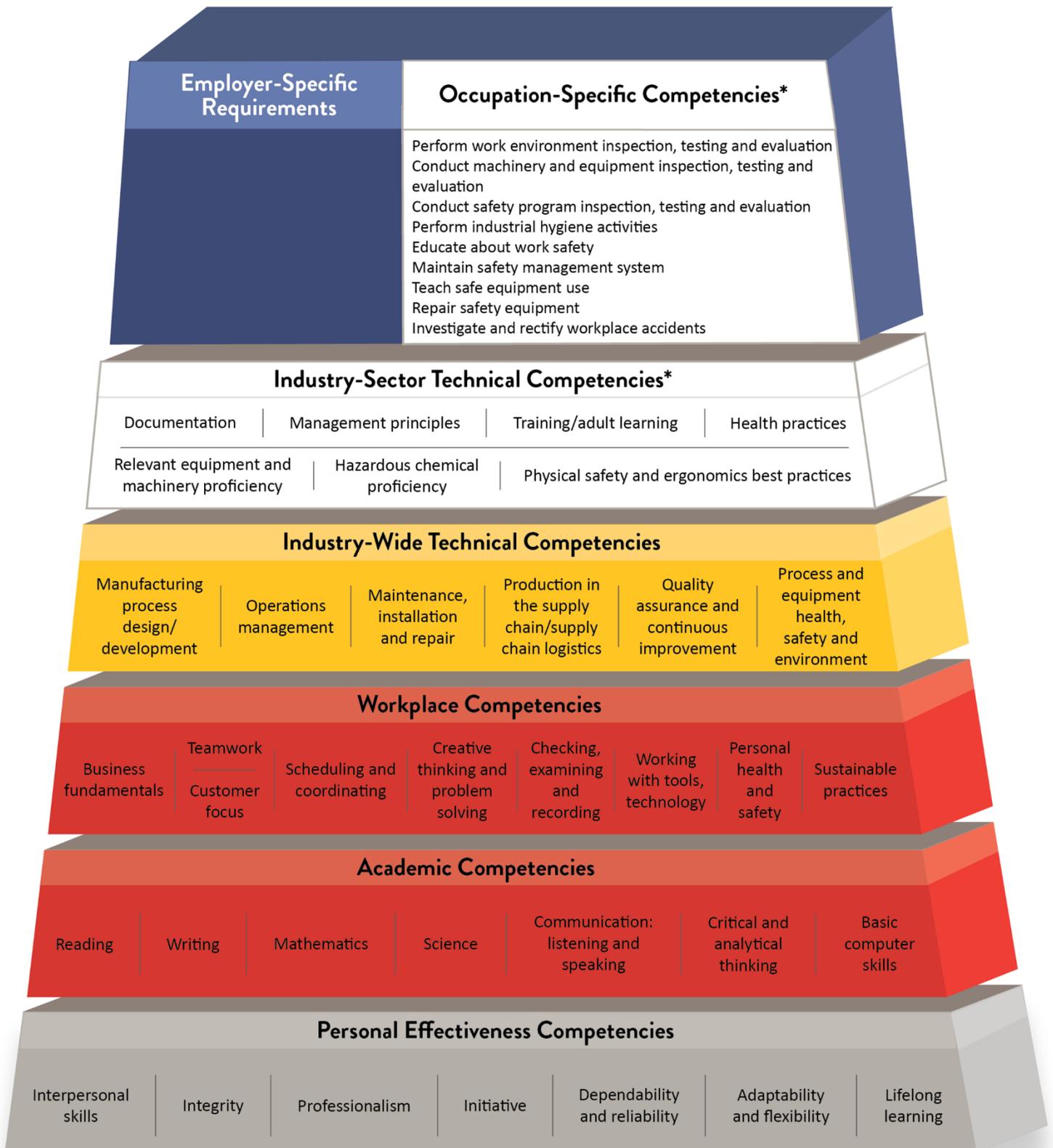


Minnesota Dual-Training Pipeline

Competency Model for Advanced Manufacturing

Occupation: Safety Technician



Based on: Advanced Manufacturing Competency Model, Employment and Training Administration, United States Department of Labor, February 2025. For more detailed information about competency model creation and sources, visit dli.mn.gov/business/workforce/advanced-manufacturing.

Competency Model for Safety Technician

Safety technician – A safety technician is responsible for performing activities in the fields of industrial hygiene, occupational health and environmental health to ensure safe and healthy working conditions are maintained and that the environment is not adversely affected by daily work operations.

*Pipeline recommends the Industry-Sector Technical Competencies as formal training opportunities (provided through related instruction) and the Occupation-Specific Competencies as on-the-job (OJT) training opportunities.

Industry-Sector Technical Competencies

Related Instruction for dual training means the organized and systematic form of education resulting in the enhancement of skills and competencies related to the dual trainee's current or intended occupation.

- **Documentation** – Understand rules, regulations, and best practices that dictate how and when to document timelines and events.
- **Management principles** – Understand basics of supervising staff and follow organizational guidelines for the decisions and actions of organizational leaders and managers.
- **Training/adult learning** – Understand how to effectively train and present material to adult learners.
- **Health practices** – Be able to review, evaluate, and analyze work environments and design programs and procedures to control, eliminate, and prevent disease or injury caused by chemical, physical, and biological agents or ergonomic factors.
- **Relevant equipment and machinery proficiency** – Each organization will present a different composition of equipment or machinery in which the safety technician will need to be proficient, but this is a vital component to the job for any safety technician.
- **Hazardous chemical proficiency** – Deep functional knowledge and understanding of chemicals that may be hazardous on the job and how to handle them.
- **Physical safety and ergonomics best practices** – Understanding of practices to handling ergonomic needs and approaches to physically and mentally safe work environments.

Occupation-Specific Competencies

On-the-Job Training is hands-on instruction completed at work to learn the core competencies necessary to succeed in an occupation. Common types of OJT include job shadowing, mentorship, cohort-based training, assignment-based project evaluation and discussion-based training.

- **Perform work environment inspection, testing, and evaluation** – Demonstrate the ability to inspect, test, and evaluate work environments.
- **Conduct machinery and equipment inspection, testing, and evaluation** – Demonstrate the ability to inspect, test, and evaluate machinery for efficient and safe operations.
- **Conduct safety program inspection, testing, and evaluation** – Demonstrate the ability to inspect, test, and evaluate safety programs in one or more relevant locations.
- **Perform industrial hygiene activities** – Demonstrate understanding of various environmental indicators, such as decibel readings and air quality.
- **Educate about work safety** – Know how to effectively communicate organizational needs and approaches to safe workplace practices for team members.
- **Maintain safety management system** – Demonstrate the ability to design and maintain a safety management system with the organization.
- **Teach safe equipment use** – Have the ability to coordinate training to ensure safety of tools and equipment used by team members on the job.
- **Repair safety equipment** – Demonstrate proficiency with equipment used to ensure safety on the job.
- **Investigate and rectify workplace accidents** – Understand how to conduct investigations when accidents occur to determine cause and how to adjust / enhance training to avoid future accidents.

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