Additive Manufacturing and Design at Penn State

As a leader in additive manufacturing and design (AMD) education and research, Penn State prepares tomorrow’s additive manufacturing engineers to advance and enhance manufacturing concepts and capabilities. Through its master of engineering, master of science, and graduate certificate in AMD, Penn State provides flexible residential and online options to meet the needs of today’s graduate students.

Graduate Program Offerings

Graduate Certificate
- Offered online through a partnership with Penn State World Campus
- Full-time or part-time enrollment available
- 12 credits

Master of Engineering
- Offered online through a partnership with World Campus
- Full-time or part-time enrollment available
- 30-32 credits
- Scholarly paper required

Master of Science
- Offered in-residence at University Park
- Full-time enrollment
- 30-36 credits
- Master’s scholarly paper or thesis required

Education and Research

AMD courses and research showcase the multidisciplinary aspect of the program, offering big picture concepts and in-depth experiences and education.

Core course topics highlight:
- Science of Additive Manufacturing
- Additive Manufacturing Materials
- Design for Additive Manufacturing
- Additive Manufacturing Processing
- Metal Additive Manufacturing Lab

More than 60 leading amd faculty at Penn State explore existing and emerging multidisciplinary fields including:
- Cybersecurity
- Data Science
- Bioprinting
- In Situ Sensing
- Machine Learning
- Materials Design

amd.psu.edu

State-of-the-art 3D-printing labs and facilities at University Park Learn more

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