




Mechatronics Technology Disclosure

National Certification Information


Richmond Community College

April 2026 Update

Any student who successfully completes the Mechatronics Technology Program will be prepared to sit for the following industry recognized certification exams:

Certification	Certification Information
<p>Fluid Power</p> <p><i>Covers the function, operation, and application of common components used in fluid power circuits and systems. It also assesses the understanding of how fluid power components and accessories are placed together to create circuits and systems for powering industrial machines.</i></p>	<p>Website: https://www.pmmi.org/workforce-development/certification-tests/fluid-power</p> 
<p>Industrial Electricity 1</p> <p><i>Covers basic safety practices for voltages up to 600 volts and knowledge of voltage, current and power in AC and DC circuits, circuit analysis of series and parallel loads, and basic understanding of resistors, capacitors, and inductors.</i></p>	<p>Website: https://www.pmmi.org/workforce-development/certification-tests/industrial-electricity-1</p> 
<p>Industrial Electricity 2</p> <p><i>Builds upon the Industrial Electricity 1 certificate. Candidates should understand more complex motor starting circuits such as jogging, hand-off-automatic, reversing, and reduced voltage starting.</i></p>	<p>Website: https://www.pmmi.org/workforce-development/certification-tests/industrial-electricity-2</p> 

Certification	Certification Information
<p>Mechanical Components 1</p> <p><i>Covers the principles and applications of the most commonly found mechanical drive components as used in packaging machinery and systems. Topics include simple mechanical power transmission devices such as shafts, belts, chains, cams and gears with an emphasis on application and troubleshooting.</i></p>	<p>Website: https://www.pmmi.org/workforce-development/certification-tests/mechanical-components-1</p> 
<p>Mechanical Components 2</p> <p><i>Builds upon the topics covered on the Mechanical Components 1 test by evaluating the candidate's mastery of the principles and application of more complex mechanical components such as clutches, brakes, gear boxes, transmissions, ball screws, and linear components.</i></p>	<p>Website: https://www.pmmi.org/workforce-development/certification-tests/mechanical-components-2</p> 
<p>Motor and Motor Controls</p> <p><i>Evaluates the candidate's mastery of the principles, application, troubleshooting and maintenance of rotating electrical motors and electronic motor drives as used in packaging, processing and other manufacturing environments.</i></p>	<p>Website: https://www.pmmi.org/workforce-development/certification-tests/motor-and-motor-controls</p> 
<p>Programmable Logic Controllers (PLCs) 1</p> <p><i>Covers the principles and applications of different types of logic and programming used to control packaging machinery and systems. Topics include hardware and software composition of control systems, input/output interfacing, basic logic commands and common programming instructions.</i></p>	<p>Website: https://www.pmmi.org/workforce-development/certification-tests/programmable-logic-controllers-plcs-1</p> 

Certification	Certification Information
<p>Programmable Logic Controllers (PLCs) 2</p> <p><i>Covers advanced principles and applications of programmable logic controllers (PLCs). Among the advanced topics are PLC real time considerations, various levels of PLC networking, alternate programming languages for PLCs, international standards applied to PLCs, integration of logic and motion control in PLCs, and more.</i></p>	<p>Website: https://www.pmmi.org/workforce-development/certification-tests/programmable-logic-controllers-plcs-2</p> <div data-bbox="1084 478 1469 583" style="text-align: right;">  <p>PMMI The Association for Packaging and Processing Technologies</p> </div>