NOCTI

Partner Micro-Credential Blueprint

SEMI FOUNDATION

Fab Maintenance Micro-Credential

Codes: 9509

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General Assessment Information

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Test Type: This micro-credential was developed by NOCTI for SEMI Foundation. Subject matter experts were recruited by SEMI Foundation from its education and industry connections to ensure the assessment reflects current industry expectations and practices.

CIP Code

15.0616 - Semiconductor Manufacturing Technology/Technician

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Career Cluster
Manufacturing

O*NET™ in*it

17-3028.00 - Calibration Technologists and Technicians

SEMI FOUNDATION

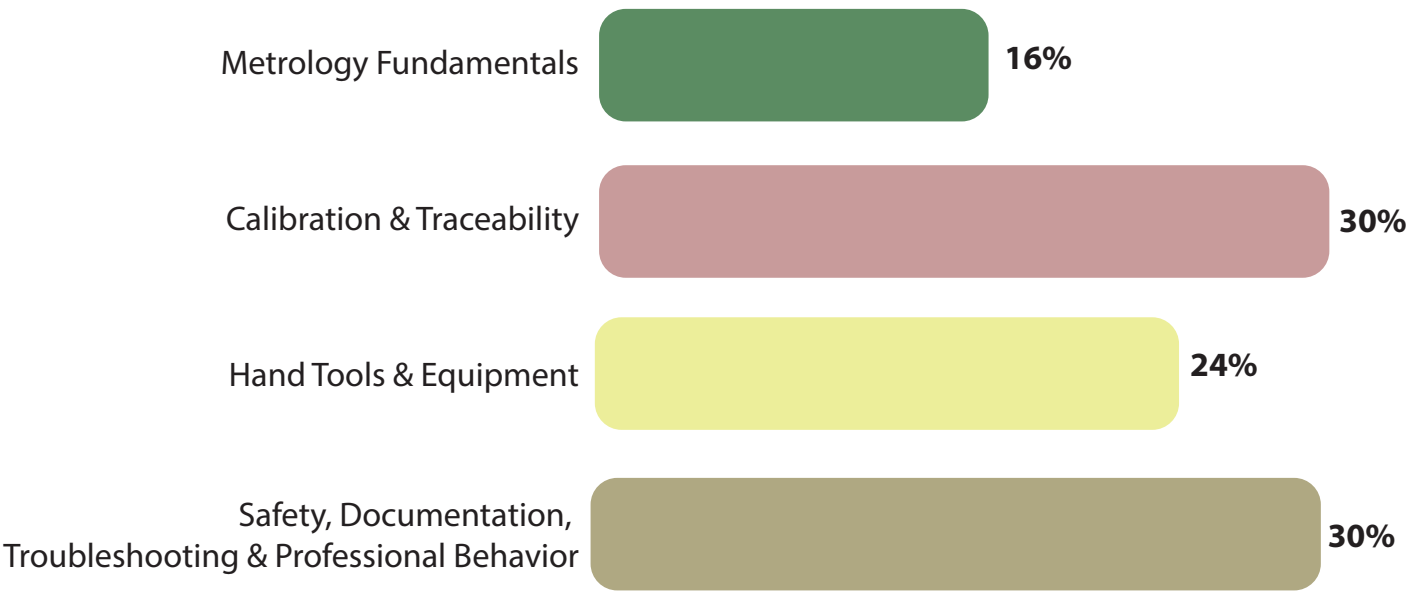
The SEMI Foundation supports the development of a diverse, skilled semiconductor workforce by advancing equitable access to education, career pathways, and industry connections. Through partnerships with schools, community organizations, and employers, the SEMI Foundation works to strengthen talent pipelines and expand opportunities in semiconductor manufacturing and advanced technology careers.

Written Assessment

NOCTI written assessments consist of questions to measure an individual's factual theoretical knowledge.

Administration Time: 1 hour and 30 minutes
Number of Questions: 50

Areas Covered



Specific Standards and Competencies Included in this Assessment

Metrology Fundamentals
- Identify semiconductor metrology equipment and terminology
- Differentiate accuracy and precision
- Apply tolerances to inspection results

Calibration and Traceability
- Verify calibration status
- Recognize calibration issues
- Apply measurement quality practices

Hand Tools and Equipment
- Identify types of hand tools and uses
- Identify types of semiconductor equipment and uses
- Identify the proper use of common hand tools, precision tools, semiconductor tools, inspection tools, ESD tools, and sensors
- Describe tool safety

Safety, Documentation, Troubleshooting, and Professional Behavior
- Follow safe work practices
- Document results correctly
- Identify measurement problems

Sample Questions

Which instrument is used to measure current in an AC circuit without interrupting it?

A. clamp-on ammeter
B. megger
C. oscilloscope
D. voltmeter

Using an electronic grounding mat or strap

A. is required when working with chemicals
B. prevents being electrocuted
C. prevents static electricity damage
D. is not a good practice in a cleanroom

Which electronic component is designed to store an electrical charge and should always be discharged prior to removal?

A. resistor
B. diode
C. capacitor
D. transistor