Electronics Technology, AAS

Advanced Automation Concentration

Academic Year 2024-2025

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:

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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 placement in 100-level Math or a minimum ACT Math score of 19 or SAT Math score of 510.
[2] ELT 111 has a prerequisite or corequisite of MAT 144 or MAT 145.
[3] ENL 131 has a corequisite of ENL 095 or prerequisite of ACT Verbal 18, SAT Verbal of 450.
[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 or MAT 144.
[12] ELT 160 has a prerequisite of ELT 131 and ELT 211.