

ONE-YEAR CERTIFICATE

AUTOMATION AND ROBOTICS TECHNOLOGY

2023-24 Catalog

Effective Summer 2023

4555

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

Industrial Technology Department

TECHNICAL Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year		
AIT121	Industrial Internet of Things (IIoT)	3				
AIT139	Introduction to Robotics	2				
AIT220	Industrial Robotics	4				
EET120	DC Circuit Analysis	4	Pre-Co-MTH125 or Pre-Co-MTH135			
EET227	PLCs and Industrial Controls I	3	EST230 or EET120			
TECHNICAL EL	TECHNICAL ELECTIVES: 3 credit hours minimum					
MST221	Mechanical Drive Components	3				
EET228	PLCs and Industrial Controls II	3	EET227			
IET223	Computer Numerical Control	4				
	Total	19-20				
NON-TECH Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year		
SSC101	Student Success Seminar^^	1	Take first semester			
MST121	Blueprint Reading	2				
or DET125	or Basic AutoCAD	or 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			
Total		11-12				
TOTAL CREDIT HOURS						

^Based on SSC placement scores.

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

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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.

First Semester		Credit Hours	Pre- and Co-requisite	
SSC101	Student Success Seminar^^	1	Take first semester	
AIT121	Industrial Internet of Things (IIoT)	3		
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	
		9		
Second Semester				
AIT139	Introduction to Robotics	2		
CSE122	Programming Logic and Problem Solving^	3	(IDS102 or Proficiency) and (ITD100 or Proficiency)	
MST121	Blueprint Reading	2	(IID 100 of I folicitiey)	
or DET125	or Basic AutoCAD	or 2		
DETI25	Basic AutoCAD	<u>3</u> 7-8		
Third Semester				
AIT220	Industrial Robotics	4		
EET120	DC Circuit Analysis	<u>4</u>	Pre-Co-MTH125 or Pre-Co- MTH135	
		8		
Fourth Semester				
EET227	PLCs and Industrial Controls I	3	EST230 or EET120	
Technical Elective ¹		<u>3-4</u>	Check for prerequisites	
		6-7		
	TOTAL CREDITS	30-32		

^Based on SSC placement scores.

^{^^}To promote student success, this course should be taken in the first semester. ¹<u>Technical Electives:</u> EET228, IET223, MST221