# Stark State

### **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 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 or DET125	Blueprint Reading or Basic AutoCAD	2 or 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	11-12			
TOTAL CREDIT HOURS					

<sup>^</sup>Based on SSC placement scores.

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

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### Course Sequence

The semester-by-semester listing below provides the normal scheduling option for students seeking a one-year certificate.

First Semester		Credit Hours	Pre- and Co-requisite	
SSC101	Student Success Seminar^^	1	Take first semester	
MTH135	Precalculus^ – A student may take MTH125 (College Algebra) and MTH130 (Trigonometry)	5	MTH025 or Proficiency	
AIT139	over two semesters to satisfy this requirement. Introduction to Robotics	2		
AIT121	Industrial Internet of Things (IIoT)	<u>3</u>		
		11		
Second Semester				
AIT220	Industrial Robotics	4		
MST121	Blueprint Reading	2		
or DET125	or Basic AutoCAD	or 3		
EET120	DC Circuit Analysis	<u>4</u>	Pre-Co-MTH125	
		10-11	or Pre-Co-MTH135	
Third Semester				
EET227	PLCs and Industrial Controls I	3	EST230 or EET120	
CSE122	Programming Logic & Problem Solving^	3	(IDS102 or Proficiency) and	
Technical Elective <sup>1</sup>		<u>3-4</u>	(ITD100 or Proficiency) Check for prerequisites	
		9-10		
	TOTAL CREDITS	30-32		

<sup>^</sup>Based on SSC placement scores.

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

<sup>&</sup>lt;sup>1</sup>Technical Electives: EET228, IET223, MST221