The Industrial Electronics Technology program at CSM prepares a student for entry-level employment as an electronics technician. Entry-level employment opportunities exist in many segments of the electronics industry in the greater Bay Area. Companies involved with circuit assembly and fabrication; installation, and support for food and pharmaceuticals processing, public utilities; component manufacturing; high-technology transportation; aerospace systems; automated process control; alternative energy and bio-tech all offer program graduates opportunities for entry-level employment.

Career Opportunities
Career opportunities in Electronics include work as an engineering aide, a technician, or a system operator. These individuals are involved with manufacturing, assembly, repair, upgrades, and service of a wide range of products or electrical systems. Electronics is the pathway to the future in Northern California, with increasing demands to modify and update the current infrastructure of the electrical generation and transmission capabilities, integration of alternative energy sources and future technical needs of society, job growth is expected over the next decade.

Program Learning Outcomes
Students completing this program will be able to:
1. Demonstrate basic and advanced electronic fundamentals.
2. Demonstrate the use and operation of test equipment (DVM’s, Frequency Generators, Oscilloscopes) when analyzing both AC and DC circuits.
3. Understand power systems and power factor as it relates to AC power transmission and generation.
4. Demonstrate the ability to program and operate a programmable logic controller.
5. Demonstrate an understanding of environmental measurement and sensory read back data to control and operate power or mechanical systems.
6. Demonstrate and understand remote and direct Industrial data communications.
7. Demonstrate and utilize hydraulic, pneumatic and vacuum systems in an industrial setting.

Major Requirements

<table>
<thead>
<tr>
<th>Required Core Courses: 35 units</th>
<th>Units</th>
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<tbody>
<tr>
<td>ELEC 111 Introduction to Electronics Fundamentals</td>
<td>3 units</td>
</tr>
<tr>
<td>ELEC 112 Advanced Electronics Fundamentals</td>
<td>3 units</td>
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</tbody>
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And required General Education coursework and electives as needed to meet the minimum 60 units required for the Associate degree.