



ASSOCIATE OF APPLIED SCIENCE

MECHANICAL ENGINEERING TECHNOLOGY

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.

2024-25 Catalog

Effective Summer 2024

4050

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		
MET124	Statics and Strength of Materials	4	Pre-Co-PHY121 or Pre-Co-PHY221	
MET221	Advanced Strength of Materials	2	MET124	
MET222	Fluid Power	4	MET124	
MET223	Dynamics	2	MET124	
MET225 or AIT122	Manufacturing Processes or Machine Tools	3 or 4		
MET226	Technical Project - Mechanical and Design	2	Pre-Co-MET228 and Pre-Co-DET125	
MET227	Thermodynamics and Heat Transfer	3	PHY121	
MET228	Machine Design	4	MET124	
EST230	Electrical Circuits and Devices [^]	4	(MTH025 or Proficiency) or MTH107	
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		
DET230	AutoCAD Inventor with 3D Printing and Scanning	3	DET125	
ENG124	College Composition [^]	3	Co-ENG024 or Co- ENG011 or Proficiency	
ENG221	Technical Report Writing	3	ENG124	
ITD122	Computer Applications for Professionals [^]	3	ITD100 or Proficiency	
MET123	Material Science	3		
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	
PHY121	College Physics I with Algebra (lab) [^]	4	MTH135 or (MTH125 and MTH130) or Proficiency	
	<i>Select one (1) Arts & Humanities Elective from the list below¹</i>	3	<i>Check for prerequisites</i>	
Total		31		
TOTAL CREDIT HOURS		62-63		

[^]Based on SSC placement scores

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

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

Students completing this degree may be eligible to also receive a Mechanical Engineering Technology – Machine Design Career Enhancement Certificate (4056 and a Mechanical Engineering Technology – Mechanical Power Career Enhancement Certificate (4057).

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>
DET121	Engineering Drawing	3	
ENG124	College Composition^	3	Co-ENG024 or Co-ENG011 or Proficiency
MET123	Material Science	3	
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^	<u>3</u>	ITD100 or Proficiency
		18	
<u>Second Semester</u>			
DET125	Basic AutoCAD	3	
MET124	Statics and Strength of Materials	4	Pre-Co-PHY121 or Pre-Co-PHY221
MET225	Manufacturing Processes	3	
or	or	or	
AIT122	Machine Tools	4	
PHY121	College Physics I with Algebra (lab)^	<u>4</u>	MTH135 or (MTH125 and MTH130) or Proficiency
		14-15	
<u>Third Semester</u>			
DET230	AutoCAD Inventor with 3D Printing and Scanning	3	DET125
MET221	Advanced Strength of Materials	2	MET124
MET222	Fluid Power	4	MET124
MET228	Machine Design	<u>4</u>	MET124
		13	
<u>Fourth Semester</u>			
EST230	Electrical Circuits and Devices^	4	(MTH025 or Proficiency) or MTH107
MET223	Dynamics	2	MET124
MET226	Technical Project - Mechanical and Design	2	Pre-Co-MET228 and Pre-Co-DET125
MET227	Thermodynamics and Heat Transfer	3	PHY121
ENG221	Technical Report Writing	3	ENG124
<i>Arts & Humanities Elective</i> ¹		<u>3</u>	<i>Check for prerequisites</i>
		17	
TOTAL CREDITS		62-63	

^Based on SSC placement scores

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

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