

# Mechatronics II

## Certificate in Applied Science

### Mission Statement:

The Mechatronics Level 2 Certificate builds on the Level 1 Certificate. The program will provide students with knowledge in the industrial automated manufacturing technology area. The student will develop basic foundational skills and understanding in electronics, robotics, motors, motor drives, and programmable logic controllers. In addition, basic troubleshooting strategies will be developed on an automated manufacturing line.

### Entrance Requirements:

Acceptable placement test score(s); plus high school diploma or GED

### Type of Program:

Day or evening

- This certificate further develops students completing Mechatronics I as well as advanced students already working in industry in areas such as, but not limited to, robotics, PLC and applications, sensors and controllers, troubleshooting, and process controls.
- This is a new interdisciplinary field involving control systems, electronic systems, computers, robotics, and mechanical systems. Students who successfully complete this course of study may be employed by high-tech industries.
- Courses taken in this certificate can be applied toward the associate degree program.
- This program requires a minimum grade of "C" in all concentration courses.

### Recommended Program Schedule

#### *First Semester – Fall*

AMT	205	Robotics & Automated Control II	3.0
EEM	201	Electronic Devices I	3.0
EEM	221	DC/AC Drives	3.0
EEM	251	Programmable Controllers	3.0

#### *Second Semester – Spring*

EEM	252	Programmable Controllers Applications	3.0
IMT	170	Statistical Process Control	3.0
WLD	108	Gas Metal Arc Welding I	4.0

#### *Third Semester – Summer*

EEM	274	Technical/Systems Troubleshooting or	4.0
MEC	299	Research in Advanced Mechatronics	

### Total Required Credit Hours:

**26.0**

**Note:** Please contact your faculty advisor for recommended evening schedules.

Visit <https://www.gvltec.edu/gainful-employment/> for important information about the educational debt, earnings and graduation rates of students who attended programs.