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| <br> | <p style="text-align: center;"><b>ONE-YEAR CERTIFICATE</b></p> <p style="text-align: center;"><b>CNC TECHNICAL</b></p> <p style="text-align: center;"><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></p> | <b>2025-26 Catalog</b><br>Effective Summer 2025 |
|  |  | <b>4308</b>                                     |

*Business, Engineering, and Information Technologies Division*

*Industrial Technology Department*

| <b>TECHNICAL<br/>Course Number</b> | <b>Course Title</b>                                   | <b>Credits</b>      | <b>Pre-and Co-Requisites</b>                | <b>Completed<br/>Sem./Year</b> |
|------------------------------------|---|---------------------|---|--------------------------------|
| AIT122                             | Machine Tools   | 4                   |   |                                |
| AIT123                             | Advanced Machine Tools                                | 4                   | AIT122                                      |                                |
| IET223                             | Computer Numerical Control                            | 4                   |   |                                |
| AIT221                             | Advanced CNC Programming                              | 3                   | IET223 <b>or</b> ARL121<br><b>or</b> ARL122 |                                |
| DET121<br><b>or</b><br>MST121      | Engineering Drawing<br><b>or</b><br>Blueprint Reading | 3<br><b>or</b><br>2 |   |                                |
| DET125                             | Basic AutoCAD   | 3                   |   |                                |
| IET270                             | Dimensional Metrology and Inspection I ^              | 3                   | (MTH025 or Proficiency) <b>or</b><br>MTH107 |                                |
| AIT137                             | CAD/CAM   | 4                   | AIT122 <b>and</b> IET223                    |                                |
| <b>Total</b>                       |   | <b>27-28</b>        |   |                                |
| <b>NON-TECH<br/>Course Number</b>  | <b>Course Title</b>                                   | <b>Credits</b>      | <b>Pre-and Co-Requisites</b>                | <b>Completed<br/>Sem./Year</b> |
| SSC101                             | Student Success Seminar^^                             | 1                   | <i>Take first semester</i>                  |                                |
| ITD122                             | Computer Applications for Professionals^              | 3                   | ITD100 <b>or</b> Proficiency                |                                |
| MET123                             | Material Science                                      | 3                   |   |                                |
| MTH107<br><b>or</b><br>MTH125      | Industrial Math^<br><b>or</b><br>College Algebra Ω    | 3<br><b>or</b><br>4 | <i>Check for prerequisites</i>              |                                |
| <b>Total</b>                       |   | <b>10-11</b>        |   |                                |
| <b>TOTAL CREDIT HOURS</b>          |   | <b>37-39</b>        |   |                                |

^Based on SSC placement scores

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

Ω MTH125 College Algebra should only be taken by students planning to transfer to a four-year institution.

***Students completing this certificate may be eligible to also receive an Industrial Technology – CAD/CAM Specialist (Computer-Aided Drafting/Computer-Aided Machining) Career Enhancement Certificate (4316) and Industrial Technology – Precision Machining and CNC Programming Career Enhancement Certificate (4319).***

***The classes in this certificate also apply toward the completion of an Industrial Technology Degree (4300).***

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| <b>2025-26 Catalog</b><br>Effective Summer 2025 | <b>ONE-YEAR CERTIFICATE</b><br><b>CNC TECHNICAL</b> | <b>4308</b> |
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## FULL-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>First Semester</u>  |  | <u>Credit Hours</u> | <u>Pre- and Co-requisite</u>                |
|------------------------|--|---------------------|---|
| SSC101                 | Student Success Seminar^^                | 1                   | <i>Take first semester</i>                  |
| MTH107                 | Industrial Math^                         | 3                   | <i>Check for prerequisites</i>              |
| <b>or</b>              | <b>or</b>                                | <b>or</b>           |   |
| MTH125                 | College Algebra Ω                        | 4                   |   |
| AIT122                 | Machine Tools                            | 4                   |   |
| IET223                 | Computer Numerical Control               | 4                   |   |
| DET121                 | Engineering Drawing                      | 3                   |   |
| <b>or</b>              | <b>or</b>                                | <b>or</b>           |   |
| MST121                 | Blueprint Reading                        | 2                   |   |
|                        |  | <b>14-16</b>        |   |
| <u>Second Semester</u> |  |                     |   |
| AIT123                 | Advanced Machine Tools                   | 4                   | AIT122                                      |
| AIT137                 | CAD/CAM                                  | 4                   | AIT122 <b>and</b> IET223                    |
| AIT221                 | Advanced CNC Programming                 | 3                   | IET223 <b>or</b> ARL121 <b>or</b> ARL122    |
| IET270                 | Dimensional Metrology and Inspection I^  | 3                   | (MTH025 or Proficiency) <b>or</b><br>MTH107 |
| MET123                 | Material Science                         | 3                   |   |
|                        |  | <b>17</b>           |   |
| <u>Third Semester</u>  |  |                     |   |
| DET125                 | Basic AutoCAD                            | 3                   |   |
| ITD122                 | Computer Applications for Professionals^ | 3                   | ITD100 <b>or</b> Proficiency                |
|                        |  | <b>6</b>            |   |
| <b>TOTAL CREDITS</b>   |  | <b>37-39</b>        |   |

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