

Electronics Technology, AAS

Advanced Automation Concentration

Academic Year 2025-2026

Career Outlook:

The Advanced Automation Technology Program provides the skills necessary in install, maintain, program, upgrade, and repair automation systems. Students will know how to control conveyors, motors, robotics, and more. This degree will fall in between an automation engineer and an automation operator. Graduates will be prepared for direct employment in all automation roles in the field including automobile manufacturing, metal manufacturing, production plants, process control automation, etc.

Career Outlook:

For the most current career outlook information please refer to the Bureau of Labor Statistics “Occupational Outlook Handbook” found at www.bls.gov/ooh/.

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/.

Employment Opportunities:

- Toyota Manufacturing Plant
- Bimbo Bakery
- Mountain State Metalworks
- Huntington Steel/Special Metals
- Martin Steel
- Aero Fab
- Smith Manufacturing
- Jenmar/McSweeney Inc.
- N Compass Networks
- Appalachian Electric Power

Contact Information:

Robert Adkins

Room: 247

Phone: 304-710-3458 or 1-8-N-ROLLED (1-866-676-5533) e-mail: adkinsr@mctc.edu

www.mctc.edu

Mountwest empowers students to learn and lead in the community and in the workforce.

Mountwest Community & Technical College
Academic Year 2025-2026

02/10/2025

Electronics Technology, Advanced Automation Technology – Major Code CE10-CE15

| Name: | | | | | ID Number 942- | | |
|---|---|-----|-------|----|-----------------------|-----|----|
| Educational Counselor: | | | | | | | |
| Faculty Advisor: | | | | | | | |
| COURSE | REQUIREMENTS | SEM | HRS | GR | SUBSTITUTE/REPEAT CRS | SEM | CR |
| MAT 120 | Applied Professional Math ¹ | | 3 | | | | |
| ELT 150 | Introduction to PLC/PAC | | 4 | | | | |
| ELT 111 | DC Circuit Analysis ² | | 5 | | | | |
| ENL 131 | Business and Technical Writing ³ | | 3 | | | | |
| | | | 15 | | | | |
| MAT 215 | Applied Discrete Math ⁴ | | 3 | | | | |
| ELT 121 | AC Circuit Analysis ⁵ | | 5 | | | | |
| ELT 180 | Ladder Logic ⁶ | | 4 | | | | |
| COM 112 or COM 125 | Oral Communications or Interpersonal Communication | | 3 | | | | |
| | | | 15 | | | | |
| ELT 131 | Analog Circuits Analysis & Applications ⁷ | | 5 | | | | |
| ELT 211 | Digital Circuits ⁸ | | 5 | | | | |
| ELT 250 | Motion Control Fundamentals ⁹ | | 4 | | | | |
| | Technical Elective | | 3-4 | | | | |
| | | | 17-18 | | | | |
| ELT 160 | Electronic Communications ¹² | | 4 | | | | |
| ELT 260 | Automation Project Development ¹⁰ | | 4 | | | | |
| ELT 299 | Electronic Technology Internship | | 3 | | | | |
| SCI 110 | Introduction to Physics ¹¹ | | 4 | | | | |
| | | | 15 | | | | |
| HOURS REQUIRED FOR GRADUATION: 62-63 | | | | | | | |

¹ MAT 120 has a prerequisite of a minimum ACT Math score of 19, SAT Math score of 510, or Accuplacer 250.

² ELT 111 has a prerequisite or corequisite of MAT 144 or MAT 145.

³ ENL 131 has a prerequisite of ACT Verbal 18, SAT Verbal of 480, Accuplacer 250-300, or be placed in ENL 131E.

⁴ MAT 215 has a prerequisite of MAT 144 or MAT 120.

⁵ ELT 121 has a prerequisite of ELT 111.

⁶ ELT 180 has a prerequisite of ELT 150.

⁷ ELT 131 has a prerequisite of ELT 121.

⁸ ELT 211 has a prerequisite of permission and MAT 215 or equivalent.

⁹ ELT 250 has a prerequisite of ELT 150 and ELT 180.

¹⁰ ELT 260 has a prerequisite of ELT 150, ELT 180 and ELT 250.

¹¹ SCI 110 has a prerequisite of MAT 120, MAT 120E, MAT 130, MAT130E, MAT 132, MAT 135, MAT 144, MAT 205, MAT 229, or permission.

¹² ELT 160 has a prerequisite of ELT 131 and ELT 211.