

# CERTIFIED ADDITIVE MANUFACTURING FUNDAMENTALS (CAM-F)



Tennessee Manufacturing Extension Partnership

## CERTIFICATION

### DEVELOP THE SKILLS NECESSARY FOR A SUCCESSFUL CAREER IN ADDITIVE MANUFACTURING

To help meet the high demand for additive manufacturing talent in our country, Tooling U-SME introduced The Certified Additive Manufacturing – Fundamentals (CAM-F). The Fundamentals certification is ideal for individuals working in or seeking to work in additive manufacturing roles in automotive, aerospace, and medical equipment. It is also ideal for high schools and colleges as a capstone or stand-alone achievement to increase workforce readiness in additive manufacturing.

### SHORT-TERM, COMPREHENSIVE TRAINING

Online classes from Tooling U-SME provide the best manufacturing content developed by industry experts. The information is presented in an engaging and interactive format for maximum effectiveness, and pre-and post-assessments measure a student's increased knowledge.

Classes are self-paced, typically taking 60 minutes to complete. The 20-class training program can be completed in less than a few weeks. They are conveniently accessible anytime, anywhere on desktops and laptops, and on tablets and phones with the Tooling U-SME app.

### BUILD A COMPREHENSIVE FOUNDATION OF KNOWLEDGE

This certification focuses on the basics of additive manufacturing, including a comprehensive overview of additive manufacturing, the seven additive manufacturing technologies, and basic safety guidelines:

- Additive Manufacturing
- Design for Additive Manufacturing
- Binder and Material Jetting
- Sheet Lamination
- Prototype and Production
- Math Fundamentals
- Safety

### EARN A NATIONALLY RECOGNIZED CERTIFICATION

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[sme.org/training/additive-manufacturing-certification](https://sme.org/training/additive-manufacturing-certification)

Choose a starting point based on employee's experience or company goals for a quick-start training solution.

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### Suggested order of Classes (20):

- Introduction to Additive Manufacturing **111**
- Additive Manufacturing Safety **121**
- The Basic Additive Manufacturing Process **131**
- Additive Manufacturing Methods and Materials **141**
- Introduction to Hybrid Manufacturing **151**
- Math Fundamentals **101**
- Algebra Fundamentals **141**
- Additive Manufacturing: Prototype to Production **162**
- Design for Additive Manufacturing **201**
- Additive Manufacturing Materials Science **211**
- Integrating Additive Manufacturing with Traditional Manufacturing **221**
- Additive Manufacturing as a Secondary Process **231**
- Reverse Engineering for Additive Manufacturing **242**
- Design for Fused Deposition Modeling **301**
- Design for Material Jetting **302**
- Design for Directed Energy Deposition **303**
- Design for Laser Powder Bed Fusion **304**
- Design for Vat Photopolymerization **305**
- Design for Binder Jetting **306**
- Design for Sheet Lamination **307**