPLACER Reading 80)

**LAW 103 – Legal Assisting.** 3 Credits. Study of the various roles played by paralegals in the legal system and the skills required to work as a paralegal in several major areas of law. Also covered are legal ethics, interviewing and investigation skills, litigation skills, trial preparation and employment information. (PR: REA 098 or ACT Reading 18 or SAT Reading 421 or ACCUPLACER Reading 80)

**LAW 104 – Legal Ethics.** 1 Credit. Introduction to legal ethics, ethical requirements for non lawyer employees and regulation of paralegals/legal assistants. Includes information regarding the process of handling ethics complaints against lawyers and employees. (CO: LAS 103 or LAW 103)

**LAW 110 – Business Organization & Governmental Regulations.** 3 Credits. Procedural information on such topics as corporations, partnerships, agencies, business trusts and other business vehicles. Survey of the fundamental principles of law applicable to each area, including the law of bankruptcy.

**LAW 209 – Administrative Agency Advocacy.** 3 Credits. Techniques of legal interviewing and details of case preparation and presentation before state and federal governmental agencies that allow non-lawyer advocacy. (PR: LAS 102 and LAS 103 or LAW 102 and LAW 103)

**LAW 211 – Legal Research and Writing I.** 3 Credits. Basic legal research sources and methods. Techniques of legal analysis with emphasis on specific cases, issues, and research. Students will be introduced to legal writing and use of a law library. (PR: LAS 102 or LAW 102)

**LAW 212 – Legal Research and Writing II.** 3 Credits. Intermediate legal research methods, analysis and writing methods. Court rules and introduction to new research methods. (PR: LAS 211 or LAW 212)

**LAW 213 – Computer Applications to the Law Office.** 3 Credits. Overview of software applications to the law office including calendar, docket control, litigation support, billing, timekeeping, pleadings preparation, legal research, and other applications. (PR: AAT 136 or AT 136 or IT 101)

**LAW 225 – Bankruptcy Law.** 3 Credits. Overview of the substantive law of bankruptcy. Students will become familiar with bankruptcy procedures and gain hands-on experience with bankruptcy tasks. (PR: LAS 102 or LAW 102)

**LAW 231 – Estate Planning and Probate Administration.** 3 Credits. Overview of the transferring of assets, including trusts, wills and gifts, and a review of typical documents. Includes administration of decedents' estates, including probate procedure, federal and state death and income taxes, and fiduciary (administrators) accounting and responsibilities. (PR: LAS 102 or LAW 102 and REA 098 or ACT Reading 18 or SAT Reading 421 or ACCUPLACER Reading 80)

**LAW 235 – Civil Litigation.** 3 Credits. Overview of civil case preparation before trial, including examination of various procedures to be completed and documents to be filed; working up trial documents for counsel's assistance. (PR: LAS 102 or LAW 102)

**LAW 240 – Criminal Litigation.** 3 Credits. Overview of criminal case preparation before trial: including examination of various procedures to be completed and documents to be filed, working up trial documents for counsel's assistance. (PR: LAS 102 or LAW 102)

**LAW 244 – Family Law.** 3 Credits. Prepares the student to undertake tasks associated with the laws of domestic relations, including preparation of documents of complaint, answer and summons; pleas; research reports; conclusions of law; and judgment orders. (PR: REA 098 or ACT Reading 18 or SAT Reading 421 or ACCUPLACER Reading 80)

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**LAW 248 – Medical Law.** 3 Credits. Introduction to the basic concepts of tort liability of physicians, surgeons and health professionals and vicarious liability of hospitals. (PR: REA 098 or ACT Reading 18 or SAT Reading 421 or ACCUPLACER Reading 80)

**LAW 250 – Employment Law.** 3 Credits. The study of the law in the workplace as it applies to the regulation of employment, employer-employee relationship, Title VII of Civil Rights Act of 1964, affirmative action, testing evaluations, privacy, ERISA, workers compensation and the Fair Labor Standards Act. (PR: LAS 101 for Legal Assistant students; MG 233 for management tech students or permission)

**LAW 255 – Interviewing and Investigation.** 3 Credits. Study and practice of job duties for paralegals in interviewing and investigation of civil and criminal cases. Material covered includes initial and follow-up interviewing techniques for clients and witnesses, development of interview materials, and investigation techniques for civil and criminal cases. This course has an information literacy focus. (PR: LAS 102, LAS 103, or LAW 102 and LAW 103 or permission)

**LAW 260 – Legal Nurse Consulting.** 3 Credits. To provide nurses with the legal background and skills to provide consulting services (medical records/treatment review) to attorneys, workers' compensation offices, vocational rehabilitation, Social Security Administration, insurance companies, HMO's and various state or federal agencies. Also, structure of the West Virginia judicial system and ethics (as they apply to nurse paralegals and lawyers) and life care plans.

**LAW 280–283 – Special Topics.** 1-4 Credits. Study of (recontent not normally covered in other courses. (PR: Enrollment with permission of program coordinator or course instructor.)

**LAW 290 – Internship.** 3-6 Credits (CR/NC). Places student in work situation for a specific period for work experience prior to employment. Correlates classroom instruction with experience. (PR: Permission)

## MACHINIST TECHNOLOGY (MT)

(Classes are taught at Robert C. Byrd Institute for Advanced Flexible Manufacturing)

**MT 105 – Industrial Safety.** 2 Credits. An introductory course designed to develop safe workplace practices and to become familiar with OSHA standards. Students will be required to demonstrate safe handling of work materials, operation of machines and tooling, and storage and disposal of hazardous materials.

**MT 117 – Systems and Technologies.** 3 Credits. Introduction to automation development procedure; factors introduction to automation development procedure: factors of automation; distribution; part transfer devices; part of automation; distribution; part transfer devices; part positioning devices; loading devices; prime movers; positioning devices; loading devices; prime movers; controls; continuous production; automated assembly; future of automation; advantages of automation; of automation; advantages of automation. (PR: EGT 110 or permission)

**MT 119 – Production Activity Control.** 3 Credits. Instruction in the purpose, principles, policies, and procedures of production control; practical application of production control; factors affecting production control; major functions of production control.

**MT 121 – Introduction to Machinery.** 4 Credits. A hands-on laboratory experience to acquaint students with machinery and the industrial environment. In this course the application of skills and knowledge of machine tool processes are stressed. (PR: Permission)

**MT 134 – Master Planning.** 3 Credits. Perspective of the several functions within an individual organization and how the coordination of such functions contributes to an effective enterprise.

**MT 200 – Blueprint Reading.** 3 Credits. Students will develop the ability to read standard and GDT orthographic blueprints as required in a machine shop.

**MT 205 – Precision Measurement.** 3 Credits. Students learn to identify select and use measuring instruments used in machining.

**MT 210 – Introduction to Robotics.** 3 Credits. Designed to teach the student terminology, functional designed to teach the student terminology, functional parameters, and uses of industrial robots. Emphasis is parameters, and uses of industrial robots. Emphasis is given to the designed component makeup and microprocessor given to the designed component makeup and microprocessor skills needed for it control (PR: CT 103; skills needed for its control) (PR: CT 115, EDT 110 or permission)

**MT 215 – Metalworking Theory & Application.** 10 Credits. Students will become skilled in the use of machines and processes utilized in metalworking. They will develop a basic knowledge of CNC machining and programming, and the calculation of speeds and feeds.

**MT 223 – Advanced Technical Specialization.** 4 Credits. The application of skills and knowledge used in turning, milling, and drilling operations with emphasis on HAAS CNC , machines. (PR: MT 215)

**MT 231 – Inventory Management.** 3 Credits. Current information about materials and their manufacturing current information about materials and their manufacturing processes and flow, relation of substituted materials to processes and flow, relation of substituted materials to process, problems involved in material use. (PR: EGT 101 or process, problems involved in material use; MAT 145 or permission)

**MT 234 – Material & Cap Req. Planning.** 3 Credits. Procedures and techniques in scheduling, manpower planning, and utilization. Control of production flow from raw and utilization. Control of production flow from raw material receipt to produce shipment. (PR: MAT 145)

**MT 233 – NIMS Credentialing.** 4 Credits. This course will acquaint students with the National Institute for Metalworking Skills (NIMS) and prepare them for the national credentialing examination. Students will be credentialed in at least 3 areas recognized by the Institute before they are graduated from the Machinist Technology program. (PR: Permission)

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**MT 237 – JIT Manufact Strategies.** 3 Credits. Modern methods of advanced planning and forecasting modern methods of advanced planning and forecasting techniques and control, routing with break-even analysis techniques and control; routing with break-even analysis of alternatives; mathematical loading and scheduling, using of alternatives; mathematical loading and scheduling, using index and linear programming methods. (PR: BUS 206; MAT 145 or permission)

**MT 241 – Introduction to Computer Numerical Control Machining.** 4 Credits. Students will be provided an overview of the history of CNC machining, operation, setup, G-code programming and coordinate systems used on CNC machines. Students will have the opportunity to work with up-to-date CNC equipment after learning the basics. (PR: Permission)

**MT 242 – CNC Maintenance.** 4 Credits. Students will develop an understanding of all aspects of CNC maintenance including, hydraulics, electronics, machine setup and alignment, pneumatics and programmable logic controllers (PLC). Students will perform actual hands-on application on CNC machining centers and CNC training centers. Simulators will be used for basic instruction. (PR: MT 241)

**MT 243 – Introduction to Advance Measurement.** 3 Credits. Students will be provided an overview of computer measuring and digitizing instruments for part inspection and reverse engineering. Instruction will be provided in the use of CMM's, Faro Arm's, Laser Scanners, etc. (PR: MT 241)

**MT 244 – CNC Maintenance.** 4 Credits. Students will receive comprehensive instruction on CNC and mill operations including machine setup and tooling selection. They will receive instrumentation on work coordinates, tool length offsets, coordinate settings, program entering and editing, tool wear compensation, setting zero, and part set up. Milling operations will cover X, Y and Z axes, and lathe operations will cover X and Z axes. (PR: MT 240 and MT 242)

**MT 246 – Computer Aided Manufacturing.** 4 Credits. This course will introduce CNC Programming via CAD/CAM. Students will learn Gibbs CAM, Master CAM, and conversational programming. Basic part drawing will be taught, process layout, tool selections and how to post a program. Students will receive instruction in program verification and how to analyze it. Course focus will be 2 and 3 axis programming. (PR: MFE 220 and MT 244, permission)

**MT 248 – National Incident Management System Credentialing/Project.** 4 Credits. Student will be required to pass the 2 NIMS CNC Machining Level I tests, both written and performance. During this course, the student will also be required to produce parts from drawings on a project basis to insure competency in all aspects of CNC operation and programming, some of these could possible be prototypes for industry. (PR: MT 246)

**MT 277 – Flexible Manufacturing.** 3 Credits. This course will introduce the student to basic knowledge and application skills dealing with the FMS environment to include the integration of CAD, robotics, CNC machine operations.

**MT 280-285 – Machinist Special Topics.** 1-6 Credits. Study of content not normally covered in other courses. Enrollment with permission of program coordinator or course instructor. (PR: Permission)

**MT 286-288 – Machinist Technology Special Topics.** 1-6 . Machinist Technology Special Topics. Study and skill development not normally covered in other courses.

**MT 289 – Internship for Machinist.** 6 Credits. The student, work supervisor, and instructor will develop a training plan to ensure that activities are applicable to the student's career goals. Completion of this internship will require the student to perform machinist-type duties. The experience will be monitored by the instructor. (PR: Permission)

## MAINTENANCE TECHNOLOGY (MTEC)

**MTEC 101 – Machine Shop I.** 3 Credits. This course designed to teach students the proper use of power-operated shop equipment including metal turning lathes, milling machines, shapers, saws, and drills as well as standard safety practices and operating procedures.

**MTEC 105 – Fundamentals of Industrial Maintenance.** 3 Credits. This course is designed to teach students the knowledge and skills necessary to enter the field of industrial maintenance. Students will learn about workplace safety, measurement and calculation, proper use of tools, fasteners, lubrication, bearings, mechanical alignment, and vibration.

**MTEC 107 – Welding.** 3 Credits. This course introduces students to the fundamentals of welding/cutting. Students will become familiar with general safety, welding terms and joints, and oxyfuel welding techniques.

**MTEC 110 – Print and Schematic Reading.** 3 Credits. Teaches students the basics of reading mechanical prints, schematics for electrical/electronic circuits, hydraulic/pneumatic circuits, and piping schematics

**MTEC 113 – Fundamentals of Welding Technology.** 3 Credits. Fundamentals of Welding Technology teaches students the knowledge and skills necessary to become proficient in welding techniques. Students learn welding terms and processes, how to perform oxyfuel cutting, and the proper safety techniques to be used in all welding situations.

**MTEC 121 – Machine Tool Operation.** 3 Credits. This course introduces students working with intermediate hand and power tools to the skills related to machine tool technology including vertical band hand saws, grinders, metal lathes, and milling machines. Students will learn how to measure and to scribe circles, radian, and parallel lines on a work piece. (PR: Permission)

**MTEC 171 – Hydraulic and Pneumatic Systems.** 3 Credits. Teaches students the principles and practical application of pneumatic and hydraulic systems.

**MTEC 250 – Electricity Basics I.** 3 Credits. This course is designed to teach the principles of electricity, AC circuits, series and parallel circuits, resistors, Ohm's Law, magnetism, electrical measurement, and DC circuits.

**MTEC 251 – Electrical Maintenance.** 3 Credits. Teaches students the knowledge and base technical skills for entry into the field of electrical industrial maintenance. Students will learn basic electrical theory and calculations; how to

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use electrical tools, instruments, and equipment; how to read electrical schematics and diagrams; and how to safely work with electrical systems.

**MTEC 280-289 – Special Topics.** 1-6 Credits. This course presents various topics in maintenance technology field.

## MANAGEMENT (MG)

**MG 101 – Introduction to Business.** 3 Credits. Study of the nature of business activities and problems regarding ownership, organization, management and control. Course content is designed to emphasize business vocabulary and explore personal characteristics and training most desirable for various areas of specialization in business. (PR: REA 098 or ACT Reading 18 or SAT Reading 421 or ACCUPLACER Reading 80)

**MG 102 – Introduction to Entrepreneurship.** 3 Credits. This course introduces individuals desiring to start and run their own business to the principles of entrepreneurship. Students will learn how to develop and draft business, marketing, sales, and financing plans while learning how to determine product/service pricing. Discussions will focus on best business practices for start-up and future growth considerations. (PR: REA 098 or ACT Reading 18 or SAT Reading 421 or ACCUPLACER Reading 80)

**MG 105 – Introduction to Workplace Training.** 3 Credits. This course will provide an overview of the skills required in training groups and individuals in the workplace. How to promote a positive training climate and a needs analysis will also be discussed. (PR: REA 098 or ACT Reading 18 or SAT Reading 421 or ACCUPLACER Reading 80)

**MG 131 – Leadership and Construction Management.** 3 Credits. This interdisciplinary course prepares students to take an active managerial/leadership role in the construction industry by learning to use: effective interpersonal communication, the planning process to better utilize human and physical resources in the work place, form and lead a highly motivated team, and how to foster a safe and productive work environment. (PR: Permission)

**MG 181 – Retailing.** 3 Credits. Introduction to retailing with managerial and supervisory insights. Includes topics of franchising, location and layout, organization, sales, and customer services. (PR: REA 098 or ACT Reading 18 or SAT Reading 421 or ACCUPLACER Reading 80)

**MG 202 – Business Organization & Management.** 3 Credits. Designed to develop an understanding of management concepts through the study of planning, organizing, leadership and control functions. (PR: MG 101 or MG 101E)

**MG 203 – Managing Call Center Teams.** 3 Credits. Provides skills on how to build effective work teams within the call center environment. (PR: SS 201 or MG 202)

**MG 205 – Call Center Environment/Technology.** 3 Credits. This course covers call center technology equipment and systems. Students will learn telecommunications terminology, theory, infrastructure and troubleshooting techniques. Student will explore telecommunications technology that supports web-enabled multimedia call centers in the information age. (PR: IT 101 or IT 101E)

**MG 207 – Managing Call Center Data.** 3 Credits. Focus on how to collect, interpret and manage data that is generated in a call center environment. Students will learn how to define and interpret data from efficiency, productivity, attendance and log-in reports. Forecasting and budgeting techniques will also be discussed. (PR: MAT 210)

**MG 209 – Occupational Safety.** 3 Credits. This course will provide students with a basic understanding of the nature of occupational safety, accident prevention and loss reduction. Topics to be discussed include accident causation, strategies for minimizing injuries and losses, sources of assistance in resolving safety problems, and Occupational Safety and Health Act (OSHA) standards, policies, and procedures. (PR: REA 098 or ACT Reading 18 or SAT Reading 421 or ACCUPLACER Reading 80)

**MG 226 – Business Law.** 3 Credits. Focus on various business forms and laws governing businesses and business transactions. Students learn to analyze business transactions such as those dealing with sales, insurance, real estate, bankruptcy, and financial statements, with emphasis on commercial documents. (PR: REA 098 or ACT Reading 18 or SAT Reading 421 or ACCUPLACER Reading 80)

**MG 232 – Logistics.** 3 Credits. This course introduces students to the field of logistics. Topics include careers in logistics, the development of logistics systems, modes of transportation, distribution planning, supply chain security, and customer service. The roles and functions of purchasing packaging, materials handling, inventory management, warehousing, and logistics software are also explored. (PR: Permission)

**MG 233 – Personnel Management.** 3 Credits. Designed to acquaint the student with principles of managing personnel in business. Personnel recruitment, selection, and evaluation; job analysis and evaluation; employee retention; wage and salary administration; and labor relations and legislation are studied. (PR: MG 101; MG 101E; or Permission)

**MG 240 – Business Ethics.** 3 Credits. The purpose of this course is to provide students with a framework for effective decision making when they face ethical issues in business. (PR: COM 111 or permission)

**MG 253 – Bank Management.** 3 Credits. Covers new trends that have emerged in the philosophy and practice of management. The study and application of the principles outlined provide new and experienced banks with a working knowledge of bank management. The case study technique is utilized as an effective management learning technique. (PR: FN 151)

**MG 280-287 – Special Topics.** 1-4 Credits. Study of content not normally covered in other courses. (PR: Permission)

**MG 296 – Integrated Business Strategies.** 3 Credits. A capstone course in which students work in teams, using their skills and knowledge to develop and implement simulated business strategies. (PR: Students must have completed at least 45 credit hours in their program)

**MG 299 – Cooperative Work Experience.** 1-9 Credits (CR/NC). Supervised on-the-job training for business students. (PR: Permission)

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## MANUFACTURING ENGINEERING TECHNOLOGY (MFE)

**MFE 103 – Entrepreneurship for Manufacturing.** 3 Credits. This course teaches students the requisite steps to develop a feasible new product. A possible product will be identified using the Quest process, followed by actual Focus Groups and surveys. Feasibility will be checked through product research, patent searches, business plans, etc., using the expertise of the local SCORE. Finally the process required to start a business in WV will be explained, using state employee expertise.

**MFE 116 – Manufacturing Processes.** 3 Credits. This course introduces students to the wide variety of manufacturing strategies and processes in the creation of consumer and industrial goods. Topics include: milling, turning, casting, forging, stamping, punching, bending, welding, water jet, laser cutting, plasma cutting, injection molding, blow molding, thermoforming, and rotational molding. (Offered Fall Semester only)

**MFE 120 – Introduction to Manual Machining.** 4 Credits. This course introduces the student to fundamental manufacturing and machining concepts and skills. Students will learn and take part in precision measurement using calipers, micrometers, and height gauges. Students will plan and execute the machining processes and select correct tooling for manufactured parts for an engine lathe and knee mill. A solid balance of lecture and hands-on in the shop manual machining experience prepares the student for advanced coursework. (PR: MAT 145 or Permission) (Offered Fall Semester only)

**MFE 220 – Computer Aided Design I.** 4 Credits. This course provides students with a solid foundation in reading and creating engineering drawings using AutoCAD. The student will learn 2D computer aided design techniques through 3D solid modeling software and design (PR: Permission)

**MFE 225 – CNC Programming I.** 3 Credits. This course builds on manual machining with the introduction of CNC Programming language G&M codes. Students will calculate speeds and feeds, write CNC programs for 2 or 3 axis lathes and mills respectively, simulate turning and milling parts using software simulators, and produce their projects on standard industry CNC milling and turning centers. (PR: MFE 116 or MFE 120)

**MFE 230 – Computer Aided Design II.** 3 Credits. This course challenges students to design in the 3D solid modeling world. Students rapidly create 3D component parts, assemblies, and produce 2D detailed engineering drawings using a single database of information in AutoCad and Inventor. Students will use their 3D designs to create rapid prototypes in concurrent course work. 3D solid modeling is required for production using modern manufacturing techniques. (PR: Permission)

**MFE 235 – Compute Aided Manufacturing.** 3 Credits. This course introduces students to computer aided manufacturing (CAM) software. Building on manual and CNC machining knowledge, this course teaches students to use the latest CAM software to general G&M code to program a variety of 2, 3, and 4 axis turning and milling operations. This course takes the student beyond just the design phase with CAD and into the next step in the manufacturing process. (PR: MT 225 and MT 230)

**MFE 240 – Statics.** 3 Credits. This course examines the application of forces in equilibrium. Students will use force vector analysis to solve problems involving resultant force and distributed load, center of gravity, moment, trusses and frames. Free body diagrams will be used in the problem solving process. (PR: SCI 110) (Offered Fall Semester only)

**MFE 245 – Mechanics of Materials.** 3 Credits. This course builds on the force analysis used in Statics. Students will determine the level of stress that beams and structural members experience under a variety of point and distributed loading conditions. Course topics include: stress, strain, Poisson's ratio, Hooke's law, shear and bending moment diagrams, and moment of inertia. (PR: MT 240) (Offered Spring Semester only)

**MFE 248 – Statistical Process and Control.** 3 Credits. This course teaches students the necessary statistical concepts to perform quality studies for manufacturing, mining and similar processes, as well as comparative devices to compare actual to predicted product properties. Students also will learn the historical precedents for these studies, including TQM, Six Sigma, and Lean Manufacturing.

**MFE 250 – Engineering Materials I.** 3 Credits. The materials covered in this course include low carbon and alloy steel, tool steels and stainless steels. Students will examine the mechanical properties, corrosion resistance characteristics, and heat treatment options used to select materials for a variety of engineering applications.

**MFE 253 – 3D Scanning for Reverse Engineering.** 4 Credits. This course teaches students the required skills to produce files that can be used in 3D CAD programs and digital rapid prototypers from three-dimensional scans. The student first will learn to use a 3D scanner to produce a point cloud. The student will then learn to use 3D CAD programs to repair these files, as required, to produce a working 3D prototype form a digital rapid prototyper.

**MFE 255 – Rapid Prototyping Techniques.** 3 Credits. This course teaches students the requisite steps to successfully create a rapid prototyping ABS-Plus model. Students will create three-dimensionally coherent STL files, and then print actual ABS models. Products also will be reverse-engineered by first scanning the object. Finally, the models will be used to assess the engineering and functional appropriateness of the proposed product. (PR: MFE 230 or permission)

**MFE 258 – Introduction to Visual Digitalization.** 4 Credits. This course focuses on training students in the contemporary techniques of 3D modeling, rendering, and animation. Topics include visualization (photo-realism), which allows the student to create presentation drawings for realistic, three-dimensional architectural designs, product designs, etc. Also 3D-animation will be covered, allowing realistic spatial viewing of the particular design product. (PR: MFE 220, MFE 230)

**MFE 260 – Tool Design - Jigs & Fixtures.** 3 Credits. This course provides a foundation for students to design and create production tooling for the manufacturing floor. It will emphasize clamping and holding concepts and techniques. Students will use CAD, CAM and CNC to design and create jigs and fixtures.



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**MFE 262 – Engineering Design.** 4 Credits. Students work in teams to complete projects that cover problem definition, solution, and presentation. The teams will learn modeling and visual representation, spreadsheet applications to scientific computations, basic project management, written and oral communication, professionalism, and ethics. (PR: MFE 220, MFE 230)

**MFE 272 – Advance Parametric Analysis.** 4 Credits. This is the capstone course for the MFE program. The student will be working with an industry representative to develop, plan and complete an individual project. The projects will combine concurrent engineering design principles with parametric solid modeling and parametric analysis. A written report and oral presentation are required upon completion of the project. (PR: MFE 220 and MFE 230 abd MFE 258)

**MFE 290 – Manufacturing Capstone.** 3 Credits. This course will challenge the student to utilize the combined knowledge and experience gained in the program. Students will work individually and in small teams to design and manufacture parts and assemblies. CAD, stress and strain calculations, and material selection experience will be applied in the course. (PR: MFE 230, MFE 240, MFE 245 and MGE 255) (Offered Spring Semester only)

**MFE 299 – Internship.** 1-4 Credits. Places the student in a supervised work situation for a specific period for practical work experience prior to seeking permanent employment. Orientation plus 75 clock hours per credit hour. (PR: Permission)

## MARKETING (MK)

**MK 130 – Fundamentals of Marketing.** 3 Credits. Study of the marketing process as it relates to the problems and policies of business enterprises. Attention is given to the role and significance of middlemen, evaluation of consumer needs, price determination, promotional and sales strategies and governmental regulations. (PR: REA 098 or ACT Reading 18 or SAT Reading 421 or ACCUPLACER Reading 80)

**MK 210 – Customer Service.** 3 Credits. A study of how to deliver excellent customer service. Students will learn how to maintain control over troublesome internal and external customer situations, methods for reducing negative stress, the importance of ethics in the work environment, and techniques for motivating employees to provide excellent customer service. (PR: COM 111 or ENG 111)

**MK 255 – Bank Public Relations and Marketing.** 3 Credits. Study of the basis of public relations, both internal and external, and seeks to explain the why, what and some of the how of public relations and marketing. (PR: FN 151)

**MK 279 – Advertising and Sales Promotion.** 3 Credits. This course covers advertising and promotion methods and procedures. Includes techniques of planning, budgeting, evaluation, and selection of media; steps in producing an advertisement; as well as methods of determining what, how and when to promote. (PR: REA 098 or ACT Reading 18 or SAT Reading 421 or ACCUPLACER Reading 80)

## MASSAGE THERAPY (MAS)

(Classes are taught at Mountain State School of Massage in Charleston)

**MAS 101 – Introduction to Massage Therapy.** 1 Credit. This course provides a general overview of the massage therapy career and the science of complementary medicine.

**MAS 201 – Introduction to Eastern Theory.** 3 Credits. This course introduces the student to the basic philosophy of Eastern medicine as it relates to medicine. This course introduces the five branches of traditional Chinese Medicine (TCM), the macrocosmic and microcosmic principles of Qi, the theory of Yin/Yang, the five element theory, the eight principles, and other key philosophies of Eastern medicine.

**MAS 210 – Orientation, Awareness Skills, Business and Research.** 4 Credits. This course provides the future massage therapist with a variety of skills needed to have a successful career. The focus of the class is to present information on effective communication, professionalism, ethics, business strategies and methods of locating research literature.

**MAS 212 – Body Works I for Massage Therapy.** 2 Credits. Body Works I presents an integral approach to teaching the core and fundamental knowledge base of therapeutic massage. The course presents the four layers of the existing spectrum of touch, the continuum of the three paradigms of possible levels of practice, and the skills and categories which represent universal and recurring concepts from varied schools of thought. Strong emphasis is placed on the importance of the student developing coordination, balance, and stamina. (CO: MAS 201, 232, and 240)

**MAS 212L – Body Works I for MAS.** 1 Credit. Students perform hands on manipulation techniques introduced in Body Works I. (PR: AH 151 and BIOL 260) (CO: MAS 212)

**MAS 214 – Body Works II for Massage Therapy.** 3 Credits. Body Works II continues the foundations laid in Body Works I. Developing deeper, the power of intention and body mechanics. This course will go into a more profound understanding of each modality within the four layers of touch. Different assessment strategies including charting, SOAP notes, and record keeping will be explored. Student competence will be developed as they learn to integrate skills learned into their practice of message. (CO: MAS 228, 245, 250, and 255)

**MAS 214L – Body Works II for MAS.** 1 Credit. Students perform hands on manipulation techniques introduced in Body Works II. (PR: MAS 212 and MAS 212L)

**MAS 222 – Business and Ethics.** 3 Credits. Business and Ethics for MAS is a professional growth and development course designed to help student graduates transition into professional practice with knowledge of ethical business practices and good decision making skills specific to the massage therapy practice. This course combines discussion of the complex issues concerning the ethics of touch with all aspects of operating a massage therapy practice. Students will learn how to maintain the highest ethical and professional standards in their practices and to identify ways that they can engage in a successful, profitable and ethical business. (PR: Acceptance into the Massage Therapy Program)

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**MAS 225 – Pathology for Massage Therapy.** 5 Credits. This course covers the common pathological diseases that massage therapists encounter, potential challenges associated with these illnesses. Students evaluate the role of the massage therapist in the diagnosis of these various conditions. (PR: Admission to Massage Therapy program)

**MAS 228 – Pathology and Pharmacology for Massage Therapy.** 3 Credits. Pathology and Pharmacology for the Massage Therapist provides a scientific background for developing an appropriate treatment plan based on a client's medical history. The course will review basic anatomy and function. Pathologies will be identified for each major organ system and drug protocols for each will be discussed. Cautions and contraindications for massage will also be discussed at length. (CO: MAS 214, 245, 250 and 255)

**MAS 230 – Kinesiology for Massage Therapy.** 5 Credits. This course integrates the massage therapy student's basic knowledge of human anatomy and physiology with the study of the muscles that coordinate movement and posture in the human body. Biomechanical principles of the muscles and joints are also covered. (PR: Admission to the MAS program)

**MAS 235 – Student Clinic Massage.** 3 Credits. This course provides the student an opportunity to work with patients in a supervised environment. Interpreting patient medical information, developing treatment plans, practicing proper communication skills and utilizing the various techniques learned. The class offers the opportunity to build the confidence level and professionalism of the student. (CO: MAS 270)

**MAS 240 – Muscle Palp I.** 3 Credits. Muscle Palpation I is a course that offers an in-depth look at the human muscular system. This course deals with the characteristic of muscle tissue, connective tissue, components of skeletal muscle, the nerve and blood supply, contraction and relaxation of skeletal muscle fibers and muscle metabolism. During this course, students will learn to superficially outline the shape and fiber direction of the various muscles and muscle groups studied. The muscles covered in this course will focus on the lower extremity. Additionally, the student will learn to physically locate, palpate, and demonstrate the actions of the major muscle groups, related bones and bony landmarks. (CO: MAS 201, MS 212, MAS 232)

**MAS 245 – Muscle Palp II.** 3 Credits. Muscle Palpation II is a course that offers an in-depth look at the human muscular system. This course deals with the characteristics of muscle tissue, connective tissue, components of skeletal muscle, the nerve and blood supply, contraction and relaxation of skeletal muscle fibers and muscle metabolism. During this course, students will learn to superficially outline the shape and fiber direction of the various muscles and muscle groups studied. The muscles covered in this course will focus on the upper extremity. Additionally, the student will learn to physically locate, palpate, and demonstrate the actions of the major muscle groups, related bones and bony landmarks. (CO: MAS 214, 228, 250, 255)

**MAS 250 – Shiatsu for MAS.** 3 Credits. Shiatsu provides the specific foundation, context and technical hands-on skills for basic Shiatsu practice. During this course the basic philosophy, specific channels and points, as well as the principles of assessment, patterns of imbalance and organ dysfunction are reviewed as it relates to the practice of Shiatsu. This course also provides

students with a more in depth study of the pathways of the 12 regular channels and two of the eight extraordinary vessels studied in the course introduction to Eastern Theory including selected points on each channel essential to the Shiatsu treatment process. Basic point palpation and location will also be practiced to help students develop the sensitivity and skills necessary for effective Shiatsu treatment. (CO: MAS 214, MAS 228, MAS 245, and MAS 255)

**MAS 255 – Deep Tissue for Massage Therapy.** 3 Credits. This course will teach the student an understanding of the layers of the musculoskeletal system and the ability to work with tissue in these layers to relax, lengthen and release holding patterns in the most effective and energy efficient manner. The history and evolution of Deep Tissue Massage will also be covered. (CO: MAS 214, 228, 245, and 250)

**MAS 260 – Anatomy for Massage Therapy.** 4 Credits. This course provides a general study of the normal structure and function of the human body with emphasis on the skeletal system. Included in the course is the interrelationship of the organs, the adaptability of the human body to the environment, and the role of massage therapy in normal body functions. (PR: Admission to the MAS program)

**MAS 265 – Physiology for Massage Therapy.** 4 Credits. This course provides a general study of the physiological functions of the human body as it relates to massage therapy. Included in the course is the interrelationship of the organs, the adaptability of the human body to the environment, and the role of massage therapy in normal body functions.

**MAS 270 – Spa Theory for MAS.** 2 Credits. Course provides a working knowledge of the most commonly practiced spa techniques performed in both dry and wet room settings without the need for full spa facilities. Course includes the theory, contraindications, and the benefits of each treatment including the history of spas, bathing and spa models as they develop over time. In addition, students will learn spa-specific customer service how to work in teams, proper body mechanics for preserving one's body, and resume development for obtaining employment as a spa therapist. (CO: MAS 235)

**MAS 275 - MAS Board Review Capstone.** 2 Credits. This course focuses on correct issues in the massage profession and prepares students for the Massage Therapy Board Examinations. (PR: Admission into the MAS program)

**MAS 280-289 – Special Topics in Massage Therapy.** 1-8 Credits. This course presents various topics in Massage Therapy.

## MATHEMATICS (MAT)

**MAT 010-109 – Special Topics: Developmental Mathematics.** 1-6 Credits (CR/NC). Study of content not normally covered in other courses. (PR: Permission)

**MAT 096 – Algebra I.** 3 Credits. This course is designed to improve students' skills in the following areas: algebraic expressions, integers, fractions, decimals, real numbers, basic number theory, set theory, linear equations and inequalities in one variable, linear equations in two variables, graphing on the coordinate plane, and basic knowledge of functions. (PR: ACT 12 - 15 or PLAC 096)

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**MAT 100 – Occupational Mathematics.** 3 Credits. This course develops the ability to utilize mathematical skills and technology to solve problems at a level found in non-mathematic-intensive programs. Topics include applications to percent, ratio and proportion, statistics, finance, and probability. Upon completion, students should be able to solve practical problems; reason and communicate with mathematics; and work confidently, collaboratively, and independently. Applications may be drawn from the fields of business, human services, and health fields. (CO: ASC 099)

**MAT 101 – Algebra II.** 3 Credits. A course designed to provide the foundation for further college mathematics courses. The subject matter will include functions, linear systems of two and three variables, integer and rational exponents, polynomials, factoring, radical expressions, rational expressions, quadratic equations, quadratic forms, and complex numbers. (PR: MAT 096 or ACT 19)

**MAT 115 – Business Mathematics.** 3 Credits. Mathematical operations applied to negotiate instruments, payroll, discounts, interest, merchandising, commissions and other business topics. Calculators will be used in making computations. (PR: MAT 097; MAT 097E; ACT 19 or PLAC 100)

**MAT 120 – Applied Professional Mathematics.** 3 Credits. Content consists of marketplace mathematics, introductory statistics, the mathematics of sets, prediction, mathematical relationships, optimization, geometry, graph theory and introductory logic. (PR: ACT 19; MAT 097; MAT 097E or PLAC 100)

**MAT 121 – Applied Professional Math Expanded.** 5 Credits. Consists of marketplace mathematics, introductory statistics, and the mathematics of sets, prediction, mathematical relationships, optimization, geometry, graph theory and introductory logic. This class also incorporates "just in time" developmental math needs. (PR: ACT 12-15 or PLAC 096) (Requisite: ASC099)

**MAT 130 – College Algebra.** 4 Credits. This course covers equations, inequalities, graphs, polynomial functions, exponential and logarithmic functions, systems of equations and inequalities, matrices, conic sections, sequences, series, and mathematical induction. (PR: MAT 101 or ACT 21 or Placement or Permission)

**MAT 133 – Math for Applied Health.** 5 Credits. This course presents basic math and algebra principles used daily in the applied health careers. Topics covered will include the metric system with focus on unit conversions by proportionalities and dimensional analysis; representations of linear functions verbally, graphically, numerically, and algebraically; exponential growth and decay; logarithmic functions; analysis of proportionality of quantities; and formula manipulation.

**MAT 135 – Mathematics for Machinist Technology.** 3 Credits. Designed to develop understanding of mathematical concepts required of skilled employees in the machine trade and related occupations. (PR: MAT 096, ACT 19; MAT 097, PLAC 100 or Boot camp; and permission)

**MAT 137 – Culinary Math.** 5 Credits. This course presents basic math principles used daily in food service and hospitality careers. Along with mathematical principles, this course utilizes word problems and examples exclusive to food service including, the study of recipe conversion and yields,

production formulas, weights and measures, the metric system and recipe and food cost analysis. Skills developed in this course are critical to the successful control of food costs and effective culinary management.

**MAT 144 – Applications in Algebra Expanded.** 5 Credits. Algebraic applications needed by technicians including equation solving, inequalities, functions, quadratic equations, systems, logarithmic functions, graphing and statistics. This course includes introductory skills needed to be successful including integer and rational number operations, exponent rules, and simplifying algebraic expressions. (PR: ACCUPLACER Scores: Arithmetic 36 and Elementary Algebra 23; CR: ASC 099)

**MAT 145 – Applications in Algebra.** 3 Credits. Algebraic applications needed by technicians including equation solving, inequalities, functions, quadratic equations, systems, logarithmic functions, graphing and statistics. (PR: ACT 19; MAT 096; MAT 097; or PLAC 100)

**MAT 205 – Technical Calculus.** 3 Credits. Contents of this course cover determinants, theory of equations, applications of differential calculus and applications of integral calculus. (PR: MAT 146 or MAT 146E)

**MAT 210 – Statistics for Business and Industry.** 3 Credits. An introduction to basic statistical concepts and applications. Content includes the nature of statistics and data; data descriptions and representations, basic probability, random sampling, distributions, non-parametric methods, time series and quality control. (PR: MAT 115 or MAT 145 or MAT 120)

**MAT 215 – Applied Discrete Mathematics.** 3 Credits. This course is an introduction to logic, set theory, number theory, combinatorics, and Boolean algebra. The course will provide foundation for students majoring in computer science courses and electronics. (PR: MAT 135; MAT 145 or MAT 145E)

**MAT 280-282 – Special Topics.** 1-4 Credits. Study of content not normally covered in other courses. (PR: Permission)

**MAT 283 – Special Topics.** 1-4 Credits. Study of content not normally covered in other courses. (PR: Permission)

## MEDICAL ASSISTING (MA)

**MA 201 – Medical Assisting Techniques I.** 4 Credits. Introduction to clinical skills performed in medical offices with emphasis on asepsis, health history, physical examinations, and assessment, vital signs, and infection control, common diseases, conditions and selected clinical skills will be emphasized.

**MA 202 – Medical Assisting Techniques II.** 4 Credits. Advanced level of physical assessment, medical history, surgical procedures, common diseases, conditions and selected clinical skills will be emphasized. (PR: MA 201)

**MA 203 – Medical Lab Techniques.** 3 Credits. Instruction to the medical lab, including quality control, specimen collection and analysis. Includes urinalysis, hematology, microbiology and immunology procedures and testing. Regulatory guidelines including OSHA and CLIA standards.

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**MA 204 – Physician's Office Medical Coding.** 3 Credits. Introduction to physician's office medical coding. The student will learn coding systems including CPT-4 and ICD-9-CM as they apply to physician billing, claim submission and accurate reimbursement from Medicare, Medicaid and third party payors.

**MA 205 – Medical Office Claims Procedures.** 3 Credits. Use of CPT, HCPCS, ICD-9-CM coding systems as they apply to physician claim submission and accurate reimbursement from all payer sources. Explore proper documentation to optimize reimbursement.

**MA 206 – Medical Office Procedures for Medical Assistants.** 3 Credits. This class is designed to cover entry-level administrative and general competencies as designated by the American Association of Medical Assistants so that the medical assistant student will be able to perform those functions specific to the medical office, including but not limited to administrative and clerical functions, medical accounting, insurance procedure and other functions as they relate to a medical office or ambulatory care setting.

**MA 207 – Medical Office Internship.** 3 Credits (CR/NC). Supervised learning experience in Medical Assisting designed to provide students with an opportunity to obtain technical experience under the supervision of competent practitioners. (PR: MA 201, 202, 203, 204, 205)

**MA 280 – Special Topics.** 1-4 Credits. Study of content not normally covered in other courses. (PR: Permission)

## MID-ATLANTIC MARITIME (MMA)

(Courses are taught at Mid-Atlantic Maritime Academy)

**MMA 101 – Basic Safety Training.** 3 Credits. Students learn basic survival techniques, personal and social responsibilities of the mariner, and marine pollution prevention techniques. Additionally, students learn First Aid/CPR, and the fundamentals of firefighting.

**MMA 103 – RFPNW (Lookout Only).** 1 Credit. this course is for a Rating Forming Part of a Navigational Watch and standing lookout duties on oceangoing vessels. It is supplemented by a period of required sea service of not less than two months, where trainees conduct related practical training and assessments. This course is approved by the U.S. Coast Guard.

**MMA 104 – Tankerman Assistant (Familiarization).** 2 Credits. This is an in-depth study of the transport of bulk cargoes by tankship. Candidates who complete this course may serve on board oil tankers in a capacity other than Master, Chief Engineering Officer, Chief Mate, or Second Engineering Officer, and perform specific duties and responsibilities related to cargo and cargo equipment. They may not serve in a capacity where they are immediately responsible for the loading, discharge, or care in transit or handling of bulk liquid cargoes. This course is approved by the U.S. Coast Guard.

**MMA 105 – REPNW (Assessments only).** 1 Credit. This course is required for all mariners assigned to lookout and Watchkeeping duties on ocean going vessels. It is supplemented by a practical training and assessments. This course is approved by the U.S. Coast Guard.

**MMA 107 – Crowd Management.** 1 Credit. Students learn the general techniques and protocols for managing movement of passengers under emergency conditions necessitating preparation to abandon ship, and supervise the movement of passengers to life boats.

**MMA 109 – Crisis Management and Human Behavior.** 1 Credit. This course provides trainees with techniques and protocols for managing movement of passengers under emergency conditions necessitating preparation to abandon ship. This course meets the STCW training requirements and is approved by the U.S. Coast Guard.

**MMA 111 – Operator of Uninspected Passenger Vessels.** 4 Credits. This course provides the training and education that will enable the graduate to operate a small passenger vessel carrying six or less passengers for hire. This course is approved by the U.S. Coast Guard.

**MMA 113 – Auxiliary Sail.** 1 Credit. This course provides the student with the knowledge and training that is required by the U.S. Coast Guard for an endorsement to a license up to 200 gross tons that adds permission to operate sailing vessels.

**MMA 115 – Towing Assistance.** 1 Credit. This course provides the student with the knowledge and training that is required by the U.S. Coast Guard to allow the student to add an endorsement to a license up to 200 gross tons to tow other vessels non-commercially.

**MMA 201 – Able Seaman.** 3 Credits. Students will learn the functions of watchstanding duties, and how to conduct the various shipboard responsibilities of an able seaman. Students also learn how to complete all of the deck-related tasks that one might encounter while at sea to work safely and efficiently aboard today's merchant vessels.

**MMA 203 – Proficiency in Survival Craft (Lifeboat).** 2 Credits. This course provides the student with the knowledge, understanding, and proficiency required to take charge of a survival craft or rescue boat during and after launching. The course is designed to prepare candidates to carry out effectively all the duties of a Lifeboatman. The successful student will be able to take charge of a boat under oars or motor or take charge of an inflatable liferaft. This course is approved by the U.S. Coast Guard.

**MMA 207 – Upgrade OUPV to 100 GRT Master.** 6 Credits. The student will learn about tidal calculations, international and inland rules of the road, coastal pilotage, and meteorology. In addition, students will practice anchoring, mooring, docking, and undocking. Students will learn about the basic construction of a ship.

**MMA 213 – Upgrade 200 GRT Celestial Navigation.** 6 Credits. Students will learn how to determine the position of a vessel using both terrestrial and celestial observations. Students will also learn how to determine the errors in magnetic and gyro compasses using terrestrial and celestial observations.

**MMA 280-289 – Special Topics.** 1-6 Credits. This course presents various topics in marine transportation not normally covered in other courses.

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## MILITARY SCIENCE (MILS)

**MILS 101 – Foundation of Officership.** 1 Credit. Students learn fundamental concepts of leadership and team development. The fundamentals of leadership development are reinforced through classroom and outdoor laboratory environments that are designed to increase individual self-confidence through team interactions and physical fitness activities, training in land navigation, first aid, and basic drill and ceremonies. (CO: 101L)

**MILS 101L – Military Science Basic Course Leadership.** 1 Credit. Students learn and practice basic soldier skills and field craft. Students use team building leadership activities in drill and ceremonies, rappelling, and basic marksmanship. (CO: MILS 101)

**MILS 102 – Basic Leadership.** 2 Credits. Students learn and apply the principles of effective leadership. Students develop communication skills to improve individual performance and group interaction. Students learn how organizational ethical values relate to leader effectiveness. (CO: MILS 102L; PR: MILS 101 or Permission.)

**MILS 102L – Military Science Basic Course Leadership Lab 102.** 1 Credit. Students learn and practice basic soldier skills and field craft. Students use team building leadership activities in drill and ceremonies, rappelling, and basic marksmanship. (CO: MILS 102)

**MILS 110 – Introduction to Military Science.** 3 Credits. This course prepares future service members for military service. Topics include history of the US military, military branch history, basic First Aid, land navigation, military protocol and procedures, the military education benefits, military transcripts and personal finance. (PR: Permission)

**MILS 133 – Introduction to Marksmanship.** 1-3 Credits. This course introduces students to the principles of precision shooting. Students learn how to properly disassemble and assemble their weapon, practice weapon and range safety, properly handle ammunition, and apply the principles of marksmanship. Classroom learning is reinforced by range exercises in which the students zero their weapons, engage short- and long-range targets, and effectively engage limited visibility targets.

**MILS 201 – Individual Leadership Studies.** 2 Credits. This course teaches students how ethics-based leadership is used to develop leadership abilities and how these skills contribute to the small-unit team-building process. Students will further develop their skills with participation in communication exercises, event planning, group coordination, advanced first aid, land navigation, and basic tactical exercises. (PR: MILS 102 or permission; CO: MILS 201)

**MILS 201L – Individual Leadership Studies Lab.** 1 Credit. This lab course is used to develop individual leadership abilities by providing practical application exercise for student participation in team building activities, which include communication exercises, event planning, group coordination, advanced first aid, land navigation, and basic tactical exercise. (PR: MILS 102 or permission; CO: MILS 201)

**MILS 280-289 - Special.** + Credits. Study of content not normally covered in other Military Science Courses.

## MINING INFORMATION TECHNOLOGY (MIT)

**MIT – Electrical Safety for Coal Miners.** 2 Credits (CR/NC). This introductory course teaches coal inspection personnel with limited or no electrical experience to be able to properly inspect electrical components of coal mining machinery. Students will learn practical methods and techniques to be used in identifying electrical hazards and teach the appropriate enforcement actions to be taken to prevent accidents.

**MIT 226 – Mine Blasting Safety.** 1 Credit (CR/NC). This course is intended to provide students with the most recent blasting techniques, trends and developments used in the mining industry. In this course, students will learn how to apply their knowledge of blasting techniques to help advise mining operations in safety procedures.

**MIT 275 – Mine Safety Inspector On-the-Job Training.** 1-12 Credits. This course consists of supervised paid OJT, internship, or practicum performed in a mine safety inspecting setting while working for the U.S. Department of Labor. Students will apply their knowledge in real life situations by performing safety inspections of surface and/or underground mine sites, investigating accidents, reporting violations, and assessing penalties for non-compliance. On-the-job training and attainment of program learning outcomes will be verified by an employer. (PR: Permission)

## MULTI-CRAFT TECHNOLOGY (MTEC)

**MTEC 101 – Machine Shop I.** 3 Credits. Machine Shop I teaches students the proper use of power-operated shop equipment including metal turning lathes, milling machines, shapes, saws and drills as well as standard safety practices and operating procedures.

**MTEC 105 – Fundamentals of Industrial Maintenance.** 3 Credits. Fundamentals of Industrial Maintenance teaches students the knowledge and skills necessary to enter the field of industrial maintenance. Students will learn about workplace safety, measurement and calculation, proper use of tools, fasteners, lubrication, bearings, mechanical alignment and vibration.

**MTEC 107 – Welding.** 3 Credits. This course introduces students to the fundamentals of welding/cutting. Students will become familiar with general safety, welding terms and joints, and oxyfuel welding techniques.

**MTEC 110 – Print and Schematic Reading.** 3 Credits. Print and schematic teach the basics of reading mechanical prints and schematics for electrical/electronic circuits, hydraulic/pneumatic circuits, and piping systems.

**MTEC 114 – Fundamentals of Welding Technology.** 3 Credits. Fundamentals of Welding Technology teach students the knowledge and skills necessary to become proficient in welding techniques. Students learn welding terms and processes, how to perform oxyfuel cutting, and the proper safety techniques to be used in all welding situations.

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**MTEC 121 – Machine Tool Operations.** 3 Credits. This course introduces students working with intermediate hand and power tools to the skills related to machine tool technology including vertical band saws, grinders, metal lathes, and milling machines. Students will learn how to measure and to scribe circles, radian, and parallel lines on a work piece. (PR: Permission)

**MTEC 171 – Hydraulic and Pneumatic Systems.** 3 Credits. Hydraulic and Pneumatic Systems teach students the principles and practical applications of pneumatic and hydraulic systems.

**MTEC 250 – Electricity Basics I.** 3 Credits. Electricity Basics I teach the principles of electricity, AC circuits, series and parallel circuits, resistors, Ohm's Law, magnetism, electrical measurement, and DC circuits.

**MTEC 251 – Electrical Maintenance.** 3 Credits. Electrical Maintenance teaches students the knowledge and base technical skills for entry into the field of electrical industrial maintenance. Students will learn about basic electrical theory and calculations; how to use electrical tools, instruments, and equipment; how to read electrical schematics and diagrams, and how to safely work with electrical systems.

**MTEC 280-289 – Special Topics.** 1-6 Credits. This course presents various topics in maintenance technology field.

## MUSIC (MUSI)

**MUSI 101 – Introduction to Music.** 3 Credits. This introductory music course furnished the student with information on the basic elements of music and its major forms, genres, and stylistic periods, which can be used for intelligent appreciation and understanding of music.

## OCCUPATIONAL DEVELOPMENT (OD)

**OD 100 – Introduction to Occupational Development.** 1 to 3 Credits. An introduction to the occupational field and responsibilities of the professional in the field. Provide a foundation for employment and further coursework in the chosen field.

**OD 104 – Specialized Occupational Training.** 1 to 3 Credits. Instruction for occupational leaders of curriculum needed in the occupation for self improvement or for teaching to fellow employees in the field. This curriculum will vary with the needs of the students. Some classes covered are OSHA 500, OSHA 501, Air Monitoring, Metal and Non-metal Mining, and others.

**OD 105 – OSHA 500.** 2 to 3 Credits (CR/NC). A course for persons in the construction industry who are interested in developing safety and health programs in the private sector. Using OSHA standards as a guide, special emphasis is placed on becoming knowledgeable about the most hazardous areas of industry. (PR: Permission)

**OD 106 – OSHA 501.** 2 to 3 Credits (CR/NC). Designed for private sector personnel from all types of industries, this course presents detailed information on how the provisions of the Occupational Safety and Health Act may be implemented in the workplace. (PR: Permission)

**OD 107 – Lead Abatement.** 2 Credits (CR/NC). This course is to train the trainer to teach what regulations are required to have a safe and healthy job site while working with the hazards of lead. The instructor will be preparing students for state certification examinations as well as fulfill training requirements as dictated by EPA Title X, and state legislative requirements. (PR: Permission)

**OD 108 – First Aid/CPR/AED Instructor.** 2 Credits (CR/NC). The purpose is to train instructor candidates to teach American Red Cross First Aid/CPR/AED Program courses and modules. (PR: Permission)

**OD 109 – Scaffolding.** 2 Credits (CR/NC). Introduces students to the four hazard classifications related to scaffolding. Teaches students to associate the classifications with actual injury statistics from OSHA and the BLS. Includes the identification of various scaffold components. (PR: Permission)

**OD 110 – Confined Space.** 2 Credits (CR/NC). Teaches major legal requirements of OSHA's permit-required confined space standard to ensure that members of the building and construction trades understand what it is to work safely in confined spaces. (PR: Permission)

**OD 111 – Science Air Monitoring.** 2 Credits (CR/NC). Focus on air monitoring of common occupational health hazards in the painting industry. The course includes maintenance and calibration of air monitoring equipment, record keeping, quality control instruments, calibration and other engineering controls. (PR: Permission)

**OD 112 – Blueprints, Codes and Specifications.** 2 to 8 Credits (CR/NC). Upon successful completion of this course, the student will be able to locate and identify engineered specifications within a set of plans; locate and identify engineered scaled and unscaled drawings; order and manage construction materials from a set of plans; increase creditability and communication between the job foreman and job-site engineers; identify National Building Codes pertaining to their trade. Available to students through partnerships with Department of Labor approved apprenticeship programs.

**OD 120 – On-the-Job Training.** 1 to 12 Credits. This course consists of paid or unpaid OJT, internship, or practicum performed in a business, industry, trade, or technical career setting within the student's occupational area. The on-the-job training component is converted to credit hours at a ratio of 200:1 with a maximum of 2,400 contact hours allowable. A statement of the total number of contact hours experienced through on-the-job training will be verified by an employer or union official and will be placed on the college record. This credit will be recorded immediately prior to graduation from college. (PR: Must major in Occupational Development degree programs)

## PAINTING AND ALLIED TRADES (PAT)

**PAT 120 – Introduction to Painting.** 3 Credits. This class will orient individuals to the painting profession. The topics to be covered include painting materials, tools, equipment and terminology. An overview of the characteristics of light and color will also be provided.

**PAT 121 – Techniques of Painting.** 4 Credits. This course covers surface preparation, selection and characteristics of materials, standards and specifications related to abrasive blasting, H2O blasting, and painting. Special

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emphasis will be placed on characteristics of normal and abnormal surface deterioration and thermal spraying for metal substrates.

**PAT 122 – Introduction to Wall covering.** 3 Credits. This course covers the basic principles of wall covering. Students will learn how to prepare a surface wall covering and how to apply wall covering. Tools and materials of the wall covering trade will also be discussed.

**PAT 130 – Introduction to Industrial Painting.** 4 Credits. This class will orient individuals to the industrial painting profession. Topics to be covered include coating materials, tools, equipment and terminology. The differences between industrial painting and commercial painting will be identified and described.

**PAT 131 – Surface Preparation.** 4 Credits. This course covers the tools, materials and methods used for cleaning and preparing surfaces using solvents, hand tools and power tools. Content in this course is based on the methods and procedures specified by SSPC and NACE.

**PAT 132 – Materials for Industrial Painting.** 3 Credits. This course covers the basic components and film forming processes of paints and coatings. The different systems and functions of paints and coatings are described. The criteria for selecting a coating system based on surface environment and preparation requirements are outlined.

**PAT 133 – Techniques of Spraying.** 3 Credits. This course covers the fundamentals of spray painting with a detailed discussion of the most common spray painting systems: electrostatic, turbine, airless, conventional, air, HVLP, and turbine. Student will also learn how to safely use spray equipment and the potential hazards involved.

**PAT 134 – Safety Measures for Industrial Painting.** 3 Credits. This course covers the dangers related to working with lead and the procedures for safe exposure and abatement. In particular, this course will cover what lead is, where it can be found, its health effects, its hazards, worker and community rights related to lead, abatement methods, cleanup, disposal, and laws, regulations and standards.

**PAT 140 – Introduction to Glazing.** 3 Credits. This course is designed to provide an introduction to glazing and the tools of the trade. Students will learn fundamentals of the glazing industry including the different purposes windows serve in a building's design, trade terminology, symbols, trade tools and materials. Students will learn the management of glass cutting projects.

**PAT 141 – Sealant Theory & Application.** 4 Credits. This course is designed to provide an introduction to sealants used in the glazing trade. Students will learn sealant terminology, selection, forms, and their proper and most effective use for a given project. The basic principles regarding joint design and measurements as well as the proper substrate preparation techniques will be discussed. Additionally, students will learn the basics of structural glazing including its methods, applications and safety factors.

**PAT 142 – Basic Glass Fabrication.** 3 Credits. This course is designed to build basic skills and knowledge necessary for fabricating glass including mirrors, spandrel glass, architectural panels and Ribbon Window Systems. Students will

also learn the purpose and techniques for anodizing aluminum surfaces that often surround glass installations.

**PAT 143 – Math & Blueprint Reading for Glaziers.** 3 Credits. This course will build upon the students' basic mathematics, trigonometry, measurement skills and knowledge by accurately using math when reading blueprints. Reading blueprints, measuring, layout, fabrication and other functions specific to the glazing trade require accurate calculations and measurements for the success of any glazing job. Reading blueprints and tape rules or taking other measurements accurately will lead to properly cut glass or aluminum and will contribute to a timely and successful job.

**PAT 150 – Introduction to Sign and Display.** 4 Credits. The display installers' profession is part of one of the fastest growing industries in the country. Convention Centers are expanding and improving facilities to attract more clientele while support service industries such as hotels, restaurants and entertainment industries provide numerous job opportunities around trade show locations. Display workers assemble and build large and small exhibits in the shops as well as install and dismantle them at the show locations. This course is intended to provide the display installer with basic skills in organization, tools of the trade and safe and efficient work practices. The apprentice installer will learn the various jobs available or expected of him, identify and describe commonly used tools, use proper terminology and describe the steps involved in planning, installing and dismantling a trade show.

**PAT 151 – Tools of the Sign and Display Trade.** 4 Credits. Tradesmen in the sign industry need an infinite number of tools to bring the signs we see to life. Participants in this course will work with many stretch, tape and seam carpet and the show the proper techniques for dismantling the setup pieces. Also discussed will be the responsibilities of the lead person for storing deco equipment and keeping track of the equipment being used during the show.

**PAT 152 – Methods of Layout for Sign and Display.** 4 Credits. Signs are meant to convey messages or to get someone from point A to point B. The composition of the sign determines whether a sign is pleasing to the eye or completely ignored. There are six interdependent components of a good sign. Each component needs the other five for a layout to succeed. Upon completion of this course, the participants should be able to create a sign that incorporates the six components of a good layout and conveys the intended message while meeting the clients' needs.

**PAT 153 – Techniques of Sign and Display.** 4 Credits. This course will introduce the participant to the process of applying vinyl designs to a variety of substrates. Vinyl designs can be used for advertising and displaying information and can be applied on vehicles, windows, doors, wood or metal. Participants will learn the types of vinyl that can be used in given situations, the use of application tools, and the ability to identify and complete any preparations to various substrates prior to applying the vinyl. The sign and display apprentice will be taught how to inspect the applied vinyl for wrinkles, bubbles, adhesion, etc. and the resolution for any imperfections found. Cleanup procedures, personal protective equipment, safety precautions and the procedures for proper disposal of scrap metals will also be discussed to give the participants a foundation in the basics of applications.

**PAT 160 – Methods of Trade Show Floor Layout.** 4 Credits. The first job at a show site is to transfer the floor plan to the floor of the facility. This

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must be accomplished before the equipment can be unloaded. In this course, the participant will learn to read and interpret the floor plan and its symbols that show how the floor space is to be divided into a basic framework desired by the association organizing the show. They will move into using a scale ruler to transfer dimensions on the floor plan to the show floor and marking the floor with appropriate symbols. The installer will also be given the opportunity to demonstrate methods used to compensate for deviations between the floor plan and the actual floor. Other factors concerning the floor's condition and limitations will also be discussed to give the participant a solid foundation of skills and knowledge to properly layout a trade show floor.

**PAT 161 – Methods of Booth Preparation and Installation.** 4 Credits. The focus of this course will be pre-planning and preparation of exhibit installation and dismantle. Participants in this course will gain hands-on experience using the basic procedures to efficiently and safely erect and dismantle the three general categories of display booths. The installer will be expected to demonstrate the standards of conduct for the display installer while they will also demonstrate the use and identification of safety equipment and cleaners for specific jobs. Booth installation and dismantling covers a variety of tasks that require specific technical expertise. The participant in this course will describe the general systems assembled by display installers with specific descriptions and tips for working with them. The learning experience will include three general types of displays used in trade shows: portable booths, component systems, and custom or construction systems.

**PAT 162 – Techniques of Trade show Carpet Installation.** 4 Credits. Using the proper tools and equipment for installing carpet at a trade show can make the difference between acceptable and unacceptable results. Having the proper tools and using them correctly will make the job easier, require less installation time and standardize every installation. The participant will be exposed to a myriad of skills and knowledge that will help him perform the job proficiently. Topics to be discussed include tools and equipment, carpet, booth carpet and aisle carpet installation procedures as well as the identification and practice of safety with respect to using tools, cutting, transporting and ergonomics when installing carpets.

**PAT 170 – Introduction to Floor Covering.** 3 Credits. This course will provide the participant with a solid introduction to the floor covering trade. Participants will explore the rewards and benefits of working in the floor covering trade. Additionally, participants will be introduced to the many different types of materials from which they and their customers can choose when laying a new floor or replacing an old floor. Participants will learn to describe and determine which floor covering materials are appropriate for the job at hand and how the job can be accomplished safely and efficiently.

**PAT 171 – Sketching for Floor Coverers.** 3 Credits. In this course, participants will learn to describe and demonstrate various drawings and sketches using both tools and freehand techniques. The participants will apply all newly learned skills to draw and sketch sections of storefront installation as well as a complex storefront.

**PAT 172 – Procedures for Floor Covering Prep.** 3 Credits. This course describes the procedure for preparing concrete and other masonry surfaces to receive resilient floor coverings. Additionally, participants in this course will learn the requirements for preparing a wood surface for covering. Similar to the

preparation for concrete work, the wood surface must be dry, clean, and level. The methods by which the wood surfaces are prepared are more complex because of the many wood surfaces with which the installer must work.

**PAT 173 – Introduction to Carpet Installation.** 3 Credits. In this course, participants will learn the history of the carpet industry in North America. Participants will learn that identifying the various types of carpet construction is essential to the installer and the installation process since each type determines which technique will be used for installation. Additionally, this course will provide a foundation of the tools and materials used when installing carpet.

**PAT 174 – Techniques of Floor Covering I.** 3 Credits. This course will discuss the installation procedures and considerations for woven carpets and vinyl back carpet or carpet tiles. The participants will also learn techniques for installing stair carpet from which the basic principles can be applied to other installations of carpet on varying styles and dimensions of stairs.

**PAT 175 – Techniques of Floor Covering II.** 3 Credits. This course will provide the floor coverer with a working knowledge of the appropriate procedures for preparing and installing laminate flooring, sheet goods, and resilient floor tile. Participants will be exposed to the types of surfaces on which the above mentioned types of flooring can be applied. Additionally, this course will discuss the importance of planning the layout, preparing the room and choosing specialty tools and other equipment needed to properly and efficiently install laminate flooring, sheet goods, and resilient floor tile.

**PAT 180 – Confined Space.** 3 Credits. In this course, students will study OSHA's permit-required confined spaces standard (29 cfr 1910.146). The term "confined space" will be defined and the potential hazards involved in permit-required confined spaces and safe entry procedures will be discussed.

**PAT 181 – Hazardous Materials.** 4 Credits. This course covers the dangers related to working with hazardous materials and the procedures for safe exposure and abatement. In particular, this course will cover what lead and asbestos are, where they can be found, their health effects, their hazards, worker and community rights related to these hazardous materials, abatement methods, cleanup, disposal, laws, regulations, and standards.

**PAT 183 – Elevated Platforms.** 4 Credits. The main objective of this course is to prevent workplace injuries and fatalities related to falls. This course covers the potential hazards related to working on raised or unstable platforms. The types of tools and equipment for elevating oneself and one's work materials are identified. Selection, inspection, setup, safe techniques and proper maintenance of equipment are discussed.

**PAT 184 – Respiratory Protection.** 3 Credits. This course covers OSHA's requirements for respiratory protection in 29 cfr 1910.134. The primary objective of this course is to reduce workers' exposure to airborne contaminants. This course will cover how the human respiratory system works, respiratory hazards, the purpose of respiratory protection, different types of respirators and their purposes, appropriate use, inspection, cleaning and storage of respirators.

**PAT 187 – Techniques for First Aid Instruction.** 3 Credits. This course is designed to provide basic safety awareness and practices for workers within



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all trade areas. Students will gain useful exposure and knowledge to basic safety practices including but not limited to First Aid/CPR, First Aid/AED (Automatic External Defibrillator), respiratory protection, fall protection and safety protocol when using power tools.

**PAT 220 – Techniques and Applications of Spray Painting.** 4 Credits. This course covers the fundamentals of spray painting with a detailed discussion of the most common spray painting systems: electrostatic, turbine, airless, conventional, air, and HVLP. Students will also learn the potential hazards involved with spray equipment and how to use spray equipment safely:

**PAT 221 – Techniques of Wall Covering.** 4 Credits. This course covers the advanced techniques of wall covering. Specialized decorative techniques such as glazing, antiquing, wood graining, marbleizing, texturing, gilding, stenciling, and stipple finishing will be discussed.

**PAT 230 – Testing and Quality Control.** 3 Credits. This course covers quality control and quality assurance. Students will learn how to recognize failures of paint coatings, causes of failures and their remedies. Students will also learn to conduct a quality control inspection and the standards that apply to the various tasks performed during the inspection process.

**PAT 231 – Advanced Safety Measures For Industrial Painting.** 4 Credits. This course covers the potential hazards of working with toxic and flammable materials and the related use of personal protective equipment. Additionally, this course covers the potential hazards related to working on raised or unstable platforms. The types of tools and equipment for elevating oneself and one's work materials are identified. Selection, inspection, setup, safe techniques and proper maintenance of equipment are discussed.

**PAT 240 – Advanced Fabrication.** 3 Credits. This course is designed to provide the glazier with the skills and knowledge to fabricate glass and mirror, install door hardware, create material lists and optimize schedules. This course will also discuss door hardware including locks and bolts. Fabrication techniques will include edging, removing scratches, drilling and cut outs.

**PAT 241 – Installation Layout and Building Control.** 4 Credits. This course is designed to introduce the glazier to curtain wall installation methods, practices and testing standards. Students will also learn the basics of aluminum entrances, storefront installations, Ribbon window installations and the use of transits, levers and lasers. All aspects of installation and layout will be discussed as well as building control basics.

**PAT 242 – Welding Techniques.** 3 Credits. This course is designed to teach the principles of welding, flame cutting and brazing with emphasis on mastering basic welding techniques.

**PAT 243 – Specialties in the Glazing Trade.** 3 Credits. This course is designed to enhance the basic skills of a glazier in performing specialty work. Specialized glazing work may include aquarium and shower door installation, auto glass work, glass shelving, Herculites, stained glass and clear story. Glaziers will learn techniques and procedures as well as safety regulations and safe handling of all materials and installations.

**PAT 250 – Techniques of Vehicle Signage.** 4 Credits. This course will introduce the participant to the appropriate procedures to vehicle signage. The participant will be exposed to the six components of a good layout that conveys the intended message while meeting the clients' needs.

**PAT 260 – Steward's Training.** 4 Credits. A steward is a union member elected or appointed as the union representative in dealings with management on the job site. There must always be a steward on every job. This short course on stewarding will better prepare the participant for the task of being a trade show steward. Some of the topics covered are generic in nature; others are trade show specific. Participants will summarize and discuss the affect or influence on union activities by The Labor Management Relations Act (NLRA). You will learn the roles and responsibilities of a steward to effectively perform the job and to abide by the governing laws, whether as a trade show steward or on a regular job site.

**PAT 261 – Techniques of Freight Handling for Trade Shows.** 4 Credits. This course is designed to introduce the student to "freight handling." Freight handling encompasses the removal, storage and return of the empty crates and other packaging materials. The student will be exposed to a variety of products specific to freight handling from a small submarine to the standard 10" wooden crate.

**PAT 270 – Advanced Techniques of Floor Covering I.** 3 Credits. Participants in this course will look at the use of coving to finish a sheet-goods installation. Coving not only enhances the floor's installation but also eliminates sharp corners and crevices and makes cleaning easier. Finishing or trimming an installation will provide a smooth clean finish to the floor and a smooth transition at the wall. Participants will learn the importance of using underlays and perfect bonding adhesives for a successful installation.

**PAT 271 – Advanced Techniques of Floor Covering II.** 3 Credits. In this course, participants will learn of the various materials by which safety flooring is made. They will also develop an understanding of the purpose of safety flooring and the process by which it is manufactured to withstand various underfoot traffic. Finally, some of the special jobs a floor covering installer may encounter are discussed, including: covering with tile, insets, electrostatic discharge control (EDC) and heat seam welding.

## PARAMEDIC SCIENCE (PAR)

**PAR 205 – EMS Preparatory.** 3 Credits. This lecture/lab course is designed to education and train the students in preparing for a career in the EMS systems. Students will also gain knowledge in workforce safety and wellness, public health, medical/legal issues, communications, and documentation. Students will reinforce basic patient assessment, as well as develop critical thinking and clinical decision making skills.

**PAR 210 – Airway Management.** 3 Credits. A lecture/lab course where students will develop skills in advanced airway procedures and respiratory management, the importance of artificial ventilation, BIPAP/CPAP, percutaneous cricothyrotomy, monitoring devices including waveform capnography, chemistry analysis; arterial blood gas interpretation, and medications essential for airway management. (PR/CO: none)

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**PAR 211 – Principles of Trauma Management.** 3 Credits. A lecture/lab course designed to develop skills and knowledge essential to assessing the trauma patient in the pre-hospital setting. The course focuses on both physical exam and initial treatment and management of the trauma patient, including spinal immobilization, splinting, hemorrhage control, high pressure injection, blasé injuries, monitoring and management of chest tubes, use of a Morgan lens, and National Trauma Triage Protocol and trauma scoring. (PR/CO: none)

**PAR 212 – Pre-Hospital Pharmacology.** 3 Credits. A lecture/lab course focused on an integration of pathophysiological principles of pharmacology and assessment findings to formulate a pre-hospital impression and implement a pharmacological management plan for the benefit and improvement of victims (S). Skills such as Intramuscular, Subcutaneous, Intraosseous and Intravenous medication administration will be included. (PR/CO: none)

**PAR 220 – Cardiovascular Emergencies.** 6 Credits. A lecture/lab course focused on pre-hospital intervention and monitoring of patients with cardiovascular emergencies. The student will learn and practice ECG monitoring, interpretation, 212-lead ECG interpretation, updated information on heart failure/acute coronary syndrome, central line monitoring, and various drug therapies. (PR/CO: none)

**PAR 225 – Rescue Operations.** 3 Credits. A course designed to develop awareness of rescue operations, hazardous materials, incidents, ambulance operations, crime scenes and others.

**PAR 230 – Special Patient Considerations.** 3 Credits. A lecture/lab course focused on pre-hospital intervention and monitoring skills for patients with special considerations. Includes geriatric patients, victims of abuse and assault, patients with special challenges, acute intervention for chronic care patients, obstetrics, gynecological emergencies, and pediatric and neonatal patients. The student will learn and practice skills needed to care for a pregnant patient, delivery of a baby, care for newborn, common pediatric emergencies, and develop skills in Assessment-Based Management.

**PAR 231 – Medical Emergencies.** 3 Credits. A lecture/lab course focused on pre-hospital intervention and monitoring skills for patients with general medical emergencies. This would include patients with neurological, renal, toxicological, anaphylactic, environmental or psychiatric emergencies as well as infectious diseases such as drug-resistant bacteria and other emerging diseases.

**PAR 251 – Paramedic Clinical I.** 3 Credits. A course designed for the beginning paramedic student to gain competency in pre-hospital intervention and monitoring skills in field and hospital settings.

**PAR 252 – Paramedic Clinical II.** 3 Credits. A course designed for the advancing paramedic student to apply skills learned in the classroom to the clinical setting. All skills are performed under the supervision of a clinical preceptor. (Offered Spring Semester only)

**PAR 253 – Paramedic Clinical III.** 3 Credits. A course designed for the advancing paramedic student to apply skills learned in the classroom to the clinical setting. All skills are performed under the supervision of a clinical preceptor. (PR: Admission to program)

**PAR 260 – Critical Care Transport.** 5 Credits. A course designed for the EMT-Paramedic or Registered Nurse to obtain the knowledge and skills necessary to manage the critical patient during transfers between hospitals, specialty referral centers and extended care facilities. (PR: Paramedic or RN and CO: PAR 261)

**PAR 261 – Critical Care Transport Clinical.** 1 Credit. A course designed for the EMT-Paramedic or Registered Nurse to gain clinical transport experience in specialized units such as Intensive Care, Pediatric Intensive Care, Neonatal Intensive Care, Critical Care Ambulances and Labor & Delivery. (PR: Paramedic or RN and CO: PAR 260)

**PAR 280-289 – Special Topics in Paramedic Science.** 1-5 Credits. These courses are designed to present various topics in the field of Paramedic Science.

**PAR 290 – Paramedic Capstone.** 3 Credits. This course provides students with a final opportunity to incorporate their cognitive knowledge and psychomotor skills through labs and scenario – based practice and evaluations prior to taking the National Registry written and practical examinations. Knowledge and skills from the core curriculum courses will be incorporated into the review process to include skills testing, practice test review and scenario testing.

## PHARMACY TECHNICIAN (PHT)

**PHT 201 – Introduction to Pharmacy Technician.** 3 Credits. This course introduces pharmacy practice and the technician's role in a variety of pharmacy settings. Topics include medical terminology and abbreviations, drug delivery systems, law and ethics, prescription and medication orders, and the health care system. Upon completion, students should be able to explain the role of pharmacy technicians, read and interpret drug orders, describe quality assurance and utilize pharmacy references.

**PHT 204 – Pharmacy Practice I.** 3 Credits. This course provides instruction in the technical procedures for preparing and dispensing drugs in the hospital and retail settings. Topics include drug packaging and labeling, outpatient dispensing, hospital dispensing procedures, controlled substance procedures, inventory control, and nonsterile compounding. Upon completion, students should be able to perform basic dispensing techniques in a variety of pharmacy setting.

**PHT 206 – Pharmacy Calculations.** 3 Credits. This course provides the specific information pharmacy technicians require when working with metric, avoirdupois, and apothecary systems of measurement and how these relate to the specific applications in pharmacy.

**PHT 208 – Sterile Products.** 2 Credits. This course provides an introduction to intravenous admixtures preparation and other sterile products, including total parenteral nutrition and chemotherapy. Topics include aseptic techniques, facilities, equipment and supplies utilized in admixture preparation, incompatibility and stability, laminar flow hoods, immunizations and irrigation solutions and quality assurance.

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**PHT 216 – Pharmacology for Pharmacy Tech I.** 3 Credits. This course provides an overview of the major systems of the body; diseases that occur within those systems; and the prescription, non-prescription, and alternative medicines used to treat those diseases.

**PHT 226 – Pharmacology for PHT II.** 2 Credits. This course provides an overview of the major systems of the body, diseases that occur within those systems and the prescription, nonprescription, and alternative medicines used to treat those diseases. The course will cover mechanisms of action, pharmacokinetic principles, therapeutic efforts, adverse reactions, dosage forms, and routes of administration. (PR: PHT 216 with "C" or better)

**PHT 250 – Pharmacy Practice II.** 3 Credits. This course provides continued instruction in the technical procedures for preparing and dispensing drugs in the hospital setting. Topics include more detailed coverage of unit-dose dispensing, ward stock systems, materials management, automated dispensing and quality assurance. (PR: PHT 204 with "C" or better)

**PHT 260 – Pharmacy Technician Practice Management.** 3 Credits. This course covers the major issues, trends and concepts in contemporary pharmacy practice. Topics include professional ethics, continuing education, job placement and the latest developments in pharmacy technician practice.

**PHT 280-289 – Pharmacy Technician Special Topics.** 2 Credits. Study of content not normally covered in other courses.

**PHT 290 – Pharmacy Technician Experiential Training.** 6 Credits. This course provides an opportunity to work in pharmacy settings under a pharmacist's supervision. Emphasis is on communicating effectively with personnel, developing proper employee attitude, and dispensing medications. (PR: PHT 201, PHT 204, PHT 206, PHT 208, PHT 216, PHT 226, PHT 250, PHT 260, PHT 281 with a "C" or better)

**PHT 299 – Health Science.** 1 Credit. This course guides students in the completion and documentation of the general education portfolio.

## PHYSICAL EDUCATION (PE)

**PE 101 - Life Fitness.** (CR/NC). This course is designed to inform the student how to make correct life choices in reference to exercise, diet and general health components. The students will be expected to engage in various fitness modalities as well as pre-training and post-training fitness assessment.

**PE 103 – Beginning Tennis.** (CR/NC). This course is designed to teach the basics of the game of tennis. It includes but is not limited to: the history of the game, scoring, ball striking and various game strategies.

**PE 104 – Introduction to Yoga.** (CR/NC). Yoga class offers instruction and practice in basic asana with emphasis on breath and the synchronization of breath and movement. Yoga class addresses and emphasizes the integration of body, mind, and spirit via a series of practices involving seven to ten postures and breathing techniques.

**PE 129 – Spinning.** 1 Credit. The class will expose student to aerobic fitness opportunities through indoor group cycling. Students will also learn basic foundation of exercise physiology as it relates to aerobic conditioning.

**PE 131 – Total Body Conditioning.** 1 Credit. To provide students an experience with a variety of lifetime fitness activities. Students will also learn basic foundation of exercise physiology as it relates to fitness.

**PE 158 – Zumba.** 1 Credit. Zumba classes feature exotic rhythms set to high-energy latin and international beats. Basic steps include salsa, cumbia, merengue and reggaeton.

**PE 280-289 – Special Topics.** (CR/NC).

## PHYSICAL THERAPIST ASSISTANT (PTA)

**PTA 100 – Introduction to Physical Therapy.** 3 Credits. An orientation to physical therapy profession including historical background, philosophy, and function of the American Physical Therapy Association, professional ethics, documentation, legal responsibilities and interpersonal relationships among health team are covered. (PR: Admission to PTA Program)

**PTA 110 – Physical Therapy Modalities.** 2 Credits. Basic treatment modalities and procedures in PT are introduced. These include therapeutic hot/cold techniques, massage and electrical stimulation. (PR: Admission to PTA Program; CO: PTA 110 L) (Offered Fall Semester only)

**PTA 110L – Physical Therapy Modalities Lab.** 1 Credit. Basic treatment modalities and procedures in PT are introduced in a laboratory setting. These include therapeutic hot/cold massage and electrical stimulation. (PR: Admission to PTA Program and CO: PTA 110)

**PTA 120 – Patient Care Skills.** 2 Credits. Rationale and skills for patient therapeutic techniques, including transportation of patients, proper body mechanics, aseptic techniques, transfers and lifts, lower extremity orthotics, gait training with assistive devices, hydrotherapy and wound care. (PR: Admission to PTA Program and CO: PTA 120L) (Offered Fall Semester only)

**PTA 120L – Patient Care Skills Lab.** 1 Credit. Lab skills practice including transportation of patients, proper mechanics, aseptic techniques, transfers and lifts, lower extremity orthotics, gait training and assistive devices, hydrotherapy and wound care. (PR: Admission to PTA Program and CO: PTA 120) (Offered Fall Semester only)

**PTA 130 – Functional Anatomy and Procedures.** 3 Credits. Structure and function of the musculoskeletal system with an introduction of the evaluative techniques of palpation, goniometry, manual muscle testing and gait patterns. (PR: Admission to PTA program and CO: PTA 130L) (Offered Fall Semester only)

**PTA 130L – Functional Anatomy and Procedures Lab.** 1 Credit. Lab skills practice including evaluative techniques of palpation, goniometry, manual muscle testing and gait training. (PR: Admission to PTA Program and CO: PTA 130)

**PTA 140 – Clinical Practice I.** 3 Credits (CR/NC). Supervised clinical experience (120 hours, based upon clinic) involving observation of physical therapy services to include an orientation to treatment, preparation and assistance to the Physical Therapist along with an introduction to medical issues, documentation and professional development. (PR: Concurrent PTA 100, 110, 110L, 120, 120L, 130, 130L , 160) (Offered Fall Semester only)

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**PTA 160 – Neuroanatomy and Physiology.** 3 Credits. Structure and function of the human nervous system and basic concepts of human physiology. (PR: Admission to PTA Program) (Offered Fall Semester only)

**PTA 200 – Pathological Conditions.** 3 Credits. Basic pathophysiology and reaction to disease and injury of commonly treated physical therapy conditions, including burns, neoplasm, hereditary and congenital conditions, blood, respiratory infections, skin, musculoskeletal and aging diseases. (PR: Completion of PTA 100, with grade of "C" or better) (Offered Spring Semester only)

**PTA 220 – Orthopedic Rehabilitation.** 3 Credits. Emphasizes therapeutic procedures utilized by physical therapist assistants for patients with orthopedic and soft tissue injury, degenerative disorders, nerve injuries and orthotic needs for hand and foot disorders. (PR: Completion of PTA 100, 110, 110L, 130, and 130L with grade of "C" or better and CR: PTA 220L) (Offered Spring Semester only)

**PTA 220L – Orthopedic Rehabilitation Lab.** 1 Credit. Application of therapeutic procedures for patients in orthopedic and cardiopulmonary rehabilitation in a laboratory setting. (PR: Completion of PTA 100, 110, 110L, 130, and 130L with grade of "C" or better and CO: PTA 220) (Offered Spring Semester only)

**PTA 230 – Adult Rehabilitation.** 3 Credits. Expands upon neurological principles to emphasize pathology and rehabilitation techniques for adult care. (PR: Completion of PTA 100, 110, 110L, 130, and 130L courses with grade of "C" or better and CR: PTA 230L) (Offered Spring Semester only)

**PTA 230L – Adult Rehabilitation Lab.** 1 Credit. Lab skills practice to expand upon neurological principles to emphasize pathology and rehabilitation techniques for adult care. (PR: Completion of PTA 100, 120, 120L, and 140 courses with grade of "C" or better and CR: PTA 230) (Offered Spring Semester only)

**PTA 240 – Clinical Practice II.** 4 Credits. Continuation of clinical experience under the direction of a licensed PT or PTA. (PR: Completion of all previous 200 level coursework with a grade of "C" or better) (Offered Spring Semester only)

**PTA 250 – Specialized PT Interventions.** 3 Credits. Introduction to principles, neurological, pathology and rehab techniques for spinal cord injury, pediatrics, lymphedema, pelvic health, vestibular dysfunction, manual therapies and diabetes. (Offered Spring Semester only)

**PTA 260 – Clinical Practice III.** 4 Credits. Final clinical experience under the direction of a licensed PT or PTA. (PR: Completion of PTA 240)

**PTA 270 – PTA Seminar.** 3 Credits. Familiarizes students with alternative employment opportunities. Students learn methods of preparing resumes and interviewing techniques. (PR: Completion of all 100 level PTA courses with a grade of "C" or better) (Offered Spring Semester only)

**PTA 280-283 – Special Topics.** 1 to 4 Credits. Study of content not normally covered in other courses. (PR: Enrollment with permission of program coordinator CJS)

**PTA 284-289.** 1-5 Credits. These courses are designed to present various topics in the field of Physical Therapist Assistant.

## POLITICAL SCIENCE (POLS)

**POLS 101 – Introduction to American Government.** 3 Credits. This course is an introduction to the United States constitution, federalism, government structure, and the political process. This course also provides techniques for civic engagement. (PR: REA 098 or ACT 18 or SO1 421 or PREA 098)

## PSYCHOLOGY (PSYC)

**PSYC 200 – General Psychology.** 3 Credits. This course is an introduction to psychology. It is designed to provide an overview of the scientific study of human behavior and mental processes. Topics include a brief history of psychology, research methods and statistics, human development, learning and memory, sensation and perception, motivation, intelligence, psychopathology, various therapies, and careers in psychology. This course also provides a knowledge base for subsequent courses in the field of psychology. Upon completion, students should be able to demonstrate a basic knowledge of the science of psychology and apply the principles to everyday life. (PR: ACT Reading 18 or SAT Reading 421 or ACCUPLACER Reading 80 or PREA 098)

**PSYC 215 – Lifespan Psychology.** 3 Credits. The study of human development and age-related changes in behavior, thinking, emotion and personality with a focus on observations and explanations that can be applied to as wide a range of human beings and in as many contexts as possible. (PR: ACT Reading 18 or SAT Reading 421 or ACCUPLACER Reading 80 or PREA 098)

**PSYC 225 – Abnormal Psychology.** 4 Credits. This course explores the major topics of abnormal behavior. This course focuses on description of various psychological disorders, classification, diagnosis, assessment techniques and methods of treatment and prevention. Historical theories as well as current research and findings in the field of abnormal psychology will be discussed. (PR: ACT Reading 18 or SAT Reading 421 or ACCUPLACER Reading 80 or PREA 80)

## PUBLIC HEALTH (PH)

**PH 200 – Public Health.** 3 Credits. This course covers concepts in public health by examining the philosophy, purpose, history, organization, functions, tools, activities and results of public health practice at the national, state, and community levels. The course also examines public health occupations and careers, as well as current issues in public health. (PR: ENL 111 or permission)

**PH 201 – Epidemiology.** 3 Credits. This course focuses on measures of disease frequency and association, observational study designs, and diagnostic and screening tests. The course reviews the use of these tools and the role of epidemiology in measuring disease in populations, estimating risks, and influencing public policy. At the completion of the course, the student will be able to identify factors that cause disease, assess the public health importance of disease, describe the natural history of diseases, and evaluate procedures for preventing disease. (PR: MAT 096 and ENL 111 or permission)

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**PH 202 – Global Health.** 3 Credits. This course will discuss concepts of the public health field and the critical links between global health and social and economic development. Students will get an overview of the determinants of health, and how health status is measured. Students will review the burden of disease, risk factors, and key measures to address the burden of disease in cost-effective ways. Emphasis will be placed on low-and middle-income countries and on the health of the poor. (PR: ENL 111 or permission)

## PUBLIC LIBRARY TECHNOLOGY (PLT)

**PLT 100 – Careers in Libraries.** 3 Credits. This course will examine basic, structures, functions and operation of public, academic and special libraries. Included will be overviews of patron types along with examining the materials, services, and technology available to meet the needs of each. In addition, students will learn about the profession and the types of careers available in libraries.

**PLT 210 – Public Library Cataloging and Technical Services.** 3 Credits. This course provides an introduction to the current practices in descriptive cataloging and subject analysis; introduction to cataloging practices, subject analysis theories and practices for all formats; introduction to the Sears List of Subject Headings, Library of Congress Subject Headings and concepts in assigning Dewey Decimal and Library of Congress Classification numbers.

**PLT 215 – Advanced Cataloging.** 3 Credits. Provides intensive practice in the fundamentals of library cataloging and classification, serials control, and database maintenance. Instruction on reading, interpretation, and use of current standards and documentation of the creation of MARC records. Focuses on management, policy, organizational issues and training related to the administration of technical services in public libraries. (PR: PLT 210)

**PLT 220 – Public Library Children's and Young Adult Services.** 3 Credits. This course addresses the selection and promotion of library materials that support programs in children's and young adult services. Issues of service, diversity and marketing and selecting materials will also be presented.

**PLT 230 – Public Library Reference.** 3 Credits. Study of basic reference sources for public libraries with emphasis on library materials evaluation, the reference interview, search strategies and impact of new technology on libraries.

**PLT 235 – Advanced Reference Skills.** 3 Credits. This course will expose students to advanced research techniques and advanced online searching for specialized areas most heavily requested by public library patrons: government documents, business information (entrepreneur/investment), legal materials, career development, continuing education and consumer health. (PR: PLT 230, May be taken concurrently).

**PLT 240 – Public Library Organization and Administration.** 3 Credits. Course will focus on principles of administration and organization for public libraries, including planning, policy development, financial management, personnel management and state and national library laws.

**PLT 250 – Introduction to Technology in Libraries.** 3 Credits. This course will examine technology of public, academic and special libraries. Students will examine Library and Web 2.0, Blogs and RSS feeds, social networks, widgets, folksonomies, integrated library systems, electronic resources management and other new and emerging technologies used in today's libraries.

**PLT 255 – Collection Development for Public Libraries.** 3 Credits. Explores the process of acquiring, maintaining and weeding library materials. Includes collection development policies, community analysis, materials for special needs and interests and materials in various formats.

**PLT 260 – Public Library Adult Services.** 3 Credits. Study of adult patron needs; how to anticipate and provide appropriate services to adult populations in the community. Services will include literacy programs and services to minorities, job seekers, business community and handicapped. Students will also learn the basic principles of programming for adults.

**PLT 275 – Information Literacy.** 3 Credits. This course is designed to help students to become more proficient in selecting and researching topics, evaluating information and the sources of that information and ultimately using relevant research (in a paper, speech, or assignment) in an ethical manner. This course will challenge the student to think critically and invest in developing research topics that will interest both the writer and the reader.

**PLT 281-285 – Special Topics.** 1-6 Credits.

**PLT 280 – Public Library Marketing.** 3 Credits. This course will expose students to advanced marketing skills and implementation processes. Students will cover basic marketing strategies and create a workable marketing plan for a public library of their choosing.

**PLT 299 – Public Library Technology: Capstone Experience.** 3 Credits. This course will provide the capstone experience in which students will perform an internship in the field while developing and refining their general education portfolio. The portfolio will consist of samples of their work garnered from the field experience and each library course within the program. (PR: Permission)

## RADIOGRAPHIC SCIENCE (RS)

**RS 201 – Fundamentals of Radiographic Science.** 1 Credit. Content designed to provide an overview of the foundations in radiography and the practitioner's role in the health care delivery system. Principles, practices and policies of the health care organization(s) will be examined and discussed in addition to the professional responsibilities of the radiographer. (PR: Admission to Radiologic Technology Program and Permission)

**RS 202 – Patient Care.** 3 Credits. Content designed to provide the basic concepts of patient care, including consideration for the physical and psychological needs of the patient and family. Routine and emergency patient care procedures will be described, as well as infection control procedures utilizing standard precautions. The role of the radiographer in patient education will be identified. (PR: Admission to Radiologic Technology Program and Permission)

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**RS 203 – Ethics & Law.** 1 Credit. Content designed to provide a fundamental background in ethics. The historical and philosophical basis of ethics, the elements of ethical behavior and an introduction to legal terminology, concepts and principles will be presented. The student will examine a variety of ethical issues and dilemmas found in clinical practice. Topics include misconduct, malpractice, legal and professional standards and the ASRT scope of practice. The importance of proper documentation and informed consent will be emphasized. (PR: Admission to Radiologic Technology Program and Permission)

**RS 204 – Radiographic Procedures I and Lab I.** 4 Credits. Content designed to provide a knowledge base necessary to perform routine radiographic procedures along with the application to special studies. Consideration will be given to the production of images of optimal diagnostic quality. Laboratory experience will be used to complement the didactic portion of Radiologic Procedures I. (PR: Admission to Radiologic Technology Program and Permission)

**RS 205 – Clinical Practice I.** 5 Credits. Students will accomplish mandatory competencies detailed in the procedures specific to Clinical Practice I. Clinical practice will be designed to provide students with experience in patient care and assessment, competent performance of radiologic imaging and total quality management ensuring the well-being of the patient preparatory to, during and following the radiologic procedure. (PR: Admission to Radiologic Technology Program and Permission)

**RS 206 – Radiobiology.** 2 Credits. Content designed to provide an overview of the principles of the interaction of radiation with living systems. Radiation effects on molecules, cells, tissues and body as a whole are presented. Factors affecting biological response are presented, including acute and chronic effects of radiation.

**RS 207 – Radiation Protection.** 2 Credits. Content designed to present an overview of the principles of radiation protection including the responsibilities of the radiographer for patients, personnel and the public. Radiation health and safety requirements of federal and state regulatory agencies, accreditation agencies and health care organizations are incorporated.

**RS 208 – Radiographic Procedures II and Lab II.** 4 Credits. Content designed to provide a knowledge base necessary to perform special radiographic procedures along with the application to special studies. Consideration will be given to the production of images of optimal diagnostic quality. Laboratory experience will be used to complement the didactic portion of Radiologic Procedures II.

**RS 209 – Radiographic Science Pharmacology.** 2 Credits. Content designed to provide basic concepts of pharmacology. The theory and practice of basic techniques of venipuncture and the administration of diagnostic contrast agents and/or intravenous medications is included. The appropriate delivery of patient care during these procedures is emphasized.

**RS 210 – Clinical Practice II.** 7 Credits. Students will accomplish mandatory competencies detailed in the procedures specific to Clinical Practice II. Clinical practice will be designed to provide experience in provision of patient care and assessment, competent performance of radiologic imaging and total quality management. Levels of competency and outcomes measurement shall ensure the well-being of the patient preparatory to, during and following the radiologic procedure.

**RS 211 – Radiation Production and Characteristics.** 2 Credits. Content designed to establish a basic knowledge of atomic structure and terminology. Also presented are the nature and characteristics of radiation, x-ray production and the fundamentals of photon interactions with matter.

**RS 212 – Imaging and Processing and Imaging Lab I.** 4 Credits. Content designed to establish a knowledge base in factors that govern and influence the production and recording of radiologic images. Film and electronic imaging with related accessories will be emphasized. Class demonstrations/labs are used to demonstrate and reinforce application of theory of imaging and processing. Film and electronic imaging with related accessories will be emphasized.

**RS 213 – Radiographic Pathology.** 2 Credits. Content designed to introduce theories of disease causation and the pathophysiologic disorders that compromise health systems. Etiology, pathophysiologic responses, clinical manifestations, radiographic appearance and management of alterations in body systems will be presented.

**RS 214 – Imaging Lab II.** 1 Credit. Content designed to provide a basis for analyzing radiographic images specific to contrast media procedures, spine, skull & facial bones. Included are the importance of minimum imaging standards, discussion of a problem-solving technique for image evaluation and the factors that can affect image quality. Actual images will be included for analysis.

**RS 215 – Clinical Practice III.** 6 Credits. Clinical practice will be designed to provide experience in provision of patient care and assessment, competent performance of radiologic imaging and total quality management. Levels of competency and outcomes measurement shall ensure the well-being of the patient preparatory to, during and following the radiologic procedure. Students will accomplish mandatory competencies detailed in the procedures just specific to Clinical Practice III.

**RS 216 – Computers In Radiologic Science.** 1 Credit. Content designed to introduce knowledge in computing and information processing. Computer applications in the radiologic sciences related to image capture, display, storage and distribution are presented.

**RS 217 – Imaging Equipment.** 2 Credits. Content designed to establish a knowledge base in radiographic, fluoroscopic, mobile and tomographic equipment requirements and design. The content will also provide a basic knowledge of quality control.

**RS 218 – Advanced Imaging Modality.** 0 Credits. Introduction to advanced imaging modalities including computed tomography, MRI, ultrasound, nuclear medicine and radiation oncology.

**RS 219 – Registry Review Seminar.** 0 Credits. Seminar provides student with ARRT examination review.

**RS 220 – Clinical Practice IV.** 4 Credits. Students will accomplish mandatory competencies detailed in the procedures specific to Clinical Practice IV. Clinical practice will be designed to provide experience in provision of patient care and assessment, competent performance of radiologic imaging and total

# COURSE DESCRIPTIONS

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quality management. Levels of competency and outcomes measurement shall ensure the well-being of the patient preparatory to, during and following the radiologic procedure.

**RS 221 – Human Diversity for Radiological Technology.** 3 Credits. Content designed to promote better understanding of patients, the patients' families and professional peers through comparison of diverse human populations based on their value system, cultural and ethnic influences, communication styles, socioeconomic influences, health risks and life stages. Content will include the study of factors that influence relationships with patients and professional peers.

## RADIOLOGY (RAD)

(In conjunction with Collins Career Center)

**RAD 201 – Introduction to Radiology.** 3 Credits. Course is designed to provide an overview of the foundations in radiography and the practitioner's role in the health care delivery system. Principles, practices and policies of the health care organization(s) will be examined and discussed in addition to the professional responsibilities of the radiographer. Also, the basic concepts of patient care, including consideration for the physical and psychological needs of the patient and family. Routine and emergency patient care procedures will be described, as well as infection control procedures utilizing standard precautions. The role of the radiographer in patient education will be identified.

**RAD 202 – Clinical Practice I.** 2 Credits. Introductory clinical practice to include the design of the radiology department to include paperwork, desk procedures, transport, filing and successfully completed laboratory check-off. Content and clinical practice experiences shall be designed for sequential development, application, critical analysis, integration, syntheses and evaluation of concepts and theories in the performance of radiologic procedures. Through structured sequential competency-based assignments in clinical setting, concepts of team practice, patient-centered clinical practice and professional development shall be discussed, examined and evaluated. Clinical practice experiences will be designed to provide patient care and assessment, competent performance of radiologic imaging and total quality management. Levels of competency and outcomes measurement shall ensure the well-being of the patient preparatory to, during the following the radiologic procedure. (PR: Orientation at Clinical Sites and maintenance of a C or better in preceding coursework)

**RAD 203 – Ethics and Law.** 1.5 Credits. Content is designed to provide a fundamental background in ethics. The historical and philosophical basis of ethics, as well as the elements of ethical behavior, will be discussed. The student will examine a variety of ethical issues and dilemmas found in clinical practice. An introduction to legal terminology, concepts and principles will also be presented. Topics include misconduct, malpractice, legal and professional standards and the ASRT scope of practice. The importance of proper documentation and informed consent is emphasized. (PR: Completion of RAD 206, 210, 211, 213 and 222 with a C or better)

**RAD 204L– Radiographic Procedures Lab I.** 2.5 Credits. Laboratory experience is used to complement the didactic portion of Radiographic Positioning I. (PR: Admission into the Radiologic Technology Program)

**RAD 205 – Clinical Practice II.** 3 Credits. Content and clinical practice experiences shall be designed for sequential development, application, critical analysis, integration, syntheses and evaluation of concepts and theories in the performance of radiologic procedures. Through structured sequential competency-based assignments in clinical setting, concepts of team practice, patient-centered clinical practice and professional development shall be discussed, examined and evaluated. Clinical practice experiences will be designed to provide patient care and assessment, competent performance of radiologic imaging and total quality management. Levels of competency and outcomes measurement shall ensure the well-being of the patient preparatory to, during and following the radiologic procedure. (PR: Completion of RAD 201, 202, 204 & 204L with a C or better)

**RAD 206 – Radiology Protect/Radiobiology.** 3 Credits. Content is designed to present an overview of the principles of radiation protection including the responsibilities of the radiographer for patients, personnel and the public. Radiation health and safety requirements of federal and state regulatory agencies, accreditation agencies and health care organizations are incorporated. An overview of the principles of the interaction of radiation with living systems is discussed. Radiation effects on molecules, cells, tissues and the body as a whole are presented. Factors affecting biological response are presented, including acute and chronic effects of radiation. (PR: RAD 205, 208, 208L and 212)

**RAD 208 – Radiographic Procedures II.** 3 Credits. Content is designed to provide a knowledge base necessary to perform special radiographic procedures along with the application to special studies. Consideration will be given to the production of images of optimal diagnostic quality. (PR: Completion of RAD 201, 202, 204 & 204L with a C or better)

**RAD 208L – RAD Procedures II.** 1 Credit. Laboratory experiences is used to complement the didactic portion of Radiographic Positioning II. (PR: RAD 201, RAD 202, RAD 204 and RAD 204L with a C or better)

**RAD 209 – Radiologic Pharmacology.** 1.5 Credits. Study of the general principles of pharmacology, including drug types, methods of administration, dosage, effects, indications, contra indications, and regulation. Drug groups related to respiratory care are emphasized, including bronchodilators, wetting agents, mucolytics, antibiotics, muscle relaxants, and corticosteroids. (PR: Completion of RAD 206, 210, 211, 213 & 222 with a C or better)

**RAD 210 – Clinical Practice III.** 3 Credits. Content and clinical practice experiences shall be designed for sequential development, application, critical analysis, integration, syntheses and evaluation of concepts and theories in the performance of radiologic procedures. Through structured sequential competency-based assignments in clinical setting, concepts of team practice, patient-centered clinical practice and professional development shall be discussed, examined and evaluated. Clinical practice experiences will be designed to provide patient care of assessment, competent performance of radiologic imaging and total quality management. Levels of competency and outcomes measurement shall ensure the well-being of the patient preparatory to, during and following the radiologic procedure. (PR: Completion of RAD 205, 208, 208L & 212 with a C or better)

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**RAD 211 – Radiation Characteristics/Radiation Physics.** 3 Credits. Content is designed to establish a basic knowledge of atomic structure and terminology. Also presented are the nature and characteristics of radiation, x-ray production and the fundamentals of photon interactions with matter. (PR: Completion of RAD 205, 208, 208L, and 212 with a C or better)

**RAD 212 – Imaging and Processing/Imaging Lab.** 3 Credits. Content is designed to establish a knowledge base in factors that govern and influence the production and recording of radiographic images. Film and electronic images with related accessories will be emphasized. Knowledge of radiographic, fluoroscopic, mobile and tomographic equipment requirements and design will be included. The content will also provide a basic knowledge of quality control. Class demonstrations/labs are used in demonstrate application of theory. (PR: Completion of RAD 201, 202, 204 and 204L with a C or better)

**RAD 213 – Radiographic Pathology.** 3 Credits. Content is designed to introduce theories of disease causation and the pathophysiologic disorders that compromise healthy systems. Etiology, pathophysiologic responses, clinical manifestations, radiographic appearance and management of alterations in body systems will be presented. (PR: Completion of RAD 205, 208, 208L and 212 with a C or better)

**RAD 215 – Clinical Practice IV.** 3 Credits. Content and clinical practice experiences shall be designed for sequential development, application, critical analysis, integration, syntheses and evaluation of concepts and theories in the performance of radiologic procedures. Through structured sequential competency-based assignments in clinical settings, concepts of team practice, patient-centered clinical practice and professional development shall be discussed, examined and evaluated. Clinical practice experiences will be designed to provide patient care and assessment, competent performance of radiologic imaging and total quality management. Levels of competency and outcomes measurement shall ensure the well-being of the patient preparatory to, during and following the radiologic procedure. (PR: Completion of RAD 206, 210, 211, 213 & 222 with a C or better)

**RAD 217 – Quality Assurance.** 1.5 Credits. Content will provide a basic knowledge of quality control and the factors that govern and influence the production and recording of radiographic procedures. (PR: Completion of RAD 206, 210, 211, 213 & 222 with a C or better)

**RAD 218 – Adv Imaging Procedures.** 3 Credits. content will provide the student with an introduction to advanced imaging modalities, to include computed tomography, MRI, ultrasound, nuclear medicine, and radiation oncology. (PR: Completion of RAD 206, 210, 211, 213, & 222 with a C or better)

**RAD 219 – Registry Review.** 3 Credits. Content is designed to provide students with a comprehensive review of the five areas covered in the national ARRT examination. The areas covered are Patient Care, Image Production and Evaluation, Radiographic Procedures, Radiation Protection and Equipment Operations and Quality Control. (PR: RAD Completion of RAD 206, 210, 211, 213 and 222 with a C or better)

**RAD 221 – Human Diversity.** 1.5 Credits. Content is designed to promote better understanding of patients, the patients, families and professional peers through comparison of diverse populations based in their value system, cultural

and ethical influences, communication styles, socioeconomic influences, health risks and life stages. Content will include the study of factors that influence relationships with the patients and professional peers. Understanding human diversity assists the student in providing better care.

**RAD 222 – Rad Procedures III.** 3 Credits. Content is designed to provide a knowledge base necessary to perform special radiographic procedures along with the application to special studies. Consideration will be given to the production of images of optimal diagnostic quality. (PR: Completion of RAD 205, 208, 208L and 212 with a C or better)

## READING (REA)

**REA 010-019 – Special Topics: Developmental Reading.** 1-6 Credits. Study of content not normally covered in other courses. (PR: Permission)

**REA 088 – Reading Improvement Lab.** 2 Credits (CR/NC). This course is designed for students whose placement scores indicate a need for additional reading instruction and practice while taking REA 098. Taken as a co-requisite with REA 098. REA 088 is two-credit hour course that counts toward full-time enrollment status financial aid eligibility but does not count toward the number of courses required to complete any degree program. Placement in REA 088 is determined by ACT score (13 or less), SAT score (369 or less), or the ACCUPLACER Reading score (51 or less).

**REA 098 – Reading Improvement.** 3 Credits (CR/NC). This course is designed for students who do not meet the state standard in reading and are enrolled in a program leading to an associate degree. Emphasis in the course is on comprehension skills, study skills, and vocabulary development. The prerequisite for the course is the reading placement test. The graduation requirement is increased three hours for students who meet the requirements for this course.

**REA 280-283 – Special Topics.** 1 to 4 Credits. Study of content not normally covered in other courses. (PR: Enrollment with permission of program coordinator or course instructor)

## RELIGIOUS STUDIES (RELS)

**RELS 130 – World Religions.** 3 Credits. This course is a general study of the basic teachings; the ethical, ceremonial, and devotional practices, and the cultural norms of the major religions of the world. Some historical developments and some of the most influential leaders of each faith are highlighted. (PR: REA 098 or ACCUPLACER Reading 80)

**RELS 220 – Hebrew Scriptures as Literature.** 3 Credits. This course offers examination of the Hebrew Scriptures as literature. It makes use of all of the writings contained in the Septuagint, which would include those considered canonical in Jewish and Protestant Christian traditions, along with the additional Jewish writings originally composed in Greek prior or the Common Era, which are considered canonical Old Testament in Orthodox and Roman Catholic tradition. Focus will be on the literary value of the works, with respect to human authorship, genre, themes and significant ideas, and influence, within the context of their original Hebrew and Jewish audiences. The course will consider modern



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critical approaches to the study of scriptures. (PR: ENL 115)

## RESPIRATORY (RTT)

**RTT 101 – Respiratory Care Procedures I.** 4 Credits. This course covers the administration of medical gases, humidity and aerosol therapy. Emphasis is placed on the safe holding of medical gases and safety in administration. Principles and techniques of therapeutic procedures used in basic respiratory care are covered. Also included are techniques of chest inflation therapy, chest physical therapy, breathing exercises, and bronchial hygiene. This physiologic effects, indications, and contraindications of each therapy are stressed. Detailed study of isolation, equipment, and supplies used in these therapies is included. (PR: RTT 102 and 110)

**RTT 101L – Respiratory Care Procedures I Lab.** 2 Credits. Practice of techniques and use of technology covered in Respiratory Care Procedures I and Cardiopulmonary Evaluation I is provided.

**RTT 102 – Respiratory Care Physics.** 2 Credits. This course is an in-depth study of physics including gas laws, behavior of gases, and application of the principles of physics. Emphasis is placed on respiratory care principles. (PR: RTT 104)

**RTT 103 – Mechanical Ventilation Techniques.** 2.67 Credits. An introduction to the fundamentals of mechanical ventilation techniques and terminology is presented. Various classes of mechanical ventilators are discussed and compared, emphasizing the differences required in their uses. The technology of adult continuous mechanical ventilation is covered. The design, function, and operation of representative mechanical ventilators of the various classifications are examined in detail. (PR: RTT 111 and RTT 202)

**RTT 103L – Mechanical Ventilation Technology Lab.** 1.330 Credits. Practice in the operation of mechanical ventilators covered in mechanical ventilation technology is provided. (CO: RTT 103)

**RTT 104 – Cardiopul Renal Anatomy and Physiology.** 2.670 Credits. The anatomy and physiology of the respiratory and circulatory systems are explored in detail. Emphasis is placed on the interaction of systems in gas exchange renal and acid base balance. The structure and function of the chest cage, mechanics of breathing, and control of respiration are also included.

**RTT 110 – Cardiopulmonary Evaluation I.** 4 Credits. History of respiratory care and professional organizations is discussed. Emphasis is on exploring the role of the respiratory therapist or techniques of patient evaluation are covered. Included are chest physical examination, measurement of the vital signs, patient interview and history, evaluation of the chest x-ray and spirometry. (PR: RTT 104)

**RTT 201 – Cardiopulmonary Evaluation II.** 2.670 Credits. Advanced techniques of pulmonary function testing are covered including lung volume determination, tests of small airways, diffusion, and distribution of ventilation. Invasive and noninvasive methods of arterial blood gas sampling, analysis, and interpretation are also covered. The technology and methodology of invasive and noninvasive cardiovascular testing, including electrocardiography and

hemodynamic monitoring, are presented. Fundamental interpretation of these tests is covered. (PR: RTT 102 and RTT 110)

**RTT 202 – Respiratory Care Procedures II.** 2.670 Credits. This advanced course provides the student with detailed knowledge of the principles and techniques of therapeutic procedures used in respiratory care. Topics include airways management, transtracheal oxygen therapy and aspiration, bronchoscopy, thoracentesis and plural chest tubes, arterial lines, ABG interpretation and analysis, transports and electrocardiogram interpretation. (PR: RTT 101 and RTT 201)

**RTT 202L – Respiratory Care Procedure II Lab.** 1.330 Credits. This course includes practice of techniques covered in Respiratory Care Procedure II, including airway management, arterial line insertion and management, pleural chest tube placement and management, and EKG interpretation. (CO: RTT 202)

**RTT 203 – Emergency Management.** 2.670 Credits. This course emphasizes the emergency respiratory management of the adult and pediatric patients. This course consist of basic life support (BLS), advanced cardiac life support (ACLS), and pediatric advanced life support (PALS). This course also consists of the role of the respiratory therapist in natural disasters, hazardous material exposure, and bioterrorism. (PR: RTT 111 and RTT 202)

**RTT 204 – Mechanical Ventilation Management.** 4 Credits. Management of continuous adult mechanical ventilation is covered with emphasis on the physiologic effects of various techniques and selection of optimal methods. Monitoring, quality control, and the ability to solve clinical problems relation to mechanical ventilation are emphasized. (PR: RTT 103 and RTT 203)

**RTT 204L – Mechanical Ventilation Management Lab.** 2 Credits. Laboratory practice of the techniques and technology covered in Mechanical Ventilator Management.

**RTT 205 – Neonatal and Pediatric Respiratory Care.** 4 Credits. This advanced course provides the student with detailed knowledge to the needs of neonatal and pediatric patients. Fetal cardiopulmonary development and changes at birth are covered. Equipments, procedures, and methods used in the care and evaluation of neonatal pediatric patients are also covered. Also included are cardiopulmonary conditions and diseases particular to neonate and pediatric patients. (PR: RTT 103 and RTT 203)

**RTT 206 – Seminar/Board Review.** 4 Credits. This course introduces the student to National Board of Respiratory Care (NBRC) exam taking skills, mock examinations of the NBRC matrix, and self-evaluation studies. Study methods and applications are also covered. This course includes a study of realistic clinical problems and situations, with emphasis on analyzing and evaluation these problems to formulate acceptance respiratory care modalities. Practice will be provided in the necessary techniques to take the NBRC clinical simulation examination. Computer simulations are an integral part of this course. (PR: RTT 207 and RTT 210)

**RTT 207– Respiratory Home Care/Rehabilitation.** 4 Credits. Care of the patient with long-term pulmonary disability is covered. Psychosocial and physical needs of the patient are addressed with emphasis on motivating and condition

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the patient with the goal of improving both quality of life and cardiopulmonary reserve. Special requirements for the patient, who required respiratory care in the home, are covered. (PR: RTT 204 and RTT 205)

**RTT 208 – Clinical Application of Critical Thinking.** 2.670 Credits. This course is designed to give the student additional skills in critical thinking through the use of patient case studies. (PR: RTT 207 and RTT 210)

**RTT 210 – Respiratory Professional Strategies.** 1.330 Credits. This course introduces the student in management responsibilities. Employee scheduling, assignment development and analysis, budget planning and analysis, diversity in the workplace and transition into practice is covered with emphasis placed on employment opportunities and employment-seeking guidelines. (PR: RTT 204 and RTT 205)

## SAFETY (SFT)

**SFT 110 – Safety in the Construction Trades.** 3 Credits (CR/NC). This course provides students with an OSHA 10 certification as well as a First Aid/CPR/AED certificate. Students become familiar with personal protective equipment (PPE), learning how to properly fit their PPE for use on the jobsite. Students also learn about workplace safety and accident reporting and the role of OSHA in enforcing workplace safety regulations. To pass this course the students are required to pass the OSHA 10 certification and First Aid/CPR exams.

**SFT 210 – Advanced Safety Techniques.** 3 Credits (CR/NC). This course covers the potential hazards of working with toxic and flammable materials and the related use of personal protective equipment. The types of tools and equipment for elevating oneself and one's work materials are identified. Selection, inspection, setup, safe techniques, and proper maintenance of equipment are discussed. Students who complete this course meet the requirement for OSHA 30 certification as well as the recertification in First Aid/CPR/AED. (PR: SFT 110)

**SFT 214 – Lead Abatement Cert.** 3 Credits (CR/NC). This course covers the dangers related to working with lead and the procedures for safe exposure and abatement. In particular, this course will cover what lead is; where it can be found; its health effects; its hazards; worker and community rights related to lead; abatement methods; cleanup; disposal; and laws, regulations, and standards. The content of this course meets the State of New Jersey certification requirements.

## SCIENCE (SCI)

**SCI 110 – Introduction to Physics.** 4 Credits. This course introduce's non-science majors to applications of physics in life, emphasizing conceptual understanding of basic principles in classical and modern physics that include critical thinking and problem solving exercises. The problem solving exercises will not require memorization of formulas but rather the understanding and application of them. (PR: MAT 125 or MAT 135, or MAT 145 or MAT145E)

**SCI 120 – Basics in Physical Science.** 4 Credits. An introduction for non-science majors to applications of physics, chemistry and astronomy in everyday life. This course will enhance the understanding of basic concepts through hands-on activities and/or experiments.

**SCI 201 – Integrated Science.** 4 Credits. A multidisciplinary course which integrates the areas of biology, chemistry, the environment, forensics, mathematics and technology. Course topics and activities relate science to the issues and aspects of the everyday world. (PR: MAT 150, Mat 150E or MAT 145, or MAT 120)

**SCI 230 – Environmental Science.** 4 Credits. This is an interdisciplinary course that emphasizes the impact of humans on the environment. This course begins with a study of the structure and function of ecosystem. Later, various environmental problems are examined including population growth, food supply, energy issues, water issues, air pollution, species extinction, solid waste disposal, and hazardous materials. (PR: REA 098 or ACT 18 or SAT 421 or PREA 098)

**SCI 280-283 – Special Topics.** 1-4 Credits. Study of content not normally covered in other courses. (PR: Permission)

## SOCIAL SCIENCE (SS)

**SS 201 – Human Relations.** 3 Credits. A survey and interdisciplinary approach to the study of organizational behavior. The course is designed to acquaint students with concepts and/or principles of managing human behavior in an organizational setting. (PR: REA 098 or ACT 18 or SAT 421 or ACCUPLACER Reading 80)

**SS 210 – Fundamentals of Sociology.** 3 Credits. A study of the development, organization and functioning of human society. Students will focus on the nature of social life, examine social differences and social inequality, examine social institutions and focus on social dynamics and social change. (PR: REA 098 or ACT 18 or SAT 421 or ACCUPLACER Reading 80)

**SS 280-289 – Special Topics.** 1 to 4 Credits. Study of content not normally covered in other courses. (PR: Permission)

## SPANISH (SPAN)

**SPAN 101 – Introductory Spanish I.** 3 Credits. This course is designed for students with no previous knowledge of Spanish. With an emphasis on grammar and communication skills, this course introduces a basic mastery of listening, speaking, reading, and writing. (PR: REA 098 or ACT Reading 18 or SAT Reading 421 or ACCUPLACER Reading 80 and ENL 095 or ACT Verbal 18 or SAT Verbal 450 or WRITEPLACER Sentence Skills 88 or WRITERPLACER 5)

**SPAN 102 – Introductory Spanish II.** 3 Credits. Spanish 102 is the continuation of SPAN 101. With an emphasis on grammar and communication skills, this course continues to build a basic mastery of listening, speaking, reading, and writing. (PR: SPAN 101)

**SPAN 280-289 – Spanish Special Topics.** 1-6 Credits. Study of content not normally covered in other Spanish courses. Enrollment with permission of division dean, chair, or course instructor. (PR: Permission)

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## TECHNICAL STUDIES (TS)

**TS 100 – Careers in Technical Fields.** This course is designed to help students identify technical careers in the following career fields, which include, but are not limited to: graphic design/communication, air conditioning/refrigeration, automotive technology, general building construction and agricultural science. In the course, students will learn basic skills needed for these career fields, listen to lectures from those working in these fields and complete career exploration.

**TS 101 – AAS Portfolio Development.** (CR/NC). This course is designed to assist adult students with the development of a comprehensive portfolio documenting knowledge acquired through life/work experiences and other formal or informal learning experiences. (PR: Permission)

**TS 102 – On-the-Job Training.** 1-12 Credits. This course consists of paid or unpaid OJT, internship, or practicum performed in a business, industry, trade or technical career setting within the student's occupational area. The on-the-job training component is converted to credit hour at a ratio of 160:1 with the maximum of 1920 contact hours allowable. A statement of the total number of contact hours experienced through on-the-job training will be verified by an employer or union official and will be placed on the college record. This credit will be recorded immediately prior to graduation from college. (PR: Must major in Technical Studies or Occupational Development degree programs)

**TS 280-285 – Special Topics.** 1-5 Credits. This course consists of special topics of course work that will develop skills that may be applied to a variety of occupations or that may be specific to an occupation. Typically courses are technical specialty courses specific to an occupational/technical area. Courses include technical courses developed and delivered by the college, apprenticeship courses, or an approved course that can be included in a business or industry training program. (PR: Permission)

## TECHNICAL TRAINING FOR ADULTS (TTA)

**TTA 101 – Introduction to Teaching Techniques for Adults.** 1-3 Credits. This course is an introduction of teaching techniques and adult learning theories to instructors of occupational, adult education, and apprenticeship training programs. Included in this course are an introduction to adult learning and motivation theories, communications and interaction, planning, organizing and conducting training and developing and using instructional aids.

**TTA 102 – Teaching Techniques for Adults.** 1-3 Credits. This teaching techniques course is designed to teach adult learning theories to instructors of occupational, adult education, and apprenticeship training programs. Included in this course are laboratory safety; testing and evaluation; and advanced instructional techniques. Students will be required to develop, write, and teach a lesson plan.

**TTA 203 – Advanced Teaching Techniques for Adults.** 1-3 Credits. This advanced teaching techniques course is designed for instructors of occupational, adult education, and apprenticeship training programs. Included in the course are advanced use of teaching aids; implementing the curriculum and advanced instructional techniques. Students will be required to review and critique curriculum.

## TRANSPORTATION SYSTEMS (TRAN)

**TRAN 101 - Transportation Systems.** 3 Credits. Students learn about the world of personal and freight transportation including technology, systems, institutions, and how transportation systems fit into broader contexts. Additionally, students learn how the domestic and global transportation systems work, how to analyze and design transportation systems and select the most efficient means to transport freight.

**TRAN 169 – Basic Electricity and Safety.** 5 Credits (CR/NC). This course examines general principles of electricity to ensure compliance with all railroad rules and regulations for safety, operations, and the Federal Railroad Administration (FRA). Topics include basic electrical theory (Ohm's Law), FRA tests and inspections, switch machines, locking circuits, and crossing maintenance. (PR: Permission)

**TRAN 170 – Signal Systems and Wiring.** 2 Credits (CR/NC). This course examines signal systems and wiring. Topics include signals and their use, forms and foundations for signal equipment, hydraulic and pneumatic systems, and communication/signal and electrical equipment. (PR: Permission)

**TRAN 187 – Advanced Mechanical Locomotive Electrician III.** 5 Credits. This course offers an advanced review of locomotive safety, GE transportation system schematics, electronic controls, auxiliary system starting sequence, and electronic fuel injection. Students will learn the components of diesel engine cranking, voltage regulators, propulsion, and self-load. (PR/CO: Permission)

**TRAN 188 – Basic Rail Track Welding.** 5 Credits. The basic welding course will familiarize the student with welding safety, terminology, electrode classification, welding processes, welding guidelines, shop guidelines, and welding shop orientation. Additional topics include shielded metal arc welding in the flat position and the flux-cored welding technique. (PR/CO: Permission)

**TRAN 189 – Pier Safety Training.** 5 Credits (CR/NC). This course teaches the fundamentals of safety rules and operations that encompass transportation, engineering, and mechanical-type work in a pier industrial environment. (PR: Permission)

**TRAN 200 – Transportation Law and Policy.** 3 Credits. This course describes the different modes of transportation and the regulating bodies for each. Topics include contracts, tariffs, liability for loss and damage to cargo, tort liability of shippers, carriers, customers, and brokers during and after the transportation of freight and a comprehensive understanding of insurance and the various policy forms that exist.

**TRAN 201 – Track Safety Standards.** 3 Credits. This course studies the minimum FRA trans safety standards of basic track structure, track inspection frequencies, rail defects, and trans geometry as to ensure compliance set forth in Federal Code Regulations Part 213 of the Federal Railroad Administration. (PR/CO: Permission)

**TRAN 202 – Advanced Track Inspection.** 3 Credits. This advanced course prepares the student for advanced track inspection techniques. Topics include brush chart familiarization, case studies, FRA track defects, track inspection

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responsibilities, walking joint bar and switch inspections, pull apart, rail lubrication systems, curve stake monitoring, IT IS functionality, track disturbance, root cause analysis of derailments. (PR: Permission)

**TRAN 203 – Frog and Switch Track Welding.** 3 Credits. This advanced course evaluates the skills to successfully perform Frog and Switch Track Welding. Topics include torch safety and set up, air arc gouging, grinding, and welding points. (PR/CR: Permission)

**TRAN 204 – Thermite Rail Welding.** 3 Credits. Students will learn how to successfully perform thermite welding including torch safety and set up, thermite procedures, and aluminothermic reactions. Field exercises include performing weld tasks, insulated joints, relay rail, road crossing renewal, turnouts and repair of miscellaneous defects. (PR/CR: Permission)

**TRAN 206 – Concrete Bridge Structures.** 3 Credits (CR/NC). This course will provide the student an understanding of different types of concrete structures. Topics to include hand tool operation, bridge components, and blueprint reading. (PR: Permission)

**TRAN 207 – Bridge Inspection.** 3 Credits (CR/NC). This course will examine the three major components or sections that comprise a bridge structure and identify those substructures by name, location, and specific problematic areas. (PR: Permission)

**TRAN 208 – Steel Bridge Structures.** 3 Credits (CR/NC). This course will provide the student an understanding of different types of steel bridge structures and their components. Instruction includes identification of required materials, necessary equipment, steel bridge maintenance procedures, and blueprint reading. (PR: Permission)

**TRAN 209 – Timber Structures.** 3 Credits (CR/NC). This course will provide the basic knowledge for working on different types of timber structures. Instruction includes identification of required materials, necessary equipment, maintenance procedures, and blueprint reading. (PR: Permission)

**TRAN 210 – Transportation Economics.** 3 Credits. This course provides an overview of the characteristics and structure of transportation markets including aggregate demand, vehicle and mode choice, surface freight and air travel. It explores the principles of modern transport economics from a neoclassical economics perspective. It uses macroeconomic tools to explore the underpinnings of transport economics and applies micro principles to transportation issues and problems of interest.

**TRAN 211 – Bridge Supervision.** 3 Credits (CR/NC). This advanced course is to provide the student with the details and duties of a bridge foreman including leadership essentials, specific planning tasks, project development and reading blueprints. (PR: Permission)

**TRAN 220 – Transportation Security.** 3 Credits. This course covers the assessment of challenges and threats relating to national and international transportation security frameworks. Laws, regulations, policies, conventions, organizations, procedures, and technologies intended to ensure freedom of movement of people and commerce by ground, air, sea, and water will be reviewed. Analytical concepts and methods are applied to case studies with an

emphasis on vulnerability and risk reduction.

**TRAN 230 – Transportation Geography.** 3 Credits. This course introduces the relationship between transportation and spatial organization, selected analytical models dealing with traffic demand, network configuration, allocation of transport facilities, and application to selected problems. Topics include network development, movement patterns of people and commodities and the impact of transportation on other activities.

**TRAN 250 – Transportation Inform Systems.** 3 Credits. This course provides an understanding of the foundation concepts of information technologies in the transportation information technology.

**TRAN 260 – Commercial Driver's License.** 3 Credits (CR/NC). This course is designed to prepare the student for the Commercial Driver's License (CDL). Training involves: map reading, trip planning, vehicle control, driving skills, rules and regulations associated with the commercial vehicle profession, logistics, and pre and post-trip inspections. (PR: Permission)

**TRAN 270 – Intelligent Transportation Systems.** 3 Credits. This course is designed to introduce Intelligent Transportation Systems to the student. Course content will include concepts, training, and educational needs of ITS professionals. Elements of this course will include fundamentals of traffic flow and control, ITS user services, ITS applications and benefits, ITS architecture, ITS planning, ITS standards, ITS evaluation, and ITS challenges and opportunities. (PR/CO: TRAN 101)

**TRAN 272 – Intermodal Transportation Systems.** 3 Credits. This course is focused on intermodal freight transportation issues. Students are introduced to components of intermodal transportation systems, emerging trends in freight transportation, the role of logistics, and advanced technologies used in intermodal transportation. (PR/CO: TRAN 270)

**TRAN 273 – Intelligent Transportation Systems (ITS) Systems and Applications.** 3 Credits. This course focuses on ITS systems and applications for the efficient movement of travelers and goods and services including Advanced Transportation Management Systems (ATMS); National ITS Architecture; ITS user services; traffic control devices; telecommunications; and networking fundamentals. This course also addresses technical issues involved in the design and operation of ITS services. (PR/CO: TRAN 270)

**TRAN 274 – Intelligent Transportation Systems (ITS) Project Management.** 3 Credits. This course focuses on project management issues associated with the planning, implementation and assessment of technology-intensive transportation projects. Topics include project management principles, project phases, and types of project management tools available. Corridor management, transit management, weather responsive traffic management, incident and emergency management, and risk management are explored. Examples of successful ITS implementations are also presented. (PR/CO: TRAN 270)

**TRAN 279 – Intelligent Transportation Systems (ITS) Capstone.** 3 Credits. This course will challenge the student to utilize the combined knowledge and skills gained in the program to demonstrate the ability to work through real-world transportation issues. Students will utilize modeling and simulation software

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## COURSE DESCRIPTIONS

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to work through transportation issues. Case studies will be heavily relied upon, and current and future trends in Intelligent Transportation Systems will be addressed. (PR/CO: TRAN 274)

**TRAN 280-284 – Special Topics: Transportation.** 1-6 Credits. This course sequence is designed to offer special topic transportation courses on a short-term basis that are under development or are of such a specialized category or timeliness they are only offered once.

**TRAN 290 – Transportation OJT.** 1-12 Credits (CR/NC). This course is designed to provide equivalent college credit for on-the-job training of transportation professionals. A statement of the total number of contact hours experienced through on-the-job training will be verified by an employer and will be placed on college record. (PR/CO: Permission)

### VETERINARY TECHNOLOGY (VET)

**VET 101 – Intro to Veterinary Technology.** 3 Credits. This course introduces the student to the field of veterinary technology. Topics will include the history of veterinary medicine and the role the veterinary technician plays as a part of the veterinary health care team. Common business procedures including fundamental record keeping and medico-legal requirements will be discussed. Basic procedures such as handling, restraint, animal assessment, and medicating techniques for canine and feline species will be covered.

**VET 210 – Veterinary Nursing I.** 3 Credits. This course will introduce the area of animal nursing care that includes patient history and record keeping, kennel sanitation, animal restraint, syringe and needle identification handling, injection techniques, physical exam and administration of medication. (PR: Admission to Vet Tech Program) (CO: VET 215)

**VET 215 – Clinical Laboratory I.** 3 Credits. This course introduces the clinical laboratory, including its records, equipment, and equipment maintenance, hematology and serology and internal and external parasites. (PR: Admission to Vet Tech Program) (CO: VET 210)

**VET 216 – Veterinary Pharmacology.** 2 Credits. This course covers the regulations controlling the use of drugs and biological classifications and mechanisms of action of pharmaceuticals, dosage calculations, labeling, packaging, and dispensing of veterinary products. (PR: Admission to Vet Tech Program)

**VET 220 – Veterinary Nursing II.** 3 Credits. This course builds on skills learned in Veterinary Nursing I and on skills learned in VET 210. Introduces the physical examination, blood vessel and urinary catheterization, venipuncture, fluid therapy, wound care, bandaging, first aid, CPR and dental prophylaxis. (PR: VET 220) (CO: VET 225)

**VET 225 – Clinical Laboratory II.** 3 Credits. This course is a continuation and application of skills from Clinical Lab I including hematology, serology, urinalysis, cytology, and other laboratory skills. (PR: VET 210 and VET 215) (CO: VET 220)

**VET 227 – Anatomy and Physiology for Veterinary Technology.** 4 Credits. This course covers the study of cells, tissues, organs, and organ

systems in the functional animal body. Utilizing a dissection based approach, students will use canine, feline, equine, and bovine species as models. All body systems will be examined (integumentary, musculoskeletal, nervous, endocrine, circulatory, respiratory, urinary, and reproductive) with emphasis on comparative structures and clinical significance of each body stem. (PR: Admission to Vet Tech Program)

**VET 230 – Veterinary Nursing III.** 3 Credits. This course continues application of nursing skills and techniques with an emphasis on large animal species in such areas of restraint, venipuncture, behavior, breeds, food safety, medications, preventative care, surgical and anesthetic procedures, and lameness. (PR: VET 210 and VET 220)

**VET 235 – Vet Tech Office/Tech Procedures.** 2 Credits. This course covers procedures performed by a veterinary technician in a hospital environment including office and computer applications, medical record keeping, client relationships, financial transactions, inventory control, and facility management. The roles of appropriate regulatory agencies and maintenance of sanitation and nosocomial protocols for the facility are also covered.

**VET 240 – Veterinary Nursing IV.** 3 Credits. This course develops skills in basic husbandry, restraint, physical examine, venipuncture, diagnostics, and medications as they specifically apply to exotic and laboratory type animals, especially rabbits, rodents, birds, and reptiles. (PR: VET 210 and VET 220 and VET 230)

**VET 245 – Veterinary Anesthesia.** 2 Credits. This course covers the principles and application of the use of sedatives, anesthetics, peri-operative pain management, and patient monitoring. (CO: VET 255)

**VET 250 – Veterinary Nutrition and Disease.** 2 Credits. This course focuses on principles of the disease process, disease control, and prevention of common diseases of domestic animals. Nutrition principles for clinical diseases are also covered.

**VET 255 – Veterinary Surgery.** 2 Credits. This course introduces the area of veterinary surgical care with sterilization techniques, equipment maintenance, pre-surgical and surgical preparation, surgical assistance, and post-surgical patient care. (CO: VET 245)

**VET 260 – Imaging Techniques.** 3 Credits. This course introduces the principles and applications for the production of radiographs including processing, radiation safety, storage, patient positioning, and other imaging techniques.

**VET 265 – Veterinary Emergency and Critical Care.** 2 Credits. This course introduces procedures and techniques for critical care of the veterinary patient, including neonates, maintaining critical care apparatus, and intensive care and monitoring will be the focus of this course.

**VET 285 – Veterinary Hospital Practicum I.** 3 Credits. This course provides practical experience in an approved veterinary clinic or other approved clinical site to focus on mastery of clinical skills covered thus far in the curriculum. The focus will be on small animal medicine and laboratory procedures. (PR: VET 210 and VET 215 and VET 216 and VET 220 and VET 260)

# COURSE DESCRIPTIONS

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**VET 287 – Veterinary Hospital Practicum II.** 3 Credits. This course provides practical experience in an approved veterinary clinic or other approved clinical site to focus on mastery of clinical skills. This course is a continuation of Veterinary Hospital Practicum I. Focus extends to large animals as well as laboratory and exotic animal medicine and laboratory procedures. (PR: VET 285 and VET 230 and VET 245 and VET 250 and VET 255).

**VET 290 – Veterinary Technology (VTNE) Seminar.** 2 Credits. This capstone course reviews all aspects of academic and applied techniques taught in the Veterinary Technology program. Students must successfully complete a mock exam in preparation for the Veterinary Technical National Examination. Students are required to prepare a resume and present a research paper. (PR: All Vet Tech classes) (CO: VET 235 and VET 240 and VET 265)

**VET 295 – Veterinary Technology Externship.** 5 Credits. Students in this course are expected to function as working members of the staff of an approved veterinary hospital or other approved veterinary facility.

## WELDING (WELD)

**WELD 110 – Blueprint Reading for Welders.** 3 Credits. This course is designed to develop a technical understanding of the information contained on engineering drawings and the use of the information to communicate setup and welding instructions from the designer to the welder and fitter. (PR/CO: none)

**WELD 120 – Shielded Metal Arc Welding.** 6 Credits. This course provides a thorough technical understanding of arc welding, welding safety, are welding power sources, electrode classifications and selection. (PR: WELD 120L)

**WELD 120L – Shielded Metal Arc Welding Lab.** 4 Credits. This lab course provides students opportunities to perform production welding, millwright production, and general maintenance welding. (CO: WELD 120)

**WELD 121 – Gas Metal & Flux Cored Arc Welding (AMAW & FCAW).** 6 Credits. This course is designed to provide a thorough technical understanding of welding safety, gas metal arc welding, equipment adjustments, metal transfer and shielding gases. It also provides the training to make quality gas metal arc welds in all positions on mild steel from 1/4" to 3/8" plate, single and multiple pass. (CO: WELD 121L)

**WELD 121L – GMAW & FCAW Welding Lab.** 4 Credits. This course is designed to demonstrate a thorough technical understanding of welding safety and hands-on application of gas metal arc welding, equipment adjustments, metal transfer and shielding gases. It also provides the training to make quality gas metal arc welds in all positions on mild steel from 1/4" to 3/8" plate, single and multiple pass. (CO: WELD 121)

**WELD 210 – Stick Pipe Welding.** 6 Credits. This course will provide students welding safety with the Shield Metal Arc Welding process (SMAW-Stick), proper techniques and electrode selection for welding pipe to meet ASME (vertical up) welding code. Students will weld using E6010 and E7018. Blueprint reading and developing a technical understanding of the information contained on engineering drawings is contained in the course. (PR: Permission)

**WELD 299 – Welding Theory.** 3 Credits. This course is a culmination of welding safety, processes, application, symbols and codes, power sources, electrode selection, weld types, and metals and alloys. This course is the capstone course for the AAS degree.

## WORKFORCE DEVELOPMENT (WFD)

**WFD 100-119 – Specialized Workforce Training in Allied Health.** 1-6 Credits. This course provides instruction for employees seeking self-improvement or skills to meet new best practices in the Allied Health career field. This curriculum will vary with the needs of the students, employers, or changing labor market.

**WFD 120-129 – Specialized Workforce Training in General Studies.** 1-6 Credits. This course provides instruction for employees seeking self-improvement or skills to meet new best practices in the General Education field. This curriculum will vary with the needs of the students, employers or changing labor market. (PR: Permission)

**WFD 130-139 – Specialized Workforce Training in Business.** 1-6 Credits. This course provides instruction for employees seeking self-improvement or skills to meet new best practices in the Business Management field. This curriculum will vary with the needs of the students, employers or changing labor market. (PR: Permission)

**WFD 140-149 – Specialized Workforce Training in Info Tech.** 1-6 Credits. This course provides instruction for employees seeking self-improvement or skills to meet new best practices in Information Technology. This curriculum will vary with the needs of the students, employers or changing labor market. (PR: Permission)

**WFD 150-299 – Specialized Workforce Development Training.** 1-6 Credits. This course provides instruction for employees seeking self-improvement or skills to meet new best practices in their specific career field. This curriculum will vary with the needs of the students, employers or changing labor market. (PR: Permission)

**WFD 222-229 – Specialized Workforce Training in Green Technology.** 1-6 Credits (CR/NC). This course provides instruction for employees seeking self-improvement or skills to meet the new best practices in the Green Technology Industry. The curriculum will vary with the needs of the students, employers, or changing labor market. (PR: Permission)

**WFD 230-249 – Specialized Workforce Training in Manufacturing.** 1-6 Credits (CR/NC). This course provides instruction for employees seeking self-improvement or skills to meet the new best practices in the manufacturing field. This curriculum will vary with the needs of the students, employers, or changing labor market. (PR: Permission)

# ADMINISTRATION AND STAFF

---

## **PRESIDENT'S OFFICE**

### **President**

Keith J. Cotroneo

Ed.D. – Adult Education, University of Georgia

Ed.S. – Counseling and Human Development, University of Georgia

M.Ed. – Student Personnel for Higher Education, University of Georgia

B.S. – Business Administration, Auburn University

### **Executive Secretary to the President**

Latrenda D. Clay

A.A.S. – Occupational Development, Marshall University

## **HUMAN RESOURCES, EMPLOYEE DEVELOPMENT & PAYROLL**

### **Director, Human Resources and Employee Development**

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R.B.A. – Marshall University

A.A.S. – Computer Technology, Marshall University

### **Instructional Specialist – Professional Dev. & Training**

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R.B.A. – Marshall University

### **Human Resources Representative**

Bethany Perry

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B.A. – Psychology, Marshall University

### **Accountant – Payroll**

Charlotte D. Preston

B.B.A. – Finance, Marshall University

## **BUSINESS SERVICES**

### **Vice President for Finance and Business Services/CFO**

Daniel Figler

M.B.A. – Webster University

B.S. – Business Administration, University at Buffalo

### **Director of Purchasing**

Angela Casey-Bradshaw

B.B.A. – Business Administration, Marshall University

### **Director of Accounting**

Kristi Williams

B.B.A. – Accounting, West Virginia State College

### **Grants Accounting Manager**

Carey Dunfee

B.B.A. – Accounting, Marshall University

### **Supervisor/Student Accounting Services**

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B.S. – Accounting, University of Rio Grande

### **Accounting Assistant II**

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B.A. – Political Science, Ohio University

### **Assistant Accountant**

Rebecca Maynard

### **Accounting Assistant I**

Whitney Collins

### **Accounting Assistant I**

Kateland Heath

### **Accounting Assistant I**

Betty Perry

### **Accounting Assistant I**

M. Scot Tanner

R.B.A. – Marshall University

A.S. – Accounting, Huntington Jr. College of Business

## **DEVELOPMENT**

### **Director of Development**

Sheanna Spence

M.S. – Journalism, E.W. Scripps School of Journalism, Ohio University

B.A. – Journalism, Marshall University

### **Development Representative**

Ainslie McKinney

B.A. – Journalism, University of Kentucky

### **Manager – Printing Services I**

Shirley Dyer

## **INSTITUTIONAL RESEARCH**

### **Director of Institutional Research**

Natalie Mills

Ph.D. – Community & Culture Psychology, University of Hawaii, Manoa

M.A. – Psychology, University of Hawaii, Manoa

B.A. – Psychology, The Ohio State University

# ADMINISTRATION AND STAFF

---

## **OPERATIONS AND INFORMATION SERVICES**

### VP for Operations and Information Technology/CIO

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M.S. – Technology Management, Marshall University

B.S. – Computer Science, Marshall University

### Director of Public Safety

Paul Roach

B.S. – Organizational Leadership in Criminal Justice,  
Mountain State University

A.S. – Criminal Justice, Navarro College

### Program Coordinator Senior

Teresa Blankenship

R.B.A. – Marketing and Management, Marshall University

A.A.S. – Hospitality Management, Marshall University  
Community & Technical College

A.A.S. – Culinary Arts, Marshall Community & Technical  
College

### Director of Physical Plant

R. Mike Dunn

A.A.S. – Board of Governors, Mountwest Community &  
Technical College

### Trades Specialist – Lead II

D. Bruce Casey

### Trades Specialist – Mechanical Trades

Michael Smith

### Maintenance Worker II

Jeremy Blackshire

B.S. – Long-term Healthcare Administration and Health  
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### Maintenance Worker II

Matthew Vanhoose

### Program Assistant I

Anndrea Meadows

### Manager of Computer Operations

Tommie Kelley

M.S. – Adult and Technical Education, Marshall University

R.B.A. – Marshall University

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A.A.S. – Industrial Supervision and Management, Marshall  
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### Applications Systems Analyst Programmer Sr.

Debra Elliotte

M.S. – Technology Management, Marshall University

B.S. – Information Management, Rivier College

### LAN Specialist

Michael Wells

A.A.S. – Information Technology, Mountwest Community &  
Technical College

A.A. – Ashland Community & Technical College

### Information Systems Specialist

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### Applications Systems Analyst Programmer

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### IT Consultant Senior

Christopher Stevens

A.A.S. – Board of Governors, Mountwest Community &  
Technical College

## **ACADEMIC AFFAIRS**

### Executive Vice President and Chief Academic Officer

Harry R. Faulk

D.A. – Doctor of Arts, Carnegie Mellon University

M.M. – Music, Eastman School of Music of the University  
of Rochester

B.M. – Music, Eastman School of Music of the University of  
Rochester

### Administrative Assistant

Tina Skidmore

A.A.S. – Executive Administrative Assistant Technology,  
Marshall Community & Technical College

### Executive Director, Workforce Development

John Whiteley

Ed.S. – Marshall University

M.S. – Adult and Technical Education, Marshall University

B.S. – Marine Transportation, U.S. Merchant Marine  
Academy

### Program Coordinator

Sherri Sowards

### Program Coordinator – Off Campus Programs



# ADMINISTRATION AND STAFF

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Jenna Parker

B.B.A. – Management, Marshall University

A.A.S. – Board of Governors, Marshall Community & Technical College

## CAREER AND TECHNICAL DIVISION

### Dean of Career and Technical Division

Steven L. Brown

Ed.D. – Leadership Studies, Marshall University

Ed.S. – Marshall University

M.S. – Management, Troy State University

B.S. – Criminal Justice, Troy State University

### Administrative Assistant

Lisa Beckett

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A.A.S. – Administrative Assistant Technology, Marshall Community & Technical College

### Administrative Assistant

Patricia Young

### Administrative Assistant

Jill Sansom

A.A.S. – Board of Governors, Mountwest Community & Technical College

### Bridging the Gap - Transformation Leader

Randall Jones

Ed.D. – Higher Education Administration and Information Systems, West Virginia University

M.S. – Information Systems, West Virginia College of Graduate Studies

B.B.A. – Management Information Systems and Business Education, James Madison University

A.B.A. – Business Administration, Central Virginia Community College

A.E.T. – Electronics, West Virginia Institute of Technology

### Chef

Jason Clifton

A.A.S. – Culinary Arts, Ashland Community & Technical College

### Audit Technician

Mary Willis

A.A.S. – Banking and Finance, Marshall Community & Technical College

## STUDENT SERVICES

### Vice President for Student Services

Billie Brooks

M.S. – Adult and Technical Education, Marshall University

R.B.A. – Marshall University

A.A.S. – Computer Technology, Marshall Community & Technical College

### Administrative Assistant

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A.A.S. – Legal Secretary and Medical Secretary, Huntington Jr. College of Business

### Financial Aid Manager

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B.A. – Education, Marshall University

### Financial Aid Counselor

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A.A.S. – Board of Governors, Mountwest Community & Technical College

### Financial Aid Counselor

Sandy Winters

## REGISTRAR

### Office Administrator Senior

Monica Shafer

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### Records Assistant III

Shelly Hensley

A.A. – Morehead State University

## ADMISSIONS AND RECRUITMENT

### Director of Student Recruitment

Megan Russell

M.A. – Communication Studies, Marshall University

B.A. – Public Relations, Marshall University

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# ADMINISTRATION AND STAFF

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## **Program Manager**

Stacey Arthur

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A.A.S. – Medical Assisting, Marshall Community & Technical College

## **MILITARY PROGRAMS**

### **Statewide Coordinator – Military Programs**

Cory Payne

M.S. – Adult and Technical Education, Marshall University

R.B.A. – Marshall University

A.A.S. – Board of Governors

### **Program Specialist – Military Programs**

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### **Coordinator – Student Support Services**

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### **Coordinator – Student Support Services**

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## **LIBERAL ARTS AND TRANSFER DIVISION**

### **Dean of Liberal Arts and Transfer Division**

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### **Ballard, Melissa**

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### **Barker, Jane**

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Paramedic Certification, MCTC

Instructor Certification: ACLS, PALS, BCLS; EMS-C,

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M.S. – Health Administration, Southwest Baptist University

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# ADMINISTRATION AND STAFF

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B.A. – Individualized Studies, Shawnee State University

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Provider and Instructor Certification: AHA- PALS, ACLS,  
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B.S. – Health Record Administration, York College of Pennsylvania

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B.S. – Zoology, Marshall University

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Doctor of Chiropractic, Palmer College of Chiropractic  
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**Terry, Julie**

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M.S. – Strategic Leadership, Mountain State University  
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**Terry, Kelly**

Clinical Director, Associate Professor,  
Physical Therapist Assistant Program  
DPT – Physical Therapy, Slippery Rock University  
M.S. – Health and Physical Education/Athletic Training, Marshall University  
B.A. – Athletic Training, Marshall University  
Instructor Certifications: Licensed PT (WV, OH), CCI

**Triplett, Theodore L.**

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M.S. – Mining Engineering, Virginia Tech  
B.S. – Mining Engineering, Virginia Tech

**Vinson, Linda**

Professor, Chair – Human Services  
M.A. – Advertising/Public Relations, University of Alabama  
B.A. – Journalism, University of Alabama

**White, Rebecca**

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M.A. – Early Childhood Education, Marshall University  
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M.A. – Counseling, Marshall University  
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