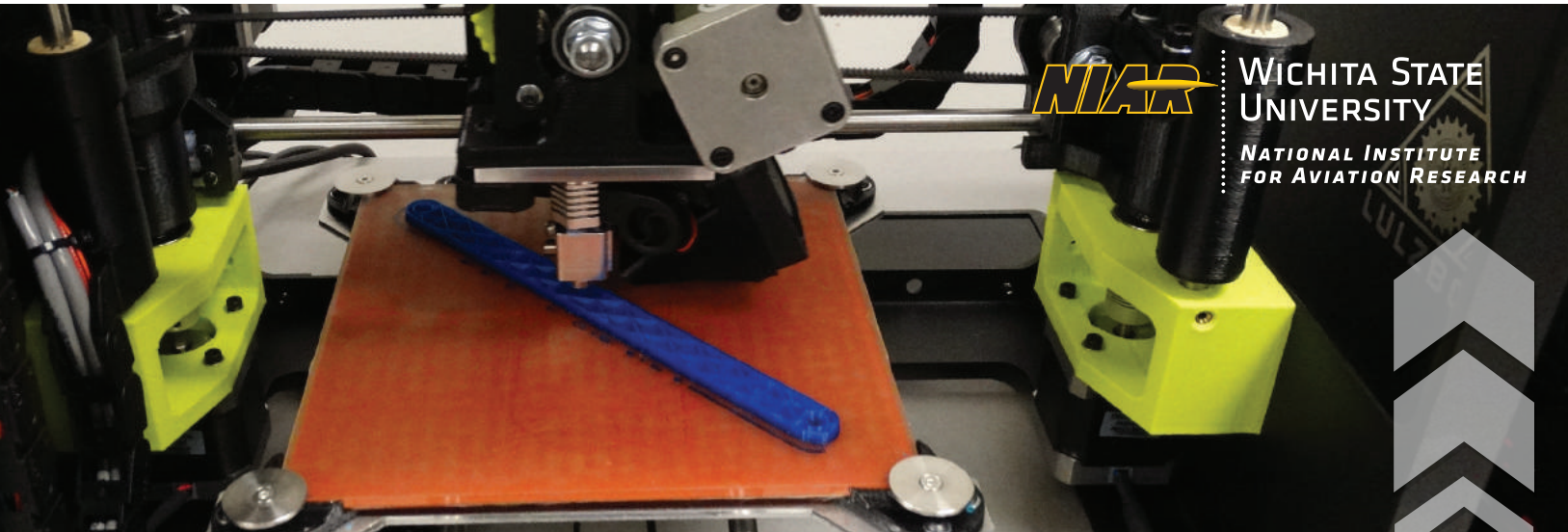


The Additive Manufacturing Laboratory supports local and national industry to build 3D prototype models from various materials. Prototype parts can then be used to test for fit, form and function. Parts can vary from small, intricate models, to much larger mockups.



# ADDITIVE MANUFACTURING



## → CAPABILITIES

- FDM Printers from Consumer grade to Industrial Grade qualities
- PolyJet Printer for high resolution and smooth surface quality
- DMLS, Direct Metal Laser Sintering, Printer
- Materials for simple prototypes to high strength and high temperature parts
- Full Color 3D printing

## → LAB EQUIPMENT

- **BAAM (Big Area Additive Manufacturing FDM)**
  - Materials: Contact for available materials
  - Layer Resolution: 0.1" -0.2" thick
  - Build Envelope: 12ft x 6ft x 6ft
- **Fortus 400mc (FDM - Fused Deposition Modeling)**
  - Materials: PC-ABS, ABS-M30i, PC-ISO, ULTEM 9085, ULTEM 1010, PC-10
  - Soluablesupports available for PC-ABS, ABS-M30i and PC-10
  - Layer Resolution: 0.005", 0.007", or 0.012"
  - Build Envelope: 16"x14"x16" high
- **Connex260 (Polyjet)**
  - Digital-material mixing between plastics and rubber, contact for material options
  - Layer Resolution: 0.0006"
  - Build Envelope: 10" x 10" x 8"
- **Eden 500V (Polyjet)**
  - Materials: Tango Black, Vero Black, Vero Clear, White
  - Layer Resolution: 0.0006" or 0.0011"
  - Build Envelope: 19" x 15" x 7.5" high
- **ESO M280 (DLMS - Direct Laser Metal Sintering)**
  - Materials: Stainless Steel (PH1), Aluminum (AlSi 10Mg), Titanium (Ti64)
  - Layer Resolution: 0.0007"
  - Build Envelope: 10"x10"x12" high

## • MCOR IRIS HD (SDL - Selective Deposition Lamination)

- Material: Standard paper & resin
- Full color Range
- Layer Resolution: 0.004"

## • 3DP X1000 (FDM - Fused Deposition Modeling)

- Materials: PLA, ABS, PC, Nylon, NinjaFlex, PVA, HIPS
- Layer Resolution: 0.003" and up
- Build Envelope: 40"x40"x20" high

## • Altair Pro (FDM - Fused Deposition Modeling)

- Delta Style Printing Technology
- Materials: PLA, ABS, PC, Nylon, NinjaFlex, HIPS
- Layer Resolution: 0.002" and up
- Build Envelope: 8" Dia x 10" high

## • Markforged (FDM - Fused Deposition Modeling)

- Composite 3D Printer
- Materials: Nylon, Fiber Glass, Carbon Fiber, Kevlar
- Layer Resolution: 0.004"
- Build Envelope: 12.6" x 5.2" x 6.0" high

## • Lulzbot TAZ4 & Mini (FDM - Fused Deposition Modeling)

- Materials: PLA, ABS, Nylon, NinjaFlex, PVA, HIPS
- Layer Resolution: 0.003"-0.014"
- Maximum Build Envelope: 12"x11"x10" high

## → CONTACT

**Chris Rempe, Manager**  
(316) 978-5965  
chris@cadcamlab.org