

Mechatronics Engineering Technology

Mechatronics Engineering Technology (A40350)

Degree Awarded

The Associate in Applied Science Degree-Mechatronics Engineering Technology is awarded by the College upon completing this program.

Admissions

- A high school diploma or equivalent is required. High school students preparing for an engineering technology program should complete algebra, geometry, and advanced mathematics courses. Skills and proficiencies should be developed in writing, computer literacy, and science.
- Placement tests in English and mathematics determine the entry-level courses that match individual needs. Developmental Studies English and mathematics courses are available for students to build basic skills and knowledge.
- A counseling/orientation appointment follows placement testing.
- Many courses have prerequisites or co-requisites; check the Courses section for details.

Notes

The Mechatronics Engineering Technology curriculum at Central Piedmont provides a basic background in mechanical, electrical and computer skills and, depending on the track, specialized instruction in each of these areas. Topics include CAD, basic computer skills, safety, automation, programmable logic controllers, instrumentation, hydraulics and pneumatics, mechanical drives, motors and controls, and basic electricity. The latest equipment is used to provide skills in these areas.

It is recommended students also sign up for the Electrical Engineering Technology Certificate Specialization in Automation Control (C40180-C6), a certificate which requires no extra courses to receive.

Completion of the program requires that students use college-level algebra, trigonometry and physics in the application of scientific principles to technical problems.

Contact Information

The Mechatronics Engineering Technology Program is in the Engineering Technologies Division. For additional information, visit the Mechatronics Engineering Technology website or call the Program Chair at 704.330.6545.

General Education Requirements

ENG 111	Writing and Inquiry	3.0
COM 110	Introduction to Communication	3.0
ECO 251	Principles of Microeconomics	3.0
Take 1 of the following:		3.0
MAT 121	Algebra/Trigonometry I	
	or MAT 171 Precalculus Algebra	
Take 1 of the following:		3.0
ART 111	Art Appreciation	

- or ART 114 Art History Survey I
- or ART 115 Art History Survey II
- or DRA 111 Theatre Appreciation
- or HUM 120 Cultural Studies
- or HUM 130 Myth in Human Culture
- or MUS 110 Music Appreciation
- or MUS 112 Introduction to Jazz
- or PHI 215 Philosophical Issues
- or PHI 240 Introduction to Ethics
- or REL 110 World Religions

Major Requirements

ACA 122	College Transfer Success	1.0
PHY 131	Physics-Mechanics	4.0
	or PHY 151 College Physics I	
ISC 112	Industrial Safety	2.0
EGR 125	Applications Software for Tech	2.0
MEC 130	Mechanisms	3.0
MEC 265	Fluid Mechanics	3.0
ELC 131	Circuit Analysis I	4.0
ELC 135	Electrical Machines	3.0
ELC 136	Electrical Machines II	4.0
ATR 112	Introduction to Automation	3.0
ELC 213	Instrumentation	4.0
ELN 260	Programmable Logic Controllers	4.0
PCI 173	Programmable Systems	4.0
	or PCI 170 DAQ and Control	
DFT 154	Introduction to Solid Modeling	3.0
ISC 212	Metrology	2.0
MEC 180	Engineering Materials	3.0
MEC 210	Applied Mechanics	3.0
Take 2 credits from the following:		2.0
WBL 111	Work-Based Learning I	
& WBL 121	and Work-Based Learning II	
WBL 112	Work-Based Learning I	
MEC 161	Manufacturing Processes I	

Total Credits 69