



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.*

2023-24 Catalog

Effective Summer 2023

**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 <b>or</b> Pre-Co-PHY221	
MET221	Advanced Strength of Materials	2	MET124	
MET222	Fluid Power	4	MET124	
MET223	Dynamics	2	MET124	
MET225 <b>or</b> AIT122	Manufacturing Processes <b>or</b> Machine Tools	3 <b>or</b> 4		
MET226	Technical Project - Mechanical and Design	2	Pre-Co-MET228 <b>and</b> Pre-Co-DET125	
MET227	Thermodynamics and Heat Transfer	3	PHY121	
MET228	Machine Design	4	MET124	
EST230	Electrical Circuits and Devices <sup>^</sup>	4	(MTH025 <b>or</b> Proficiency) <b>or</b> MTH107	
<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 <sup>^^</sup>	1	<i>Take first semester</i>	
DET125	Basic AutoCAD	3		
DET230	AutoCAD Inventor with 3D Printing and Scanning	3	DET125	
ENG124	College Composition <sup>^</sup>	3	Co-ENG024 <b>or</b> Co-ENG011 <b>or</b> Proficiency	
ENG221	Technical Report Writing	3	ENG124	
ITD122	Computer Applications for Professionals <sup>^</sup>	3	ITD100 <b>or</b> Proficiency	
MET123	Material Science	3		
MTH135	Precalculus <sup>^</sup> – <i>A student may take MTH125 (College Algebra) and MTH130 (Trigonometry) over two semesters to satisfy this requirement.</i>	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	
	<i>Select one (1) Arts &amp; Humanities Elective<sup>1</sup></i>	3	<i>Check for prerequisites</i>	
<b>Total</b>		<b>31</b>		
<b>TOTAL CREDIT HOURS</b>		<b>62-63</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 Electives: ENG233, ENG234, ENG236, ENG237, HIS121, HIS122, PHL122

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 <sup>^^</sup>	1	<i>Take first semester</i>
DET121	Engineering Drawing	3	
ENG124	College Composition <sup>^</sup>	3	Co-ENG024 <b>or</b> Co-ENG011 <b>or</b> Proficiency
MET123	Material Science	3	
MTH135	Precalculus <sup>^</sup> – <i>A student may take MTH125 (College Algebra) and MTH130 (Trigonometry) over two semesters to satisfy this requirement.</i>	5	MTH025 <b>or</b> Proficiency
ITD122	Computer Applications for Professionals <sup>^</sup>	<u>3</u>	ITD100 <b>or</b> Proficiency
		<b>18</b>	
<u>Second Semester</u>			
DET125	Basic AutoCAD	3	
MET124	Statics and Strength of Materials	4	Pre-Co-PHY121 <b>or</b> Pre-Co-PHY221
MET225	Manufacturing Processes	3	
<b>or</b>	<b>or</b>	<b>or</b>	
AIT122	Machine Tools	4	
PHY121	College Physics I with Algebra (lab)	<u>4</u>	MTH135 <b>or</b> (MTH125 and MTH130) <b>or</b> Proficiency
		<b>14-15</b>	
<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
		<b>13</b>	
<u>Fourth Semester</u>			
EST230	Electrical Circuits and Devices <sup>^</sup>	4	(MTH025 or Proficiency) <b>or</b> MTH107
MET223	Dynamics	2	MET124
MET226	Technical Project - Mechanical and Design	2	Pre-Co-MET228 <b>and</b> Pre-Co-DET125
MET227	Thermodynamics and Heat Transfer	3	PHY121
ENG221	Technical Report Writing	3	ENG124
<i>Arts &amp; Humanities Elective<sup>1</sup></i>		<u>3</u>	<i>Check for prerequisites</i>
		<b>17</b>	
<b>TOTAL CREDITS</b>		<b>62-63</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 Electives: ENG233, ENG234, ENG236, ENG237, HIS121, HIS122, PHL122