

# Industrial Machine/Maintenance Technology Program Alignment – CIP: 47.0303

Effective: Fall 2026  
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## Certificate A

16-29 Credit Hours

- AC/DC Circuits
- Mechanical Systems
- Mechanical Systems Reliability
- OSHA 10
- Math
- Employability Skills/Interpersonal Communication

## Certificate B

30-44 Credit Hours

- Certificate A Requirements
- Programmable Logic Controllers (PLC)
- Industrial Fluid Power/Fluid Power I & II
- Fundamentals of Motor Control/ECS I

## Certificate C

45-59 Credit Hours

- Certificate B Requirements
- Industrial Process Control
- Variable Speed Motor Controls/ECS II

## A.A.S.

60-68 Credit Hours

- Certificate C Requirements
- Minimum of 15 Credit Hours of General Education

## Required Courses within Program

<b>Common Courses</b>	<b>16 credits:</b>
<i>AC/DC Circuits</i>	<i>4 credits</i>
<i>Mechanical Systems</i>	<i>3 credits</i>
<i>Mechanical Systems Reliability</i>	<i>3 credits</i>
<i>Programmable Logic Controllers (PLC)</i>	<i>3 credits</i>
<i>Industrial Process Control</i>	<i>3 credits</i>
<b>Support Courses*</b>	<b>13-19 credits:</b>
<i>OSHA 10</i>	<i>1 credit</i>
<i>Math</i>	<i>3 credits</i>
<i>Employability Skills/ Interpersonal Communication</i>	<i>2-3 credits</i>
<i>Industrial Fluid Power/ Fluid Power I &amp; II</i>	<i>3-6 credits</i>
<i>Fundamentals of Motor Control/ Electrical Control Systems I</i>	<i>2-3 credits</i>
<i>Variable Speed Motor Control/ Electrical Control Systems II</i>	<i>2-3 credits</i>

*Course list sequence has no implication on course scheduling by colleges.*

*Institutions may add additional competencies based on local demand.*

*Competencies identified within the Common Courses and/or Support Courses represent opportunities for articulation with K-12.*

*\*Institutions may utilize existing like course titles for Support Courses that adhere to the agreed upon course lengths.*

## Notes

Specifics pertaining to Industrial Machine/Maintenance Technology programs:

1. Program title may include Machine **OR** Maintenance **OR** both for marketing purposes.
2. Educational Competencies align with CMRT requirements.
3. While not a requirement for employment, A.A.S. graduates will be prepared to take and pass the Certified Maintenance and Reliability Technician (CMRT) certification through the Society for Maintenance and Reliability Professionals (SMRP).
4. Level C certificates that do not include any general education courses and lead to the A.A.S. degree cannot be greater than 53 credit hours to maintain the 68 credit hour maximum for the A.A.S. degree.