

# Manufacturing Technology/Technician (2021)

## COMMON COMPETENCIES

- 1 Use correct terminology, vocabulary and appropriate language to communicate effectively in the workplace. 1**

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- 2 Select and safely use appropriate tools, supplies, and equipment for a specific task or set of tasks. 2**

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- 3 Employ effective time and project management strategies to complete work efficiently and proficiently. 3**

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- 4 Apply math concepts, including measurement, operations, and higher mathematics to relevant applications and specific tasks. 4**

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- 5 Demonstrate awareness strategies to safely work in a variety of workspaces and locations. 5**

## PATHWAY COMPETENCIES

- 1 MANUFACTURING PROCESSES AND PRODUCTION 1**
  - 1 The principles and practices specific to workplace manufacturing processes in order to continuously improve and meet the needs of a manufacturing organization and its customers. 1.1

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- 2 DESIGN/TECHNICAL DRAWINGS 2**
  - 1 The methodologies used to interpret, create, and prototype by using blue prints, drawings, and new technologies including but not limited to 3D printing, laser cutting, solid modeling, and/or AR/VR. 2.1

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- 3 AUTOMATION & MECHATRONIC PROCESSES 3**
  - 1 The variety of automation resources such as but not limited to smart manufacturing, robotics, automation, pneumatics and hydraulic systems found within industry and be able to identify and relate their impact to manufacturing. 3.1

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- 4 QUALITY CONTROL/ QUALITY ASSURANCE 4**
  - 1 The tools and techniques associated with the quality control, processes, and standards associated with the manufacturing industry. 4.1

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## **5 SOFTWARE&NUMERICAL CONTROL 5**

- 1 The methodologies and practices associated with pre-programmed software within industry, and apply those processes in a manufacturing environment. 5.1

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## **6 LEAN PROCESSING 6**

- 1 Lean philosophies in ways to positively impact the manufacturing process and environment 6.1