



# 2022-2023 Certificate

**Certificate:**                    **ADVANCED MANUFACTURING SPECIALIST (90-664-2)**

**Credits:**                        **22 Credits**

**Description:**                The Advanced Manufacturing Specialist certificate provides students with the opportunity to acquire specialized skills for manufacturing systems using Rockwell Automation products. Students investigate industrial automation principles, controllers, networks, visualization, AC drives/motors, instrumentation, and machine safety. They achieve professional competency in accelerating team performance, communications, navigating change, managing conflict, and presentation skills. Graduates of the program are certified by Rockwell Automation in these technical and professional areas.

**Related program:**            Advanced Manufacturing Technology

The sequence shown is the recommended path to completion. Courses will be scheduled in the terms indicated here.  
All courses should be taken in the order shown to help you stay on track and graduate according to your academic plan.  
Courses in this program may be offered in a variety or combination of formats (for example: in-person, video conferencing, online, etc.).

### REQUIRED COURSES

NOTE: Requisites (prereq- before/ coreq-with)  
**I-D = iMET Days F=Fall, S=Spring, SU=Summer**

✓	<b>Term One</b>	<b>Cr.</b>	<b>Prerequisite</b>	<b>Corequisite</b>	<b>I-D</b>
	664-100 Introduction to Industrial Control Systems*	2			F/S
	664-103 Motor Controls for Manufacturing*	3			F/S
	664-105 Introduction to Industrial Robotics*	2			F/S
	664-110 Introduction to Mechatronics*	2			F/S
	664-113 Leadership for Advanced Manufacturing	3			F/S
✓	<b>Term Two</b>				
	664-104 Industrial Control System Applications*	2		664-103; 664-118	F/S
	664-118 PLC and HMI Programming*	3	664-100		F/S
	664-119 Advanced Manufacturing Network Systems	3			F/S
	664-120 Intro to Industrial Internet of Things*	2			F/S
	<b>Total Credits</b>	<b>22</b>			

### ADMISSION REQUIREMENTS

Students must submit official high school, GED, or HSED transcript including a graduation or passing date.

**Courses marked with an (\*) are 7-weeks long and offered in an accelerated format - see an advisor for more information**

NOTE: Students must complete a certificate program with a minimum of a 2.0 Program GPA.