ADVANCED MECHATRONICS ENGINEERING TECHNOLOGY - BASIC TECHNICAL CERTIFICATE (BTC)

Explore More About This Program: https://cwi.edu/program/advanced-mechatronics-engineering-technology

Certificate Quick Facts

- **Instructional School:** Industry, Engineering, and Trades
- **Department:** Engineering
- **Program Code:** AMET.BTC
- **Program Type:** Career and Technical Education
- **Available Fully Online:** No
- **Eligible for Federal Financial Aid:** Yes

NOTE: Courses required for this program *may* have an additional fee; more information can be found on the Special Course Fees web page.

Certificate Requirements

Course	Course Title	Min Credits
Major Requirements		
AMET 121	DC Circuits and Application	5
AMET 131	AC Circuits and Application	5
AMET 136	Industrial Tools and Fabrication	3
AMET 141	Analog Circuits and Application	5
AMET 151	Digital Circuits and Application	4
Minimum Credit Hours Required		**22**

Certificate Plan: Fall or Spring Start

The course sequence listed below is strongly recommended in order to complete your program requirements. Many Career and Technical Education (CTE) courses have prerequisites and/or corequisites that have been accounted for within this Plan of Study Guide. Please register for each semester as shown using the Student Planning tool in myCWI. Consult your advisor for any questions regarding this course sequence plan.

First Year

Fall		Credit Hours
AMET 121	DC Circuits and Application	5
AMET 131	AC Circuits and Application	5
AMET 136	Industrial Tools and Fabrication	3
	Total Semester Credit Hours	**13**
Spring		
AMET 141	Analog Circuits and Application	5
AMET 151	Digital Circuits and Application	4
	Total Semester Credit Hours	**9**
	Minimum Credit Hours Required	**22**

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Establish basic work and study habits.
- Demonstrate cognitive problem-solving abilities related to the mechatronics and electronics field.
- Demonstrate cognitive and effective mathematical skills related to the field of mechatronics.
- Develop a verbal and mental vocabulary for components and devices related to the field of mechatronics.
- Read and effectively interpret mechatronics and electronic schematic diagrams as they relate to physical circuitry and processes.
- Analyze and repair faults in basic electronic and mechatronics systems.
- Demonstrate a working knowledge of test equipment associated with learning areas.
- Apply essential mechatronics and electronic principles, laws, and formulas.