

Work Process Schedule

WORK PROCESS SCHEDULE		O*NET-SOC Code: 51-7042.00	
Woodwork Manufacturing Specialist (Existing Title: Machine Setter (Woodwork))		RAPIDS Code: 0321CB	
Anticipated completion of apprenticeship program is three (3) years			
Job Title:			
Level:		Specialization:	
Stackable Program: <input type="checkbox"/> Yes <input type="checkbox"/> No			
Base Occupation Name:			
Company Contact:			
Address:		Phone:	Email:
Apprenticeship Type: <input checked="" type="checkbox"/> Competency-based <input type="checkbox"/> Time-based <input type="checkbox"/> Hybrid		Prerequisites:	
Job Function 1: Communicates effectively and professionally with colleagues, both internally and externally			
Competencies	Core or Optional	RTI	OJT
A. Reliably follows others' instructions	Core		
B. Willingly asks questions about things not fully understood	Core		
C. Works with due regard for others' safety	Core		
D. Demonstrates a working knowledge of the company policy manual	Core		
E. Establishes a system of maintaining appropriate notes and reminders and completes any required logs, calibration records, etc.	Core		
F. Ensures proper communications between previous and next shifts, with operations and supervision	Core		
G. Identifies problems and changes that could lead to problems through the exchange of information with operators, supervisors, and others	Core		

H. Establishes trust and rapport with operators, supervisors, and others	Core		
Job Function 2: Demonstrates both effective time and project management			
Competencies	Core or Optional	RTI	OJT
A. Develops a project plan and tracks progress against the plan, flagging issues and delays as they occur	Core		
B. Develops project contingency plans to respond to unexpected delays and costs, and professionally communicates with customers about alternatives as needed	Core		
C. Verifies in-field measurements against architectural drawings to produce accurate shop drawings	Core		
D. Estimates project costs and timelines, identifying project assumptions and resource costs (supplies, labor)	Optional		
E. Computes material quantities, sizes, weights, and costs	Optional		
F. Develops a project budget based on an approved quote and tracks project progress against the budget, flagging issues and unexpected costs as they arise	Optional		
G. Develops a professional quote for a project and shares with a potential customer for review and approval	Optional		
Job Function 3: Protects self and other workers from accidents and injuries			
Competencies	Core or Optional	RTI	OJT
A. Follows employer safety requirements, including the consistent and proper use of protective clothing and personal safety devices	Core		
B. Maintains a clean and orderly workplace, storing chemicals and corrosive or combustible materials properly and disposing of waste products according to company policies and local/federal laws and regulations	Core		
C. Safely uses, stores, and maintains all tools/equipment properly to eliminate injury, electrocution, trip hazards, or damage	Core		
D. Lifts supplies and materials using proper body mechanics and assistive devices, such as hoists, lifts, forklifts, and straps	Core		
E. Reports and responds promptly, safely, and appropriately to emergency or hazard situations and troubleshoots any issues that may arise	Core		
F. Uses lock-out/tag-out procedures when working with appropriate tools and equipment	Core		

Job Function 4: Demonstrates basics of measurement, materials, and safety of products and parts			
Competencies	Core or Optional	RTI	OJT
A. Uses and applies contextual mathematics	Core		
B. Demonstrates layout processes	Core		
C. Uses proper material-processing techniques	Core		
D. Understands material properties	Core		
Job Function 5: Uses print reading and CAD software to develop shop drawings			
Competencies	Core or Optional	RTI	OJT
A. Identifies symbols, notations, and lines to industry standards	Core		
B. Determines dimensions, critical features, and tolerances on architectural/shop drawings	Core		
C. Interprets architectural/shop drawings to industry standards	Core		
D. Uses CAD software to produce and edit architectural/shop drawings	Core		
E. Demonstrates competency in primary drafting procedures	Core		
F. Creates architectural/shop drawings using a variety of CAD software tools and functions	Core		
G. Creates annotative text and dimension styles for use on floor plans, elevations, and construction details	Core		
H. Creates and modifies CAD blocks to use on floor plans, elevations, and construction details	Core		
Job Function 6: Shows competency for millwork techniques and fabrication			
Competencies	Core or Optional	RTI	OJT
A. Processes materials safely and effectively, taking into account material characteristics	Core		
B. Demonstrates the proper selection, identification, and installation of tools	Core		
C. Safely and properly sets up and operates machines/tools	Core		
D. Performs bench operations safely, effectively, and accurately	Core		
E. Installs finished products	Optional		
Job Function 7: Performs operation and maintenance of CNC and mechatronics operations			
Competencies	Core or Optional	RTI	OJT
A. Explains the proper codes and functions	Core		
B. Demonstrates how to write a G code program in order to machine a basic cylindrical part on the CNC lathe	Core		

C. Calculates the tooling, coordinates, and toolpaths necessary to machine the part on a CNC lathe	Core		
D. Identifies different aspects of the machine	Core		
E. Applies the Cartesian coordinate system and polar coordinates for a milling process	Core		
F. Locates and identifies all components of the robotic cell, including all equipment, operator interfaces, tooling, perimeter guarding, safety devices, etc.	Core		
G. Understands and practices all safety considerations related to operating the robotic cell	Core		
H. Demonstrates the proper power-up, shut-down, and lock-out sequence of the robotic cell or other equipment	Core		
Job Function 8: Performs coating/finishing operations			
Competencies	Core or Optional	RTI	OJT
A. Recognizes proper surface preparation	Core		
B. Understands chemical properties of coating and surface materials and their interactions with each other	Core		
C. Performs proper safety and workplace protocols in spray booth	Core		
D. Reads and understands safety data sheets	Core		
E. Demonstrates proper handling, storage, and disposal of finishing materials	Core		
Job Function 9: Performs wood-processing operations			
Competencies	Core or Optional	RTI	OJT
A. Performs machine operations	Core		
B. Selects proper tooling/machinery to safely and accurately perform all required processing operations within the specified tolerances on a part print	Core		
C. Calculates cutting speeds and feeds and applies these calculations while performing required operations	Core		
Job Function 10: Problem solves, diagnoses, and troubleshoots effectively			
Competencies	Core or Optional	RTI	OJT
A. Traces defects to the originating sections of their root causes, such as verifying in-field measurements against architectural drawings	Core		
B. Uses critical and logical thinking on a per project basis to analyze, measure, and record to improve manufacturing/installation process	Core		

C. Proposes a remedy, having been given the authorization to implement the process improvement	Core		
D. Conducts a triage level of troubleshooting and communicates findings to appropriate individual	Core		
E. Performs daily, weekly, and monthly preventative maintenance responsibilities	Core		