

## ASSOCIATE OF APPLIED SCIENCE

# INDUSTRIAL TECHNOLOGY – INDUSTRIAL MAINTENANCE MAJOR

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.

2024-25 Catalog

Effective Summer 2024

4351

Business, Engineering, and Information Technologies Division

Industrial Technology Department

TECHNICAL Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
AIT101	Basic Machines	2		
AIT134	Preventive and Predictive Maintenance	3		
AIT139	Introduction to Robotics	2		
AIT122	Machine Tools	4		
AIT220	Industrial Robotics	4		
AIT228	Automated Welding and Fabrication	3	AIT220 and MST127	
EST230	Electrical Circuits and Devices	4	(MTH025 or Proficiency) <b>or</b> MTH107	
MST126	Pipefitting Principles and Applications	3		
MST127	Principles of Welding	6		
MST134	Hydraulic and Pneumatic Systems^	4	MTH022 or MTH023 or Proficiency	
	Total	35		
NON-TECH Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
SSC101	Student Success Seminar^^	1	Take first semester	
MTH107	Industrial Math	3	(MTH021 or Proficiency) or Pre-Co-MTH007	
AIT124	Principles of Rigging	2		
MST121	Blueprint Reading	2		
MST125	Basic Pumps	3		
MST221	Mechanical Drive Components	3		
PHY101	Principles of Physics^	4	(MTH024 or MTH025 or Proficiency) or MTH105 or MTH107 and (IDS102 or Proficiency)	
ITD122	Computer Applications for Professionals^	3	ITD100 or Proficiency	
ENG124	College Composition^	3	Co-ENG024 or Co-ENG011 or Proficiency	
ENG221	Technical Report Writing	3	ENG124	
or	or	or	or	
COM123	Small Group Communications^	3	IDS102 or Proficiency	
PSY124	Industrial/Organizational Psych	3 <b>30</b>		
Total				
TOTAL CREDIT HOURS				

^Based on SSC placement scores

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

The classes in this major also apply toward the completion of an Industrial Technology – Welding Technology AWS\* Certification Exam Preparation Career Enhancement Certificate (4320), an Industrial Technology – Basic Industrial Maintenance Career Enhancement Certificate (4407), and an Industrial Technology – Mechanical Drive Systems Career Enhancement Certificate (4318).

## INDUSTRIAL TECHNOLOGY – INDUSTRIAL MAINTENANCE MAJOR

### 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 full-time associate degree students who plan to finish in two years.

First Semester		Credit Hours	Pre- or Co-requisites
SSC101	Student Success Seminar^^	1	Take first semester
MST127	Principles of Welding	6	
AIT139	Introduction to Robotics	2	
EST230	Electrical Circuits and Devices	4	(MTH025 or Proficiency) or MTH107
AIT101	Basic Machines	2	
MTH107	Industrial Math	<u>3</u>	(MTH021 or Proficiency) <b>or</b> Pre-Co- MTH007
		18	
Second Semester			
AIT220	Industrial Robotics	4	
AIT122	Machine Tools	4	
AIT134	Preventive and Predictive Maintenance	3	
MST121	Blueprint Reading	2	
MST126	Pipefitting Principles and Application	<u>3</u>	
		16	
Third Semester			
MST134	Hydraulic and Pneumatic Systems^	4	MTH022 or MTH023 or Proficiency
PHY101	Principles of Physics^	4	(MTH024 or MTH025 or Proficiency) or MTH105 or MTH107 and (IDS102 or Proficiency)
ENG124	College Composition^	3	Co-ENG024 or Co-ENG011 or Proficiency
MST125	Basic Pumps	3	
AIT228	Automated Welding and Fabrication	<u>3</u>	
	C C	17	
Fourth Semester			
ITD122	Computer Applications for Professionals	3	ITD100 or Proficiency
PSY124	Industrial/Organizational Psych	3	
MST221	Mechanical Drive Components	3	
AIT124	Principles of Rigging	2	
ENG221	Technical Report Writing	3	ENG124
or	or	or	or
COM123	Small Group Communication <sup>^</sup>	<u>3</u>	IDS102 or Proficiency
		14	
	TOTAL CREDITS	65	

^Based on SSC placement scores

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