# Electronics Technician Tier I

## **Certificate of Technical Studies Degree**

This is program is currently under review - please contact Flathead Valley Community College:http://catalog.fvcc.edu/preview\_program.php? catoid=3&poid=476#tierielectronicstechniciancertificate

This program is designed to give students the technical skills, as well as interpersonal skills, that will prepare them for placement into electronics technician positions. Students gain theoretical knowledge and hands-on experience with both basic and advanced electronics including circuits, controllers, and the machine to system interface.

More information about this program can be found at: http://catalog.fvcc.edu/preview\_program.php? catoid=3&poid=476#tierielectronicstechniciancertificate

Outcomes

## Graduates are prepared to:

- Analyze, configure, troubleshoot and assist in designing and measuring electrical and electronic circuits and systems;
- Read and describe the characteristics of basic circuitry and compute circuit capacity;
- Demonstrate wiring design and identify basic electrical components;
- Troubleshoot analog and digital circuits using standard and specialized test equipment;
- · Program and troubleshoot PLC systems for basic system control;
- Describe how various industrial processes are coalesced using advanced PLC techniques;
- Demonstrate the use of electrical, electronic solid state, digital, and pneumatic transmitters in practical process control instrumentation; and
- Effectively communicate during problem solving and troubleshooting.

### Estimated Cost

## **Estimated Resident Program Cost\***

Tuition and Fees	\$1,627
Application Fee	\$30
Online Course Fees	\$240
Course Fees	\$223
Tools/clothing	varies
Books/Supplies	\$500
Total	\$2,620

Fall 2017 MUS Student Health Insurance Premiums will be changing. Please check the Health Insurance website (http:// students.gfcmsu.edu/insurance.html) and/or Student Central for confirmed premium rates. Students will be charged an additional fee of \$21 per credit for online/hybrid courses.

#### **Program Requirements**

Many students need preliminary math and writing courses before enrolling in the program requirements. These courses may increase the total number of program credits. Students should review their math and writing placement before planning out their full program schedules.

Course	Title	Credits	Grade/Sem
Fall Semester			
ECP 104	Workplace Safety +	1	
ELCT 100	Introduction to Electricity +	3	
ELCT 110	Basic Electricity I +	5	
ELCT 137	Electrical Drafting +	2	
M 114	Extended Technical Mathematics **,+	3	
MCH 101	Introduction to Manufacturing Processes +	1	
Select one of the following:			
CAPP 106	Short Courses: Computer Applications +	1	
CAPP 114	Short Courses: MS Word +	1	
CAPP 116	Short Courses: MS Excel +	1	
Total		16	

<sup>\*</sup> Indicates prerequisites needed.

- \*\* Placement in course(s) is determined by placement assessment.
- + A grade of C- or above is required for graduation.