Minnesota Dual-Training Pipeline Competency Model for Advanced Manufacturing Occupation: Safety Technician

Employer-Specific Requirements	Occupation-Specific Competencies*			
	Machinery and Safety program Perform industr Educate about v Maintain safety Teach safe equip Repair safety eq	management system pment use	ting, and evaluat valuation	ion
Industry-Sect	or Technical	Competencies*		
Documentation Management pr	rinciples T	raining/adult learning	Health prac	tices
	s chemical	Physical safety and ergo	nomics best pra	ctices
Industry-Wi	de Technical	Competencies		
Manuf. process Production Physical sign and stamina elopment	Quality assurance, continuous improvement	reporting	Safety, health ecurity and nvironment	Root cause analysis
Work	cplace Comp	oetencies		
ess Teamwork Adaptability Custom cs Teamwork and servic flexibility focus	e and	Problem solving, decision making	and I	Sustainable practices
Acad	lemic Compe	etencies		
			Critical and	Information
Basic Basic and ce computer technical skills mathematics	Reading and writing	Communication: listening and speaking	analytic thinking	literacy
Basic Basic and e computer technical skills mathematics	and writing	listening and	analytic	

Based on: Advanced Manufacturing Competency Model Employment and Training Administration, U.S. Dept. of Labor, April 2010.

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

DUAL-TRAINING PIPELINE

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.

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** Guidelines for the decisions and actions of organization 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 for handling ergonomic needs and approaches to physically and mentally safe work environments.

Occupation-Specific Competencies

On-the-Job Training (OJT) 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.

- Work environment inspection, testing, and evaluation Demonstrate the ability to inspect, test, and evaluate work environments.
- **Machinery and equipment inspection, testing, and evaluation** Demonstrate the ability to inspect, test, and evaluate machinery for efficient and safe operations.
- 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 Demonstrate the ability to effectively communicate organization 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** Demonstrate 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.

Updated February 2025