# **Work Process Schedule**

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| Industrial Manufacturing Technician |
| **Job Description:** Operate industrial production related equipment, work with manufacturing related tools, and perform processes related to a wide variety of manufacturing settings. |
| **RAPIDS Code:** 2031CB | **O\*NET Code:** 17-3029.09 |
| **Estimated Program Length:** 1.5 years |
| **Apprenticeship Type:** [x]  Competency-Based [ ]  Time-Based [ ]  Hybrid |

Suggested On-the-Job Learning Outline

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| Protect self and other workers from accidents and injuries |
| **Competencies** | **Date Completed** | **Initial** |
| 1. Follow employer safety requirements, including the consistent and proper use of protective clothing and personal safety devices
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| 1. Maintain 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
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| 1. Use, store, and maintain hand-tools properly to eliminate trip hazards, injury, electrocution, or damage
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| 1. Lift supplies and materials using proper body mechanics and assistive devices, such as hoists, lifts, forklifts, and straps
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| 1. Report and respond promptly, safely, and appropriately to emergency or hazardous situations and troubleshoot any issues that may arise
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| 1. Use lock-out/tag-out procedures when working with appropriate tools and equipment
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| Accurately and properly interpret production specifications in order to set up/plan for production run |
| **Competencies** | **Date Completed** | **Initial** |
| 1. Outline operational sequence and steps in production process; identify points of transition between different employees or machines in the production area and impact on downstream production
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| 1. Identify and obtain the appropriate raw materials for use in production
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| 1. Obtain the necessary tools for performing the production run (such as tools to set up or modify equipment or to prepare or finish production materials)
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| 1. Set up or program machine according to manufacturer’s and/or employer’s specifications, seeking support of a qualified programmer or maintenance technician when utilizing appropriate notification procedures
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| 1. Set up production run based on recommended run time, production intervals, inspection intervals, or production requirements
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| 1. Coordinate production run with others based on supply requirements, product transition and inspection needs, or employer priorities
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| 1. Notify appropriate individual of concerns regarding production plans, access to raw materials, run time or potential delays in production timing, or production quantity/quality
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| Set up, inspect, and adjust production equipment prior to the full production run |
| **Competencies** | **Date Completed** | **Initial** |
| 1. Set up production equipment to meet production specifications
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| 1. Inspect production equipment and surrounding work area
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| 1. Adjust production equipment to meet and maintain production specifications
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| 1. Notify appropriate individual of potential problems with equipment or machine function, need for routine maintenance, or concerns about unusual sounds, vibrations, smells, or production errors
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| Operate production equipment according to production schedule and protocols and meeting all safety requirements |
| **Competencies** | **Date Completed** | **Initial** |
| 1. Maintain a neat and orderly workspace, ensuring that work area is properly marked or cordoned off and eliminating or flagging potential trip hazards created by production materials or products
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| 1. Plan an appropriate production schedule taking into account availability of raw materials and production capacity of equipment/machines
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| 1. Utilize raw materials properly, using protective gear and lifting devices as necessary
 |  |  |
| 1. Use personal protection devices as necessary and maintain proper ergonomic positioning relative to equipment or machines, raw materials, and production products
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| 1. Document run specifications, adjustments, output, and quality assurance checks
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| 1. Apply emergency stop procedures when necessary to avoid personal injury, damage to machinery or facilities, or spoilage of production run
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| 1. If emergency stop procedures are employed, begin troubleshooting procedures to fix the equipment, including documenting issues with equipment and the production run
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| Produce products that meet or exceed quality, volume, and cost requirements |
| **Competencies** | **Date Completed** | **Initial** |
| 1. Observe production rate as compared to scheduled or projected rate, quantity, or volume, and modify as necessary; notify appropriate individual of potential delays, underproduction, or potential additional capacity
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| 1. Monitor production quality, including the inspection of parts and products, and troubleshoot if necessary to improve quality and accuracy
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| 1. Perform product finishing according to production protocols
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| 1. Document appropriate information, such as product quality parameters, lot numbers, or other relevant information
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| 1. Clearly and openly communicate concerns about quality or quantity of production with appropriate individual, and colleagues in the production chain
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| 1. Adjust to changes in production requirements of schedule
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| Shut down, disassemble, and maintain equipment according to manufacturer’s and employer’s recommendations and protocols |
| **Competencies** | **Date Completed** | **Initial** |
| 1. Shut down equipment according to manufacturer’s instructions or employer’s protocols
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| 1. Engage emergency shutdown procedures when necessary
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| 1. Disassemble equipment and components
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| 1. Clean up tooling, equipment, and work spaces
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| 1. Sanitize equipment according to applicable standards
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| 1. Note and troubleshoot needed maintenance or repair services and inform appropriate individual or department, if necessary
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| 1. Follow preventive maintenance schedule and document
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| Contribute to the business goals of the organization through continuous improvement and professional development |
| **Competencies** | **Date Completed** | **Initial** |
| 1. Determine the impact of production time, material supply, and quality and quantity on the business goals of the employer, its supply chain, and its customers
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| 1. Understand the proprietary nature of materials and how it relates to the business goals and functions
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| 1. Make constructive suggestions regarding ways to improve the production process, workplace efficiencies, or cost control
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| 1. Participate in cross training activities to expand knowledge and skill set
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| 1. Help others learn about the business, the specifics of production and the connection between production and business goals
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| 1. Participate in the calculation of costs and revenue, as related to production and business goals
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Suggested Related Instruction Outline

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| Provider |
| **Name:**  |
| **Address:**  |
| **Email:** | **Phone Number:** |
| **Related Instruction Hours:** 216 |

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| **Course Number** | **Course Title** | **Contact Hours** |
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