

Work Process Schedule

WORK PROCESS SCHEDULE

O*NET-SOC Code: 17-3024.01

RAPIDS Code: 3002CB

Robotics Technician

Job Title: Robotics Technician

Level:

Specialization:

Stackable Program: __Yes __No

Base Occupation Name:

Company Contact:

Address:

Phone:

Email:

Apprenticeship Type:

Competency-based

Time-based

Hybrid

Prerequisites:

Job Function 1: Ensure appropriate safety procedures are followed to protect self and others from accidents and injuries

Competencies	Core or Optional	RTI	OJT
A. Keep self, others, and robots and/or automated machinery safe	Core		
B. Properly use safety features and components to conduct safety procedures	Core		
C. Report unsafe work conditions	Core		
D. Practice good housekeeping	Core		
E. Follow lock-out/tag-out procedures	Core		
F. Respond to emergency situations safely and efficiently	Core		
G. Adhere to company and legal safety standards	Core		

Job Function 2: Install, program, and operate the robot and/or automated machinery

Competencies	Core or Optional	RTI	OJT
A. Set-up the robot and/or automated machinery for use	Core		
B. Program the robot and/or automated machinery to carry out intended tasks	Core		
C. Use programmable logic controller (PLC) or other industrial communication protocols to operate the robot and/or automated machinery	Core		
D. Operate the robot and/or automated machinery	Core		
E. Build or assemble robotic devices/systems and/or automated machinery	Optional		

F. Use a production program to modify a position value (position register)	Core		
G. Record, interpret, and convert measurements to accurately install and configure robots and/or automated machinery	Core		
H. Adjust or repair robot and/or automated machinery components to ensure efficient operation	Core		
I. Interpret process control documentation to ensure safe and efficient operation of the robot and/or automated machinery	Core		

Job Function 3: Safely and efficiently use tools

Competencies	Core or Optional	RTI	OJT
A. Select proper tools for a given situation	Core		
B. Use tools safely	Core		
C. Use non power tools to install and repair components	Core		
D. Use power tools to install and repair components	Core		
E. Use proper tools to install and repair wiring	Core		
F. Repair or replace pneumatic components and hydraulic fittings using appropriate hand tools and metering devices	Core		
G. Perform calculations to identify specifications for use of tools (e.g., for cutting)	Optional		

Job Function 4: Safely perform maintenance and calibration for robots and/or automated machinery to properly function

Competencies	Core or Optional	RTI	OJT
A. Clean the robot, controller(s), and/or other automation machinery safely	Core		
B. Perform hardware maintenance	Core		
C. Calibrate the robot and/or automated machinery	Core		
D. Test components	Core		
E. Sort and ensure materials and equipment are in designated areas after use	Core		

Job Function 5: Troubleshoot errors in programming, robot, or system components

Competencies	Core or Optional	RTI	OJT
A. Review the equipment and product information	Core		
B. Perform tests on programs, wiring, and solder joints	Core		
C. Interpret test results using root-cause analysis to identify the problem	Core		
D. Properly use tools and repair techniques to resolve the problem	Core		
E. Make a recommendation to address the identified issue	Core		

F. Accurately report or document how problems were addressed	Core		
G. Understand and use computer networks	Core		
H. Use industrial communication protocols to troubleshoot errors	Core		
I. Use blueprints or schematics to troubleshoot	Core		
Job Function 6: Communicate with team, supervisor, and customers			
Competencies	Core or Optional	RTI	OJT
A. Read, interpret, and markup schematics and technical documents	Core		
B. Communicate with coworkers	Core		
C. Communicate with supervisor	Core		
D. Train customers and/or coworkers to safely use and maintain robots and/or automation machinery	Core		
E. Complete required documentation	Core		