3D & Poster Printing Services

UCI Libraries

3D Printing, 3D Modeling and 3D Scanning Services

This page offers information about the UCI Libraries' 3D printing services, 3D modeling software and 3D Scanning. Due to licensing restrictions, 3D printing services, 3D Scanning and 3D modeling software is only available to UCI students, faculty and staff on a first serve basis.

3D Printing Service

3D Modeling

3D Scanning

FAQs

3D printing has changed the landscape of fabrication. From engineers to artists, entrepreneurs to hobbyists, 3D printing makes it easy to turn an idea into reality. The UCI Libraries have three 3D printers to support such creativity. Located in the Multimedia Resources Center in the Science Library the 3D printers are available to current UCI faculty, students, and staff.

To print a 3D object users must bring their design to the MRC during business hours. The print object must be an .STL file on a USB flash drive formatted in NTFS or FAT32 format. Each file or part if the file contains multiple parts must be submitted separately by filling out a separate 3D Printing Request Form available at the MRC. All submissions are subject to approval based on scheduling and availability of the 3D printers.

- Filament: 1.75 mm polylactic acid (PLA)
- Build Volume: 25.2 L x 19.9 W x 15.0 H cm [9.9 x 7.8 x 5.9 in] or 7,522 cubic centimeters [456 cubic inches]
- · Cost: \$6.50 setup fee plus cost of filament (\$0.05 per gram)
- Form of payment: Must use UCI ID card or UCI Libraries card to pay for object printed. Library copy/print cards are available for purchase to UCI
 students, faculty and staff without campus ID cards, and for departmental use. Funds can be added to both campus ID cards and Library copy/print
 cards, and Library copy/print cards may be purchased, at Card Refill Stations located in the Langson, Science and Grunigen Medical Libraries as well as
 the Libraries Gateway Study Center.
- · Available Colors: Natural, Black, White, Red, Blue and Seasonal (Varies each quarter)

How long does it take?

The 3D printer creates a model by applying one layer of material at a time, so the print time is dependent on the amount of modeling and support material required, as well as the intricacy of the model. If requested, a customer will be informed the amount of time the printer requires to complete their model but, depending on the size of the queue, it can take up to several days for their model to begin printing. Build times typically range from 2 hours to 48 hours each; palm-sized prints typically take less than ten hours, whereas larger models that reach the maximum size restraints can take over 48 hours to complete. Once the object is completed and inspected, the customer will be notified by email that their model is available for pick-up.

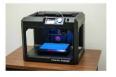
Full Service 3D Printing

Our full service 3D printing service addresses the needs of those who lack the time to learn to operate a 3D printer or require a faster turnaround due to impending class assignment deadlines. The technician will test integrity of file structure to make sure it is working and will optimize printer settings to print a denser object in less time. Our Makerbot printers and 3D printing experts are capable of fabricating high quality 3D printed objects. We will inspect the file, tune it and try to print it at least two times to our exacting standards.

Full service check-list

- 1. Patron fills out 3D printing service form and MRC staff attaches flash drive with STL file to printing form.
- 2. Staff checks file integrity and notifies patron if unable to print due to unforeseen circumstances.
- 3. Staff starts printing object or puts it on the printing queue if there is one, then MRC staff removes 3D print object from 3D Print Lab when complete.
- 4. Patron is notified that print is ready for pick up.
- 5. Patron comes to the MRC and picks up printing payment slip and pays setup fee plus cost of filament used at Science Library Check Out Desk. Patron is reminded that all 3D print jobs must be paid using a UCI ID card or print/copy card.
- 6. Patron returns to the MRC with proof of payment and picks up 3D printed object.
- 7. If patron does not pick up 3D printing object within 3 business days of being notified it is available, it becomes the property of UCI Libraries.

The UCI Libraries will be offering a self-service 3D Printing Service in Fall 2019. For any questions contact the MRC.







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3D Printing Tips

Once the 3D printed object is done and removed from the build plate it may require some post-processing. This may include:

- · removing the raft and/or support material
- removing tiny strings of filament or small blobs of melted plastic
- · smoothing imperfections
- · fastening two or more pieces together

Most post processing, for example removing raft and support material and tiny strings of filament can be done by hand. Smoothing imperfections can be easily done with a fine file and/or fine grit sand paper, in addition to a drill/Dremel tool with a grinder or sand paper attachment.

Fastening two or more parts together can be done with a variety of adhesives including super glue, epoxy, solvents, friction, or hot air. See the below links for more details about using solvents, friction, or hot air to weld together plastic parts.

Some useful links are:

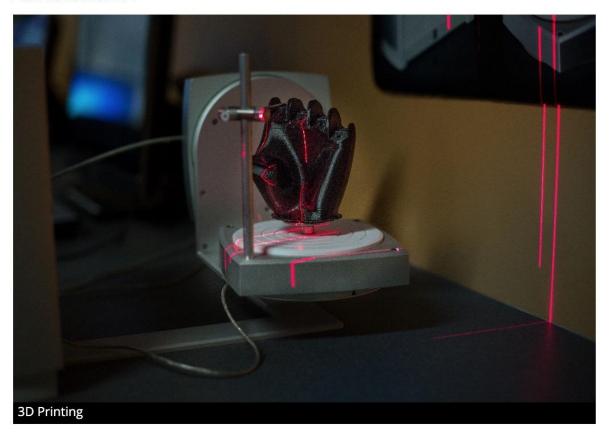
Model Repair Service

Skill Builder: Finishing and Post Processing Your 3D Printed Objects

Stratasys: Finishing bonding and gluing

Basic 3D Printing workshop

One hour Basic 3D Printing Workshop on Week 8 Thursday, May 23rd, 2019, from 10:00 - 11:00 a.m. in SL164



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Today's Hours



Multimedia Resources Center

Multimedia Resources Center

1.00 pm 5.00 pm

The Multimedia Resources Center (MRC) is located on the First Floor of the Science Library across from the Science Library Lobby entrance.

roday 3 riours.	1.00 pm - 5.00 pm
	View all hours →
Contact Info:	949-824-7072
	libmrc@uci.edu
	Driving Directions



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Multimedia Resources Center

MRC About

The Multimedia Resources Center (MRC) is the UCI Libraries' primary collection of audiovisual and computing materials, including Blu-rays, DVDs, films, videocassettes, streamed video, DVD-ROMs and CD-ROMs.

The MRC collection is intended to support the broad range of class showings, study and research interests on campus with particularly strong holdings in humanities and social sciences materials, as well as a broad range of general interest materials in the fields of science, medicine and technology.

The MRC provides UCI students, faculty and staff with 3D printing services, 3D modeling software, 3D scanning equipment and other forms of specialized and multimedia software and tools.

The MRC lends audiovisual equipment and Apple mobile devices like iPads to UCI students, faculty and staff with a valid UCI ID, and we also offer MacBook Airs, MacBook Pros and HP Tablet PCs to borrowers with a valid UCI student, faculty or staff ID and active UCInetID.

The center maintains a variety of spaces, including a presentation studio, one iMac technology-enhanced classroom, two PC technology-enhanced classrooms, group viewing rooms, a library employee meeting room, and a mixture of collaborative, music practice and reading and collaborative spaces.

Poster Printing Service



Posters are printed to fit 36" x 42" on enhanced matte paper.





All posters should be submitted as a PDF file.



Posters are printed within 1-2 business days.



The cost is \$50 per poster. Payment and pick-up happens at the Science Library Check Out Desk.



Visit or call the Check Out Desk at the Science Library - First Floor Lobby - (949) 824-3692.



To pay for a poster using a UCI account number, use this form.