

PRE-PACKAGED ASSESSMENTS

from Tooling U-SME

Assessment Name	Description	Number of Questions
Additive Manufacturing Fundamentals	Basic knowledge about additive manufacturing, math, safety, machining, materials, maintenance, fabrication, and automation.	89
Assembly: Assembler	Basic knowledge on safety, inspection, quality, math, materials, rigging, coatings, fasteners, and adhesives.	89
Assembly: Mechanic	Working knowledge necessary for detecting defects and repairing assemblies, including math, GD&T, troubleshooting, rigging, soldering, adhesives, fasteners, and introductory electrical, mechanical, and fluid systems.	78
Certified in Robotics Fundamentals	The Certified in Robotics Fundamentals (CRF) Industrial credential was developed by SME, educators and industry professionals to help meet the high demand for manufacturing and robotics advanced manufacturing technicians in our country. The certification test will enable students that have mastery various educational robot platforms to demonstrate their knowledge of the basic robotic fundamentals, operations and concepts needed to lead them into entry-level careers into high demand robotics and advanced field.	100
Engineering: Engineering Technician	Working knowledge of workholding, safety, materials, GD&T, quality, machining, stamping, electrical systems, automation, welding, fluid systems and design, and management.	90
Engineering: Fundamentals	Basic knowledge about math, materials, lean, machining, electrical systems, assembly, and additive manufacturing.	87
Job: NIMS	NIMS	132
Machining: CNC Programmer	Working knowledge of part program creation using CAD/CAM software and G code programming.	48
Machining: Fundamentals	Basic knowledge on safety, inspection, materials, quality, machining, and math.	90
Machining: Grinding Technician	Working knowledge necessary to setup and operate all common grinding machines, including knowledge of threads, leadership, communication, inspection, quality, machining, and workholding.	90
Machining: Machine Operator	Working knowledge necessary for basic operation of metal cutting machines, including workholding, CNC controls, and manual machining.	87
Machining: Production Machinist	Working knowledge of programs and machine tooling operation and setup for mills and lathes.	81
Machining: Toolmaker/Diemaker	Working knowledge of setup and operation of all common machine types to produce unique machining jobs and solve problems.	57
Maintenance: Automation Technician	Working knowledge of maintenance, repair, and troubleshooting of PLC and automated systems.	90
Maintenance: Electrical Production	Working knowledge of advanced math, heat treatment, troubleshooting, CNC machining, electrical systems, motor controls, and soldering.	90
Maintenance: Electrical Technician	Working knowledge of advanced electrical and mechanical systems for the maintenance, repair, and installation of electrical systems, including fasteners, rigging, and fluid systems.	90
Maintenance: Fluid Systems Technician	Working knowledge and troubleshooting of fluid power systems, including basics of fluid system design, welding, soldering, motor controls, electrical systems, and CNC machining.	90
Maintenance: Fundamentals	Basic knowledge on safety, inspection, quality, math, materials, electrical systems, and mechanical systems.	90

PRE-PACKAGED ASSESSMENTS

from Tooling U-SME

Assessment Name	Description	Number of Questions
Maintenance: Maintenance Production	Working knowledge and use of common toolroom equipment to manufacture and repair components for in-house maintenance purposes.	90
Manufacturing Awareness: Assembly	Select introductory knowledge required for assembly, including inspection, safety, materials, rigging, adhesives, and fasteners.	90
Manufacturing Awareness: Composites	Select introductory knowledge required for composites, including inspection, safety, materials, and quality.	78
Manufacturing Awareness: Fundamentals	Select introductory knowledge required for manufacturing, including inspection, safety, materials, and quality.	60
Manufacturing Awareness: Machining	Select introductory knowledge required for machining, including workholding, inspection, safety, materials, quality, metal cutting, and grinding.	90
Manufacturing Awareness: Maintenance	Select introductory knowledge required for maintenance, including inspection, safety, materials, quality, electrical systems, mechanical systems, and fluid systems.	89
Manufacturing Awareness: Stamping/Forming/Fabricating	Select introductory knowledge required for assembly, including inspection, safety, materials, quality, metal cutting, and press brake.	78
Manufacturing Awareness: Welding	Select introductory knowledge required for welding, including inspection, safety, materials, and quality.	90
MSSC Manufacturing Process and Production	MSSC Manufacturing Process and Production	174
MSSC Quality Practices and Measurement	MSSC Quality Practices and Measurement	129
MSSC Maintenance Awareness	MSSC Maintenance Awareness	156
MSSC Safety	MSSC Safety	84
Plastics Processing: Fundamentals	Basic knowledge about safety, inspection, quality, math, and materials.	90
Plastics Processing: Mold Extrusion Operator	Working knowledge necessary for plastic extrusion, including materials, electrical systems, mechanical systems, fluid systems, rigging, and composites processing.	66
Plastics Processing: Mold Maker	Working knowledge necessary for mold making, including inspection, machining, and grinding.	78
Quality: Quality Technician	Working knowledge necessary for maintaining quality, including math, inspection, safety, materials, and metal cutting.	90
Stamping/Forming/Fabricating: Diemaker	Working knowledge of setup and operation of all common machine types to produce unique machining jobs and solve problems. Prerequisites: Press Operator potential career paths: none	78
Stamping/Forming/Fabricating: Fundamentals	Select introductory knowledge required for assembly, including inspection, safety, materials, quality, metal cutting, and press brake. Prerequisites: none potential career paths: none	89
Stamping/Forming/Fabricating: Press Operator	Working knowledge necessary for operating a press, including workholding, GD&T, maintenance, troubleshooting, the press brake, and introductory information on electrical, mechanical, and fluid systems. Prerequisites: Stamping/Forming/Fabricating Fundamentals potential career paths: Diemaker	84

PRE-PACKAGED ASSESSMENTS

from Tooling U-SME

Assessment Name	Description	Number of Questions
Welding: Fabrication and Repair	Working knowledge necessary for the fabrication and repair of welds and welded parts, including workholding, math, materials, metal cutting, assembly, and communication skills. Prerequisites: GMAW/FCAW/Sub-Arc Welding, GMAW Welding, GTAW Welding, SMAW Welding potential career paths: none	78
Welding: Fundamentals	Basic knowledge about safety, math, machining, and welding. Prerequisites: none potential career paths: GMAW/FCAW/Sub-Arc Welding, GTAW Welding, SMAW Welding	90
Welding: GMAW/FCAW/Sub-Arc Welding	Working knowledge necessary for GMAW, FCAW, submerged arc welding, including materials, maintenance, electrical systems, advanced welding, and communication skills. Prerequisites: Welding Fundamentals potential career paths: Fabrication and Repair	90
Welding: GTAW Welding	Working knowledge necessary for GTAW welding including materials, maintenance, electrical systems, advanced welding, and communication skills. Prerequisites: Welding Fundamentals potential career paths: Fabricating and Repair	90
Welding: SMAW Welding	Working knowledge necessary for SMAW welding, including materials, maintenance, electrical systems, advanced welding, and communication skills. Prerequisites: Welding Fundamentals potential career paths: Fabrication and Repair	90