

Air Conditioning/Refrigeration

Associate in Applied Science in Technical Studies

Program Description:

The Technical Studies Degree, limited to high school students enrolled in the EDGE program, is designed to provide for cooperatively sponsored educational opportunities leading to the Associate in Applied Science degree and/or One-Year Certificate.

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:

Job prospects for heating, air-conditioning, and refrigeration mechanics and installers are expected to be good, particularly for those with technical school or formal apprenticeship training. Employment of heating, air-conditioning, and refrigeration mechanics and installers is expected to grow faster than the average for all occupations through the year 2012. As the population and economy grow, so does the demand for new residential, commercial, and industrial climate-control systems. Technicians who specialize in installation work may experience periods of unemployment when the level of new construction activity declines, but maintenance and repair work usually remain relatively stable. People and businesses depend on their climate-control systems and must keep them in good working order, regardless of economic conditions.

Salary Forecast:

Median hourly earnings of heating, air-conditioning, and refrigeration mechanics and installers were \$18.11 in May 2006. The middle 50 percent earned between \$14.12 and \$23.32 an hour. The lowest 10 percent earned less than \$11.38, and the top 10 percent earned more than \$28.57. Median hourly earnings in the industries employing the largest numbers of heating, air-conditioning, and refrigeration mechanics and installers in 2006 were as follows:

Electrical contractors	\$16.74
Hardware, and plumbing and heating equipment and supplies merchant wholesalers	\$20.53
Direct selling establishments	\$19.12
Plumbing, heating, and air conditioning contracts	\$17.46

(Information obtained from *Occupational Outlook Handbook 2008-2009*)

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.

Vocational Site Partnership:

In addition, Mountwest Community & Technical College offers an Associate in Applied Science, Technical Studies in conjunction with its Vocational Site Partnerships at Technical Centers in Cabell, Mason, Putnam and Wayne counties through EDGE.

Major Code - CT20 • Concentration Code - CT24

<p>COMPONENT I - General Education¹</p> <p>COM 112 Oral Communication3 ENL 111 Written Communication3 ENL 231 Technical Report Writing².....3 IT 101 Fundamentals of Computers (EDGE).....3 MAT/SCI Electives ³6 SS Social Science Elective ⁴3 TOTAL CREDITS21</p>	<p>COMPONENT II - Technical Core</p> <p>ENL 115 Written Communications II².....3 ELT 110 Basic Electronics3 HMN 235 Leadership Development Studies⁵3 ISM 133 Principles of Supervision & Management.....3 MG 101 Introduction to Business (EDGE).....3 MG 202 Business Organization & Management⁶.....3 MG 209 Occupational Safety3 MK 210 Customer Service².....3 TOTAL CREDITS9-21</p>
<p>COMPONENT III- TECHNICAL/OCCUPATIONAL SPECIALITY⁷</p> <p>Fundamentals of Air Conditioning/Refrigeration (EDGE) Basic Control Circuits (EDGE) Heating Systems (EDGE) Domestic Refrigeration (EDGE) TOTAL COMPONENT III HOURS20</p>	<p>COMPONENT IV - (OPTIONAL) On-the-Job Training IN THE OCCUPATION (1-12 CREDIT HOURS MAY BE AWARDED) A letter verifying completion of contact hours must be received by the Dean's Office, located in the Mountwest Community & Technical College Building, Room 110 prior to applying for graduation for credit to be awarded. 160 clock hours equals 1 college credit hour.</p>
<p>HOURS REQUIRED FOR GRADUATION: 62</p>	

Employment Opportunities:

- School maintenance
- Direct selling establishments
- Hardware/plumbing/heating equipment & supplies merchant/wholesalers
- Self-employment
- Local governments
- Federal government
- Hospitals

Earn A Degree Graduate Early (EDGE):

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

Contact Information:

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1. Students must complete a minimum of 3 credit hours with Mountwest Community & Technical College to establish academic residency.
 2. ENL 115, ENL 231 and MK 210 have a prerequisite of ENL 111 or COM 111.
 3. Six total Quantitative Skills/Laboratory Science/Experience credits are required. At least one college-level mathematics course must be selected from: MAT 115, MAT 145, or MAT 150. Students may complete the six credit requirement with a second college-level mathematics course or select from the following: SCI 101, SCI 120 or SCI 201.
 4. Select from EC 102, SS 201, SS 210, or SS 215.
 5. Required capstone course.
 6. MG 202 has prerequisite of MG 101.
 7. Verification of completion of CTE classes with a score of 74% or better on the final exam must be forwarded to West Virginia Community and Technical College System in Charleston, by course instructor.