## **ADVANCED MECHATRONICS ENGINEERING TECHNOLOGY** - BASIC TECHNICAL **CERTIFICATE (BTC)**

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

## **Certificate Requirements**

Course	Course Title	Min Credits
Major Requirements		
AMET 120	Basic Electricity and DC Electronics	4
AMET 120L	Basic Electricity and DC Electronics Lab	2
AMET 130	AC Electronics	4
AMET 130L	AC Electronics Lab	2
AMET 135	Industry Hand Tool Basics and Workplace Safety	1
AMET 140	Analog Electronics	3
AMET 140L	Analog Electronics Lab	2
AMET 150	Digital Electronics	3
AMET 150L	Digital Electronics Lab	2
Minimum Credit Hours Bequired		23

Minimum Credit Hours Required

Gainful Employment: For more information about our graduation rates, the median debt of students who have completed the program, and other important information, please visit our website at cwidaho.cc/ge (https://cwidaho.cc/ge).

## **Plan of Study Guide**

Below is the required sequence of courses that you need to take in order to complete your program requirements. Please register for each semester as shown below using the Student Planning tool in myCWI. Consult your Student Success Advisor for any questions regarding this course sequence plan.

First Year		
Fall		Credit Hours
AMET 120	Basic Electricity and DC Electronics	4
AMET 120L	Basic Electricity and DC Electronics Lab	2
AMET 130	AC Electronics	4
AMET 130L	AC Electronics Lab	2
AMET 135	Industry Hand Tool Basics and Workplace Safety	1
	Total Semester Credit Hours	13
Spring		
AMET 140	Analog Electronics	3
AMET 140L	Analog Electronics Lab	2
AMET 150	Digital Electronics	3
AMET 150L	Digital Electronics Lab	2
	Total Semester Credit Hours	10
	Minimum Credit Hours Required	23

## **Program Outcomes**

The following are student learning outcomes for the Basic Technical Certificate in Advanced Mechatronics Engineering Technology at CWI:

- · Establish basic work and study habits.
- · Demonstrate cognitive problem solving abilities related to the mechatronics and electronics field.
- · Demonstrate cognitive and affective mathematic 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.