2023-2024
Certificate

Certificate:	**INTEGRATED MANUFACTURING (90-620-1)**
Credits:	**17 Credits**
Description:	This certificate is a combination of information technology (IT) and manufacturing coursework to prepare students for Industry 4.0 employment opportunities. Certificate content includes networking, security, and customer support from the IT area, as well as manufacturing coursework including basic electrical, PLC's, and peripheral devices and robots.
Related Program:	Electromechanical Maintenance Technician

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)
E-D = Elkhorn Days F=Fall, S=Spring

✓	Term One	Cr.	Prerequisite	Corequisite	E-D
	150-301 Networking Principles	2			F
	150-194 Network Security	3			F
	620-310 Industrial Controls for Maintenance	2			F
	628-115 Industrial Robotics and Programming	3			F
✓	**Term Two**	**Cr.**			
	154-127 IT Troubleshooting, Intro to	2			S
	620-303 Motors and Electrical Systems	3	620-302 OR 620-310		S
	620-311 PLC's and HMI's I	2	620-302 OR 620-310		S
	Total Credits	**17**			

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