

 	ASSOCIATE OF APPLIED SCIENCE MECHANICAL ENGINEERING TECHNOLOGY – DESIGN MAJOR <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>	2025-26 Catalog Effective Summer 2025 <div style="font-size: 2em; font-weight: bold;">4058</div>
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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 and Co-DET125	
MET223	Dynamics	2	MET124	
DET226	Geometric Dimensioning and Tolerancing	2	DET124	
MET226	Technical Project - Mechanical and Design	2	Pre-Co-MET228 and Pre-Co-DET125	
MET225 or AIT122	Manufacturing Processes or Machine Tools	3 or 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	
Total		31-32		
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 or Proficiency	
MET123	Material Science	3		
MET124	Statics and Strength of Materials	4	Pre-Co-PHY121 or Pre-Co-PHY221	
MTH135	Precalculus^ – A student may take MTH125 (College Algebra) and MTH130 (Trigonometry) over two semesters to satisfy this requirement.	5	MTH025 or Proficiency	
PHY121	College Physics I with Algebra (lab)^	4	MTH135 or (MTH125 and MTH130) or Proficiency	
ENG124	College Composition^	3	Co-ENG024 or Co-ENG011 or Proficiency	
ENG221	Technical Report Writing	3	ENG124	
	Select one (1) Arts & Humanities Elective from the list below ¹	3	<i>Check for prerequisites</i>	
Total		32		
TOTAL CREDIT HOURS		63-64		

[^]Based on SSC placement scores

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

¹Arts & Humanities Elective: ENG233, ENG234, ENG236, ENG237, HIS121, HIS122, PHL122

Students completing this degree may be eligible to also receive a Mechanical Engineering Technology – Career Enhancement Certificate (4003) and a Mechanical Engineering Technology – Design Major – AutoCAD Career Enhancement Certificate (4004)

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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 full-time associate degree students who plan to finish in two years.

<u>First Semester</u>		<u>Credit Hours</u>	<u>Pre- or Co-requisites</u>
SSC101	Student Success Seminar^^	1	<i>Take first semester</i>
ENG124	College Composition^	3	Co-ENG024 or Co-ENG011 or Proficiency
MTH135	Precalculus^ – <i>A student may take MTH125 (College Algebra) and MTH130 (Trigonometry) over two semesters to satisfy this requirement.</i>	5	MTH025 or Proficiency
ITD122	Computer Applications for Professionals^	3	ITD100 or Proficiency
DET125	Basic AutoCAD	<u>3</u>	
		15	
<u>Second Semester</u>			
DET230	AutoCAD Inventor with 3D Printing and Scanning	3	DET125
DET121	Engineering Drawing	3	
PHY121	College Physics I with Algebra (lab)	4	MTH135 or (MTH125 and MTH130) or Proficiency
MET124	Statics and Strength of Materials	4	Pre-Co-PHY121 or Pre-Co-PHY221
DET126	Customizing AutoCAD	<u>3</u>	DET125
		17	
<u>Third Semester</u>			
DET124	Working Drawings	3	DET121 and Co-DET125
MET123	Material Science	3	
MET225	Manufacturing Processes	3	
or	or	or	
AIT122	Machine Tools	4	
DET132	SolidWorks with 3D Printing and Scanning	3	DET125
MET223	Dynamics	<u>2</u>	MET124
		14-15	
<u>Fourth Semester</u>			
DET131	Pro/ENGINEER (Creo Parametric)	3	DET125
MET226	Technical Project - Mechanical and Design	2	Pre-Co-MET228 and Pre-Co-DET125
MET228	Machine Design	4	MET124
ENG221	Technical Report Writing	3	ENG124
<i>Arts & Humanities Elective¹</i>		3	<i>Check for prerequisites</i>
DET226	Geometric Dimensioning and Tolerancing	<u>2</u>	DET124
		17	
TOTAL CREDITS		63-64	

^Based on SSC placement scores

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

¹Arts & Humanities Elective: ENG233, ENG234, ENG236, ENG237, HIS121, HIS122, PHL122