

# QUALITY INSPECTOR

O\*NET OCCUPATIONAL CODE: 19-4099.01

## Related Training Instruction Framework for Common Job Functions

The Apprenticeship Framework from Tooling-U SME provides the industry-endorsed related training instruction (RTI) hours needed to meet the requirements of a competency-based or hybrid apprenticeship program. The Apprenticeship Framework is designed to provide a minimum of 165 RTI hours per framework and can be used to enhance an existing program or provide the building blocks for new programs. Frameworks are divided into five sections that support any 21st-century apprenticeship, and provide and encourage new approaches to building a skilled and competitive workforce.

## Flexible and Convenient

The Apprenticeship Framework quickly provides an RTI resource for any apprenticeship. Online classes provide students with self-paced, easy access to RTI that is available 24x7. An app is available for phones and tablets.

## THE APPRENTICESHIP FRAMEWORK OFFERS:

- Predefined curriculum for each job function
- Online classes that align to classroom objectives and add program capacity
- A minimum of 165 RTI hours per framework
- Supplemental videos
- Access to the Administrative and Student Center
- Guidance from our Client Success team
- Hundreds of additional instructor-led training (ILT) hours



## FRAMEWORK SECTIONS

### Job Skills

Adherence to core fundamental employability skills that employers desire from new and incumbent employees in the workplace.

### Health and Safety

Adherence to safety, health and environmental rules and regulations to avoid workplace injury, and to maximize personal and organizational productivity and profitability.

### Foundations in Manufacturing

Adherence to the essential technical knowledge and skills necessary to build a job-ready manufacturing workforce.

### Technical Expertise

Adherence to the standards designated for a specific craft through the achievement of theory and hands-on skills, where these elements are applied in industry work.

### Leading and Developing People

Adherence to good practices and positive interaction in leading, training or mentoring co-workers within a manufacturing environment.

## Job Skills

Tooling U-SME Department	Related Training Instruction Topics Covered	RTI Hours
Quality	5S, Root Cause Analysis, Reading for Comprehension, Business Writing, Computer Basics, Sampling, Troubleshooting	7.5
Inspection	Basic Measurement, Basic Arithmetic Operations	3
Safety	OSHA and Proper Safety Practices	1.5
Supervisor Essentials	Verbal and Nonverbal Communication	1.5
<b>Total</b>		<b>13.5</b>

## Health and Safety

Tooling U-SME Department	Related Training Instruction Topics Covered	RTI Hours
Safety	General Workplace Safety, Personal Protective Equipment, Fall Protection, Confined Spaces, Machine Safety, Fire Safety and Prevention, Back Injury Prevention, Respiratory Protection, Industrial Ergonomics, LOTO, Hazard Communication Training, Hazardous Materials Handling and Storage, Bloodborne Pathogens, Pedestrian Safety	27
Metal Cutting	Machine Safety, Metalworking Fluid Safety	1.5
<b>Total Hours</b>		<b>28.5</b>

## Foundations in Manufacturing

Tooling U-SME Department	Related Training Instruction Topics Covered	RTI Hours
Shop Essentials (Applied Mathematics)	Basic Arithmetic Operations, Using Fractions, Decimals and Percentages, Units of Measurement, Geometry, Trigonometry, Interpreting Blueprints, Statistics	18
Inspection	Fundamentals of Blueprint Reading, Reading Schematics, GD&T, Inspection, Parts Tolerancing	7.5
<b>Total</b>		<b>25.5</b>

## Technical Expertise

Tooling U-SME Department	Related Training Instruction Topics Covered	RTI Hours
Additive Manufacturing	Nondestructive Testing	1.5
Inspection	Pneumatic Gauging Components, Automatic Gauging Components, Traceability, Calibration, GD&T, Variable Gauges, Attribute Gauges, Transfer Gauges, Automatic Gauging Components, Surface Plate Equipment, Coordinate Measuring Machine (CMM), Optical Equipment, Measurement System Analysis (MSA), Nondestructive Testing, Measuring Mass, Finish and Profile	28.5
Materials	Heat Treatment, Nonferrous Metals and Alloys, Ferrous Metals, Hardness Testing, Physical Properties of Metal	12
Metal Cutting	Nonferrous Metals and Alloys	1.5
Quality	Quality Programs, Quality Tools and Techniques, Continuous Process Improvement	19.5
Lean	Lean Tools: Eliminating Waste, Quality Tools and Techniques, Six Sigma, Total Quality Management (TQM), PDCA/PDSA Cycles, Continuous Process Improvement	19.5
Welding	Functionality Testing, Nondestructive Testing, Destructive Testing	3
<b>Total Hours</b>		<b>85.5</b>

## Leading and Developing People

Tooling U-SME Department	Related Training Instruction Topics Covered	RTI Hours
Supervisor Essentials	Team Building, Conflict Resolution, Project Management, Performance Management, Mentoring Others, Working in a Diverse Workplace, Leading in a Diverse Workplace	12
<b>Total</b>		<b>12</b>