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| <br> | <b>ONE-YEAR CERTIFICATE</b><br><br><b>INDUSTRIAL MAINTENANCE</b><br><br><i>The catalog in force is assigned to students based on the academic year they first applied to the college, and changes only when students change their major or request the change in writing. Refer to Policy No. 3357:15-13-28.</i> | <b>2025-26 Catalog</b><br><br>Effective Summer 2025<br><br><div style="font-size: 2em; font-weight: bold;">4352</div> |
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*Business, Engineering, and Information Technologies Division*

*Industrial Technology Department*

| TECHNICAL<br>Course Number | Course Title                          | Credits   | Pre- and Co-Requisites                             | Completed<br>Sem./Year |
|----------------------------|---------------------------------------|-----------|--|------------------------|
| AIT101                     | Basic Machines                        | 2         |  |                        |
| AIT134                     | Preventive and Predictive Maintenance | 3         |  |                        |
| MST121                     | Blueprint Reading                     | 2         |  |                        |
| MST134                     | Hydraulic and Pneumatic Systems^      | 4         | MTH022 <b>or</b> MTH023<br><b>or</b> Proficiency   |                        |
| MST125                     | Basic Pumps                           | 3         |  |                        |
| MST221                     | Mechanical Drive Components           | 3         |  |                        |
| AIT220                     | Industrial Robotics                   | 4         |  |                        |
| EST230                     | Electrical Circuits and Devices^      | 4         | (MTH025 or Proficiency)<br><b>or</b> MTH107        |                        |
| EET227                     | PLCs and Industrial Controls I        | 3         | EET120 <b>or</b> EST230                            |                        |
| MST127                     | Principles of Welding                 | 6         |  |                        |
| <b>Total</b>               |                                       | <b>34</b> |  |                        |
| NON-TECH<br>Course Number  | Course Title                          | Credits   | Pre- and Co-Requisites                             | Completed<br>Sem./Year |
| SSC101                     | Student Success Seminar^^             | 1         | <i>Take first semester</i>                         |                        |
| MTH107                     | Industrial Math^                      | 3         | (MTH021 or Proficiency)<br><b>or</b> Pre-Co-MTH007 |                        |
| <b>Total</b>               |                                       | <b>4</b>  |  |                        |
| <b>TOTAL CREDIT HOURS</b>  |                                       | <b>38</b> |  |                        |

^Based on SSC placement scores.

^^To promote student success, this course should be taken in the first semester.

*Students completing this degree may be eligible to also receive an Industrial Technology – Basic Industrial Maintenance Career Enhancement Certificate (4407) an Industrial Technology – Welding Technology AWS\* Certification Exam Preparation Career Enhancement Certificate (4320), and an Industrial Technology – Mechanical Drive Systems (4318).  
The classes in this certificate also apply toward the completion of an Industrial Technology Degree (4300).*

# ONE-YEAR CERTIFICATE

## INDUSTRIAL MAINTENANCE

### PART-TIME STUDENT ADVISING NOTES

#### Academic Advising

Students should make an appointment to see their advisor before registering for classes each semester. They should have prepared a completed registration form, including courses they wish to take, prior to this meeting.

#### Course Sequence

The semester-by-semester listing below provides the normal scheduling option for students seeking a one-year certificate.

| <u>Summer Semester</u> |                                       | <u>Credit Hours</u> | <u>Pre- or Co-requisites</u>                       |
|------------------------|---------------------------------------|---------------------|--|
| SSC101                 | Student Success Seminar^^             | 1                   | <i>Take first semester</i>                         |
| MTH107                 | Industrial Math^                      | 3                   | (MTH021 or Proficiency) <b>or</b><br>Pre-Co-MTH007 |
| AIT134                 | Preventive and Predictive Maintenance | <u>3</u>            |  |
|                        |                                       | <b>7</b>            |  |
| <u>Fall Semester</u>   |                                       |                     |  |
| AIT101                 | Basic Machines                        | 2                   |  |
| AIT220                 | Industrial Robotics                   | <u>4</u>            |  |
|                        |                                       | <b>6</b>            |  |
| <u>Spring Semester</u> |                                       |                     |  |
| EST230                 | Electrical Circuits and Devices^      | 4                   | (MTH025 or Proficiency) <b>or</b><br>MTH107        |
| MST125                 | Basic Pumps                           | 3                   |  |
| MST221                 | Mechanical Drive Components*          | <u>3</u>            |  |
|                        |                                       | <b>10</b>           |  |
| <u>Summer Semester</u> |                                       |                     |  |
| MST121                 | Blueprint Reading                     | 2                   |  |
| MST127                 | Principles of Welding                 | <u>6</u>            |  |
|                        |                                       | <b>8</b>            |  |
| <u>Fall Semester</u>   |                                       |                     |  |
| EET227                 | PLCs and Industrial Controls I        | 3                   | EET120 or EST230                                   |
| MST134                 | Hydraulic and Pneumatic Systems^      | <u>4</u>            | MTH022 <b>or</b> MTH023<br><b>or</b> Proficiency   |
|                        |                                       | <b>7</b>            |  |
|                        | <b>TOTAL CREDITS</b>                  | <b>38</b>           |  |

^Based on SSC placement scores.

^^To promote student success, this course should be taken in the first semester.

\*It is recommended that MST221 be taken during the first 8-week session so that MST125 can be taken during the second 8-week session.