



ONE-YEAR CERTIFICATE

AUTOMATION AND ROBOTICS 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.

2021 Catalog
Effective Summer 2020

4555

Engineering Technologies Division

Industrial Technology Department

TECHNICAL Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
IET223	Computer Numerical Control	4		
AIT139	Introduction to Robotics	2		
EET120	DC Circuit Analysis	4	Pre-Co-MTH125 or Pre-Co-MTH135	
EET227	PLCs and Industrial Controls I	3	EST230 or EET120	
MST221	Mechanical Drive Components	3		
TECHNICAL ELECTIVES: 2 credit hours minimum				
AIT220	Industrial Robotics	4	AIT139	
AIT221	Advanced CNC Programming	3	IET223 or ARL121 or ARL122	
AIT226	Robotic Vision	2	AIT220	
EET228	PLCs and Industrial Controls II	3	EET227	
Total		18-20		
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		
CSE122	Programming Logic & Problem Solving^	3	(IDS102 or Proficiency) and (ITD100 or Proficiency)	
MTH135	Precalculus^ – A student may take MTH125 (College Algebra) and MTH130 (Trigonometry) over two semesters to satisfy this requirement.	5	MTH025 or Proficiency	
Total		12		
TOTAL CREDIT HOURS		30-32		

^Based on SSC placement scores.

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

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 students seeking a one-year certificate.

<u>First Semester</u>		<u>Credit Hours</u>	<u>Pre- and Co-requisite</u>
SSC101	Student Success Seminar^^	1	<i>Take first semester</i>
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
CSE122	Programming Logic & Problem Solving^	<u>3</u>	(IDS102 or Proficiency) and (ITD100 or Proficiency)
		9	
 <u>Second Semester</u>			
AIT139	Introduction to Robotics	2	
DET125	Basic AutoCAD	3	
IET223	Computer Numerical Control	4	
EET120	DC Circuit Analysis	<u>4</u>	Pre-Co-MTH125 or Pre-Co-MTH135
		13	
 <u>Third Semester</u>			
EET227	PLCs and Industrial Controls I	3	EST230 or EET120
MST221	Mechanical Drive Components	3	
<i>Technical Elective^l</i>		<u>2-4</u>	<i>Check for prerequisites</i>
		8-10	
	TOTAL CREDITS	30-32	

^Based on SSC placement scores.

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

^lTechnical Electives: AIT220, AIT221, AIT226, EET228