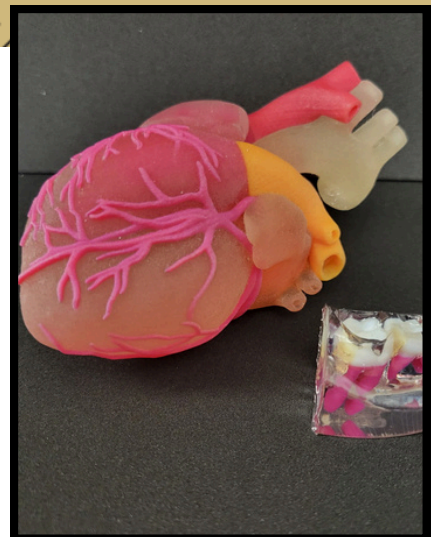


3D Printing Services  
Cutting & Milling Services  
Modeling Services



# TABLE OF CONTENTS

---

**3** Working with Inworks

**4** The Prusa i3 MK3S 3D Printer

**5** The Markforged Mark Two 3D Printer

**3D Printing  
Services**

**6** The J5 MediJet 3D Printer

**7** The Cricut Maker

**Cutting & Milling  
Services**

**8** The US Cutter

**9** Translating 2D Models → 3D Models

**Modeling  
Services**

**INWORKS INNOVATION INITIATIVE**

# WORKING WITH INWORKS

Thank you for your interest!

For initial inquiries, we ask that you fill out our [inquiry form](#) about the project you would like to collaborate on.

We will respond within one week of receiving this form to schedule a meeting and discuss your project.



## Frequently Asked Questions:

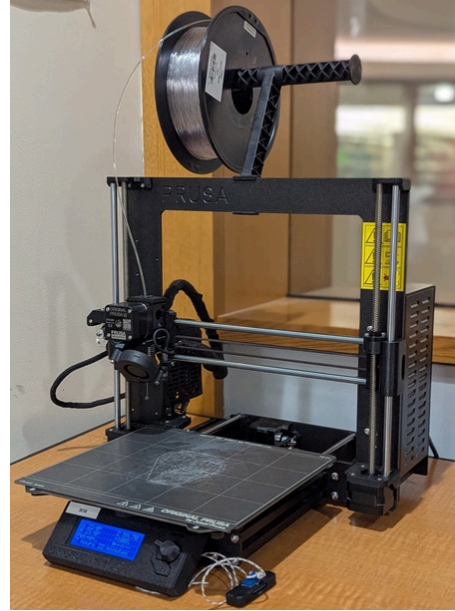
- How can I pay for my project?
  - We accept CU speedtypes or credit cards.
- How long until my order is ready for pick-up?
  - Dependent on projects in queue and machine availability; typically we have a 1 to 3-week lead time.
  - Rush service available for additional cost.
- What if I want a specific material?
  - We have biocompatible, flexible, and rigid materials available.
  - We are happy to order materials we do not have in stock, but additional lead time or cost may be incurred.
- How much will my project cost?
  - Cost will vary based on project. Cost is determined by material usage, labor, and service fees.
  - A quote will be provided before any production.
- Can you design my idea or device?
  - No. We are happy to translate your 2D dimensioned drawings into a 3D model, but we do not do device design from scratch.

Do you have more questions or want to know how we can help with your project? Feel free to email us!

Email: [inworks@cuanschutz.edu](mailto:inworks@cuanschutz.edu)

# 3D Printing Services

## The Prusa i3 MK3S



Rapid Prototyping

Composite

Medium Precision

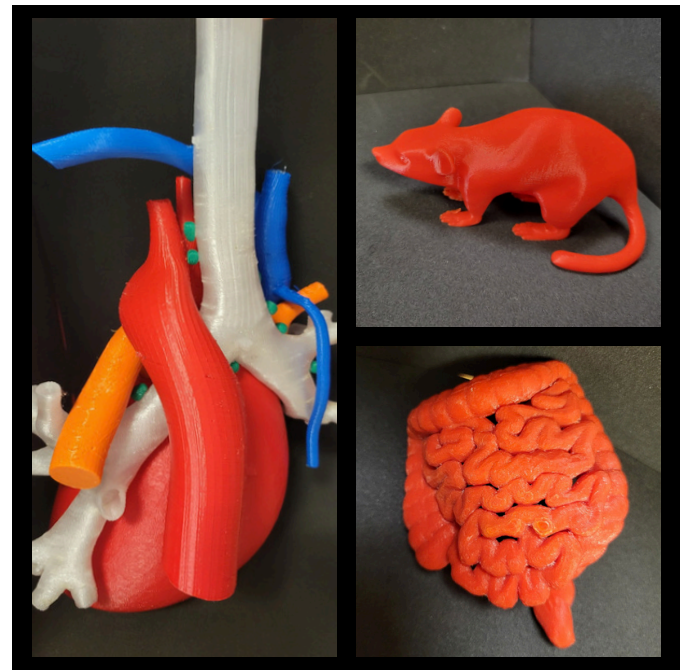
The Prusa i3 MK3S is a fused deposition modeling 3D printer that is a cost-effective option for printing prototypes out of a variety of plastic materials. We can rapidly and accurately produce quality prints that meet your unique project requirements.

### Machine Properties

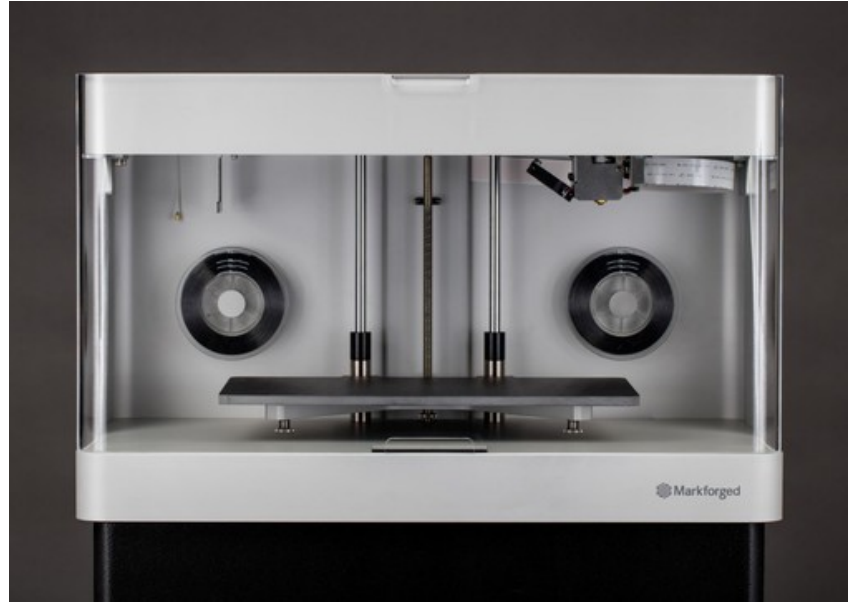
Build Volume (W x D x H)	250 x 210 x 200 (mm)
Layer Height	50-350 $\mu$ m
Materials in Stock	PLA, PETG, ASA
Compatible Materials	<a href="#">View Materials Here</a>
Price Range	\$-\$\$

### Additional Resources

Machine Handbook	<a href="#">MK3S</a>
Material Properties	<a href="#">Materials</a>



## The Markforged Mark Two



from Markforged.com

**High Strength**

**Lightweight**

**Medium Precision**

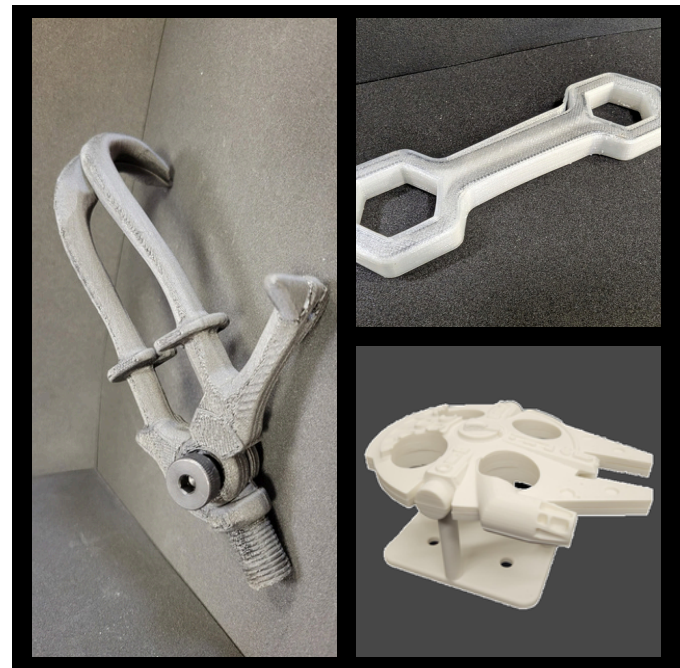
The Markforged Mark Two is a composite 3D printer that combines continuous fiber reinforcement with plastic filament to produce strong, durable, and lightweight parts. With various interchangeable plastics and fibers, you can customize your build to meet your needs.

### Machine Properties

Build Volume (W x D x H)	320 x 132 x 154 (mm)
Layer Height	50-250 $\mu$ m
Materials in Stock	Onxy, Carbon Fiber
Compatible Materials	<a href="#">View Materials Here</a>
Price Range	\$-\$\$

### Additional Resources

Technical Datasheet	<a href="#">Mark Two</a>
Material Properties	<a href="#">Composite Materials</a>



# 3D Printing Services

## The Stratasys J5 MediJet



from Stratasys.com

**Biocompatible**

**Voxel Printing**

**High Precision**

The Stratasys J5 MediJet is a high-resolution, photopolymer jetting printer with the capability for multi-material, multi-durometer, and multi-color parts. This all-in-one medical printer can produce anatomical models that are sterilizable and biocompatible.

### Machine Properties

Build Volume (W x D x H)	140 x 200 x 190 (mm)
Layer Height	18 $\mu$ m
Materials in Stock	Draft White, Med610, VeroClear, Elastico
Compatible Materials	<a href="#">View Materials Here</a>
Price Range	\$\$-\$\$\$

### Additional Resources

Machine Brochure	<a href="#">J5 MediJet</a>
Material Properties	<a href="#">Materials</a>



# Cutting & Milling Services

## The Cricut Maker



from Cricut.com

**Quick**

**Versatile**

**High Precision**

The Cricut Maker is a smart, digital cutting machine that can precisely cut, score, engrave, deboss, and draw on over 300 materials like paper, vinyl, and fabric. With fine-point and rotary blades, this machine is suitable for handling light to medium weight materials.

### Machine Properties

Cutting Area (Machine Mat)	29.2 x 59.6 (cm)
Cutting Area (Smart Materials)	29.7 x 360 (cm)
Materials in Stock	Vinyl, Paper
Compatible Materials	<a href="#">View Materials Here</a>
Price Range	\$-\$

### Additional Resources

Welcome Booklet	<a href="#">Cricut Maker</a>
-----------------	------------------------------



# Cutting & Milling Services



from USCutter.com

## The US Cutter MH-721 MK2

**Quick**

**Vinyl-Specialized**

**High Precision**

The US Cutter, model MH-721 MK2, is a professional quality, digital cutting machine specialized for cutting vinyl. With the ability to use your own fonts, artwork, and designs, this machine is best suited for creating signage, logos, and stickers.

### Machine Properties

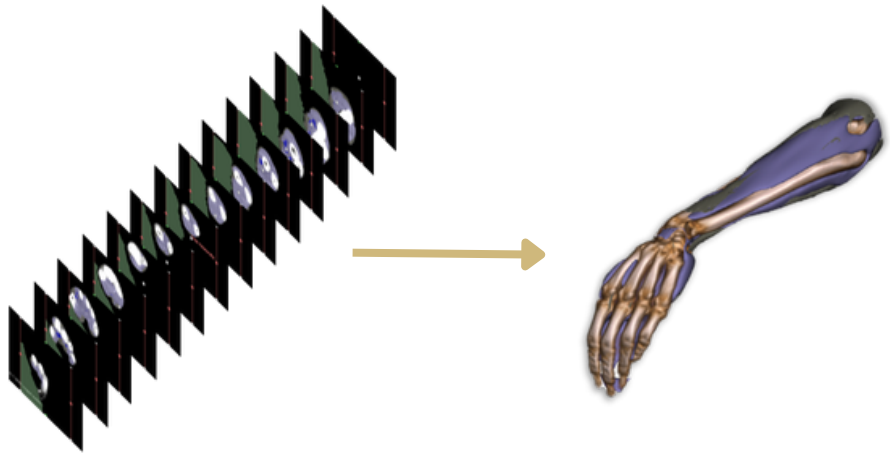
Cutting Area (Machine Mat)	60 x 243 (cm)
Materials in Stock	Vinyl
Price Range	\$-\$\$

### Additional Resources

Technical Datasheet	<a href="#">MH-721 MK2</a>
---------------------	----------------------------



# Translating 2D → 3D



**Customer-Led**

**Print-Ready**

**Anatomical Modeling**

Using 3D modeling software we can translate your 2D dimensioned drawings or your medical imaging stacks (eg. CT or MRI) into models suitable for 3D printing. Due to university intellectual property constraints, we do not offer device design from scratch.

**A meeting with Inworks and a deposit are required in order to initiate the translation process.**

### File Preferences

2D Drawings	PDF File (.pdf), Metric Units
Imaging Stacks	DICOM File (.dcm)

### Software Capabilities

Solidworks	3D Slicer
Onshape	ScanIP

