



Proud Partner within the



THE UNIVERSITY OF TEXAS AT EL PASO

Additive Manufacturing Training and Workforce Development Programs

Our training sessions are designed for military, government, educational institutions, and private businesses. They provide a significant focus on the use of additive manufacturing (AM, also known as 3D printing) and its applications. Only state-of-the-art equipment and software are utilized. The content is well-balanced, consisting of hands-on exercises and lectures.

AM LECTURE

Duration: 1 - 2 hours

Class size: 50+

Location: On site or at UTEP

Trainer: AM expert

Printers: None

Style: 100% Lecture

Topics:

- Additive manufacturing technology overview
- AM fundamentals and limitations

INTRODUCTION TO DESKTOP 3D PRINTING

Duration: 1 Day

Class size: 10 - 20 trainees

Location: On site or at UTEP

Trainers: AM expert + 1 expert assistant

Printers: Desktop

Style: 70% hands-on, 30% lecture

Topics:

- Additive manufacturing technology overview
- AM fundamentals and limitations
- Introduction to build file preparation software
- File preparation and use of support structures
- Basic operation of a desktop 3D printer



LEVEL I TRAINING: INTRO TO ADDITIVE MANUFACTURING (AM)

**Our most popular program*

Duration: 3 - 5 days

Class size: 10 - 20 trainees

Location: On site (preferred) or UTEP

Trainers: AM expert + 1 or 2 expert assistants (based on class size)

Printers: Desktop

Style: 70% hands-on, 30% lecture

Topics:

- Additive manufacturing technology overview
- AM fundamentals and limitations
- In-depth desktop 3D printer operation
- Introduction to computer-aided design (CAD)
- Introduction to build file preparation software
- AM process chain
(design, process parameters, post-processing, and inspection)
- Applications of AM
- Equipment maintenance and troubleshooting
- Advances in AM research
- Competitive capstone project



LEVEL II TRAINING: ADVANCED ADDITIVE MANUFACTURING (AM)

Duration: 2 weeks

Class size: 10 - 20 trainees

Location: UTEP

Trainer: AM expert + 1 or 2 expert assistants (based on class size)

Printers: Desktop & industrial

Style: 70% hands-on, 30% lecture

Topics:

- Review of Level I topics
- Advanced CAD
- FEA stress analysis
- 3D scanning and reverse engineering
- Design optimization
- AM material properties and safety
- Exposure to industry-grade AM equipment
- Competitive hands-on capstone projects using reverse engineering, simulation, and 3D printing

LEVEL III TRAINING: CUSTOMIZED TECHNOLOGY-SPECIFIC OPERATIONS

Duration: Varies (1 - 2 weeks)

Class size: 1 - 4 trainees

Location: On site (if machine is available) or UTEP

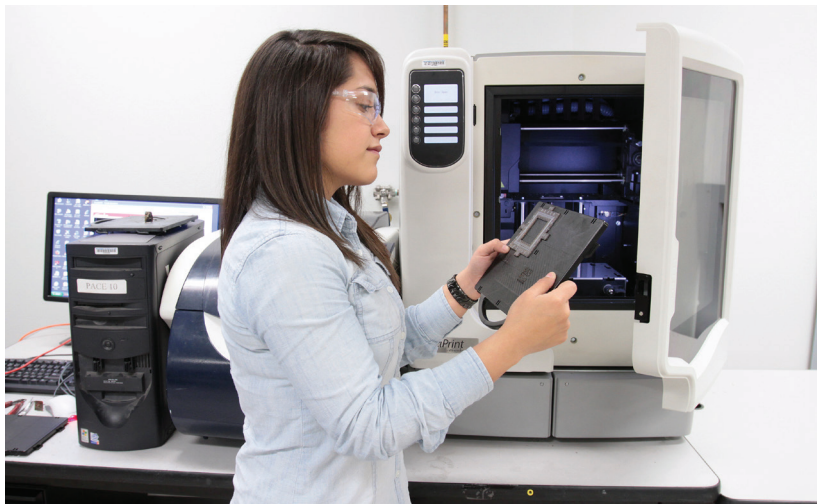
Trainer: AM expert + expert assistants (as required)

Machines: 60+ available (printers, testing, and other)

Style: Over 90% hands-on

Topics:

- Advanced operation and maintenance
- Material handling
- Material testing and characterization
- In situ monitoring and process control
- Custom operation (functional products)



FOR MORE INFORMATION, PLEASE CONTACT:

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