

# MFG 250 : ADDITIVE MANUFACTURING I

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## Transcript title

Additive Manufacturing I

## Credits

3

## Grading mode

Standard letter grades

## Total contact hours

50

## Lecture hours

20

## Lab hours

30

## Prerequisites

MFG 100.

## Course Description

Introduces additive manufacturing concepts, including various processes used in rapid prototyping. Builds design and fabrication skills by using a three-dimensional printing process to create sample parts.

## Course learning outcomes

1. Demonstrate safe practices while using the MATC Machining Lab.
2. Describe the additive manufacturing process.
3. Explain the appropriate uses of additive manufacturing.
4. Demonstrate the 3D printing process using Fused Deposition Modeling (FDM) printers.
5. Perform troubleshooting operations on FDM printers.

## Content outline

1. Methods for producing a printable file
2. Considerations for preparing a file to print
3. Use of 3D slicer software
4. Exporting files to 3D Printer
5. Troubleshooting common issues on FDM printers

## Required materials

See syllabus.