

 	<p style="text-align: center;"><b>ASSOCIATE OF APPLIED SCIENCE</b></p> <p style="text-align: center;"><b>MECHANICAL ENGINEERING</b></p> <p style="text-align: center;"><b>TECHNOLOGY – DESIGN MAJOR</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>	<p style="text-align: right;"><b>2023-24 Catalog</b></p> <p style="text-align: right;">Effective Summer 2023</p>
		<p style="text-align: center; font-size: 2em;"><b>4058</b></p>

Business, Engineering, and Information Technologies Division

Engineering Technology Department

TECHNICAL Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
DET121	Engineering Drawing	3		
DET124	Working Drawings	3	DET121 <b>and</b> Co-DET125	
MET223	Dynamics	2	MET124	
DET226	Geometric Dimensioning and Tolerancing	2	DET124	
MET226	Technical Project - Mechanical and Design	2	Pre-Co-MET228 <b>and</b> Pre-Co-DET125	
MET225 <b>or</b> AIT122	Manufacturing Processes <b>or</b> Machine Tools	3 <b>or</b> 4		
MET228	Machine Design	4	MET124	
DET126	Customizing AutoCAD	3	DET125	
DET230	AutoCAD Inventor with 3D Printing and Scanning	3	DET125	
DET131	Pro/ENGINEER (Creo Parametric)	3	DET125	
DET132	SolidWorks with 3D Printing and Scanning	3	DET125	
<b>Total</b>		<b>31-32</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>	
DET125	Basic AutoCAD	3		
ITD122	Computer Applications for Professionals^	3	ITD100 <b>or</b> Proficiency	
MET123	Material Science	3		
MET124	Statics and Strength of Materials	4	Pre-Co-PHY121 <b>or</b> Pre-Co-PHY221	
MTH135	Precalculus^ – A student may take MTH125 (College Algebra) and MTH130 (Trigonometry) over two semesters to satisfy this requirement.	5	MTH025 <b>or</b> Proficiency	
PHY121	College Physics I with Algebra (lab)	4	MTH135 <b>or</b> (MTH125 and MTH130) <b>or</b> Proficiency	
ENG124	College Composition^	3	Co-ENG024 <b>or</b> Co-ENG011 <b>or</b> Proficiency	
ENG221	Technical Report Writing	3	ENG124	
	Select one (1) Arts & Humanities Elective from the list below <sup>1</sup>	3	<i>Check for prerequisites</i>	
<b>Total</b>		<b>32</b>		
<b>TOTAL CREDIT HOURS</b>		<b>63-64</b>		

<sup>^</sup>Based on SSC placement scores

<sup>^^</sup>To promote student success, this course should be taken in the first semester

<sup>1</sup>Arts & Humanities Elective: ENG233, ENG234, ENG236, ENG237, HIS121, HIS122, PHL122

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## 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 part-time associate degree students who plan to finish in eight semesters.

<u>First Semester</u>		<u>Credit Hours</u>	<u>Pre- or Co-requisites</u>
SSC101	Student Success Seminar^^	1	
MTH135	Precalculus^ – <i>A student may take MTH125 (College Algebra) and MTH130 (Trigonometry) over two semesters to satisfy this requirement.</i>	5	Take first semester MTH025 or Proficiency
ITD122	Computer Applications for Professionals^	<u>3</u> <b>9</b>	ITD100 <b>or</b> Proficiency
<u>Second Semester</u>			
DET121	Engineering Drawing	3	
ENG124	College Composition^	3	Co-ENG024 <b>or</b> Co-ENG011 <b>or</b> Proficiency
DET125	Basic AutoCAD	<u>3</u> <b>9</b>	
<u>Third Semester</u>			
PHY121	College Physics I with Algebra (lab)^	4	MTH135 <b>or</b> (MTH125 and MTH130) <b>or</b> Proficiency
MET124	Statics and Strength of Materials	<u>4</u> <b>8</b>	Pre-Co-PHY121 <b>or</b> Pre-Co-PHY221
<u>Fourth Semester</u>			
DET124	Working Drawings	3	DET121 <b>and</b> Co-DET125
DET230	AutoCAD Inventor with 3D Printing and Scanning	3	DET125
DET126	Customizing AutoCAD	<u>3</u> <b>9</b>	DET125
<u>Fifth Semester</u>			
DET226	Geometric Dimensioning and Tolerancing	2	DET124
MET123	Material Science	3	
MET223	Dynamics	<u>2</u> <b>7</b>	MET124
<u>Sixth Semester</u>			
MET225	Manufacturing Processes	3	
<b>or</b>	<b>or</b>	<b>or</b>	
AIT122	Machine Tools	4	
DET131	Pro/ENGINEER (Creo Parametric)	<u>3</u> <b>6-7</b>	DET125
<u>Seventh Semester</u>			
MET228	Machine Design	4	MET124
DET132	SolidWorks with 3D Printing and Scanning	<u>3</u> <b>7</b>	DET125
<u>Eighth Semester</u>			
MET226	Technical Project - Mechanical and Design	2	Pre-Co-MET228 <b>and</b> Pre-Co-DET125
ENG221	Technical Report Writing	3	ENG124
Arts & Humanities Elective <sup>1</sup>		<u>3</u> <b>8</b>	Check for prerequisites
<b>TOTAL CREDITS</b>		<b>63-64</b>	

See first page for footnotes.