

 	<b>ONE-YEAR CERTIFICATE</b> <b>CNC TECHNICAL</b>	<b>2024-25 Catalog</b> Effective Summer 2024
	<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>4308</b>

Business, Engineering, and Information Technologies Division

Industrial Technology Department

TECHNICAL Course Number	Course Title	Credits	Pre-and Co-Requisites	Completed Sem./Year
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 <b>or</b> ARL122	
DET121 <b>or</b> MST121	Engineering Drawing <b>or</b> Blueprint Reading	3 <b>or</b> 2		
DET125	Basic AutoCAD	3		
IET270	Dimensional Metrology and Inspection I ^	3	(MTH025 or Proficiency) <b>or</b> MTH107	
AIT137	CAD/CAM	4	AIT122 <b>and</b> IET223	
<b>Total</b>		<b>27-28</b>		
NON-TECH Course Number	Course Title	Credits	Pre-and Co-Requisites	Completed Sem./Year
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 <b>or</b> MTH125	Industrial Math^ <b>or</b> College Algebra Ω	3 <b>or</b> 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).**

**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>	
MTH125      College Algebra Ω	4	
AIT122      Machine Tools	4	
IET223      Computer Numerical Control	4	
DET121      Engineering Drawing	3	
<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> 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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