ASSOCIATE OF APPLIED SCIENCE

ELECTRICAL/ELECTRONIC ENGINEERING TECHNOLOGY – ELECTRO-MECHANICAL MAJOR

4101

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.

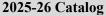*Business, Engineering, and Information Technologies Division*   *Engineering Technology Department*

TECHNICAL Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
EET120	DC Circuit Analysis	4	Pre-Co-MTH125 **or** Pre-Co-MTH135	
EET122	AC Circuit Analysis	4	(Pre-Co-MTH130 **or** Pre-Co-MTH135) **and** EET120	
EET123	Electronic Devices and Circuits	4	EET120 **and** Pre-Co-EET122	
EET126	Electrical Machines	4	Pre-Co-EET122	
EET227	PLCs and Industrial Controls I	3	EET120 **or** EST230	
MET124	Statics and Strength of Materials	4	Pre-Co-PHY121 **or** Pre-Co-PHY221	
MET228	Machine Design	4	MET124	
MET226	Technical Project – Mechanical and Design	2	Pre-Co-MET228 **and** Pre-Co-DET125	
MET227	Thermodynamics and Heat Transfer	3	PHY121	
MET123	Material Science	3		
	Total	**35**		
NON-TECH Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
SSC101	Student Success Seminar^^	1	*Take first semester*	
CSE122	Programming Logic and Problem Solving^	3	(IDS102 or Proficiency) **and** (ITD100 or Proficiency)	
DET125	Basic AutoCAD	3		
AIT139	Introduction to Robotics	2		
MET225	Manufacturing Processes	3		
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 list below[1]	3	*Check for pre-requisites*	
	Total	**30**		
	TOTAL CREDIT HOURS	**65**		

^Based on SSC placement scores
^^To promote student success, this course should be taken in the first semester
[1]Arts & Humanities Elective: ENG233, ENG234, ENG236, ENG237, HIS121, HIS122, PHL122

Students completing this degree may be eligible to also receive an Electrical/Electronic Engineering Technology – Electrical/Electronic Troubleshooting Career Enhancement Certificate (4408).

FULL-TIME STUDENT ADVISING NOTES

<u>Academic Advising</u>
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.

<u>Course Sequence</u>
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-requisite</u>
SSC101	Student Success Seminar^^	1	*Take first semester*
CSE122	Programming Logic and Problem Solving^	3	(IDS102 or Proficiency) **and** (ITD100 or Proficiency)
EET120	DC Circuit Analysis	4	Pre-Co-MTH125 **or** Pre-Co-MTH135
ENG124	College Composition^	3	Co-ENG024 **or** Co-ENG011 **or** Proficiency
MTH135	Precalculus^ – *A student may take MTH125 (College Algebra) and MTH130 (Trigonometry) over two semesters to satisfy this requirement.*	<u>5</u>	MTH025 **or** Proficiency
		16	
<u>Second Semester</u>			
EET122	AC Circuit Analysis	4	(Pre-Co-MTH130 **or** Pre-Co-MTH135) **and** EET120
MET124	Statics and Strength of Materials	4	Pre-Co-PHY121 **or** Pre-Co-PHY221
EET123	Electronic Devices and Circuits	4	EET120 **and** Pre- or Co-EET122
PHY121	College Physics I with Algebra (lab)^	<u>4</u>	MTH135 **or** (MTH125 and MTH130) **or** Proficiency
		16	
<u>Third Semester</u>			
MET227	Thermodynamics and Heat Transfer	3	PHY121
EET126	Electrical Machines	4	Pre-Co-EET122
EET227	PLCs and Industrial Controls I	3	EET120 **or** EST230
MET123	Material Science	3	
ENG221	Technical Report Writing	3	ENG124
DET125	Basic AutoCAD	<u>3</u>	
		19	
<u>Fourth Semester</u>			
MET228	Machine Design	4	MET124
MET226	Technical Project – Mechanical and Design	2	Pre-Co-MET228 **and** Pre-Co-DET125
MET225	Manufacturing Processes	3	
AIT139	Introduction to Robotics	2	
Arts & Humanities Elective[1]		<u>3</u>	*Check for prerequisites*
		14	
	TOTAL CREDITS	**65**	

^Based on SSC placement scores
^^To promote student success, this course should be taken in the first semester
[1]<u>Arts & Humanities Elective</u>: ENG233, ENG234, ENG236, ENG237, HIS121, HIS122, PHL122