



## 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		
<b>TECHNICAL ELECTIVES: 2 credit hours minimum</b>				
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	
<b>Total</b>		<b>18-20</b>		
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 and 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	
<b>Total</b>		<b>12</b>		
<b>TOTAL CREDIT HOURS</b>		<b>30-32</b>		

^Based on SSC placement scores.

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

## PART-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 who plan to finish in four semesters.

<u>First Semester</u>		<u>Credit Hours</u>	<u>Pre- and Co-requisite</u>
SSC101	Student Success Seminar^^	1	<i>Take first semester</i>
AIT139	Introduction to Robotics	2	
DET125	Basic AutoCAD	<u>3</u>	
		<b>6</b>	
<u>Second Semester</u>			
MTH135	Precalculus^ – <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
CSE122	Programming Logic and Problem Solving^	<u>3</u>	(IDS102 or Proficiency) <b>and</b> (ITD100 or Proficiency)
		<b>8</b>	
<u>Third Semester</u>			
IET223	Computer Numerical Control	4	
EET120	DC Circuit Analysis	<u>4</u>	Pre-Co-MTH125 <b>or</b> Pre-Co-MTH135
		<b>8</b>	
<u>Fourth Semester</u>			
EET227	PLCs and Industrial Controls I	3	EST230 <b>or</b> EET120
MST221	Mechanical Drive Components	3	
<i>Technical Elective<sup>l</sup></i>		<u>2-4</u>	<i>Check for prerequisites</i>
		<b>8-10</b>	
	<b>TOTAL CREDITS</b>	<b>30-32</b>	

^Based on SSC placement scores.

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

<sup>l</sup>Technical Electives: AIT220, AIT221, AIT226, EET228