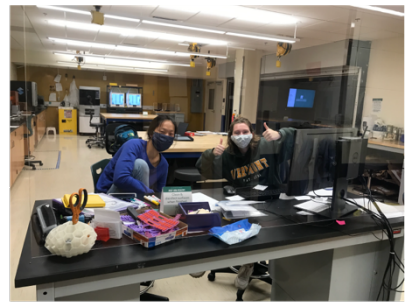
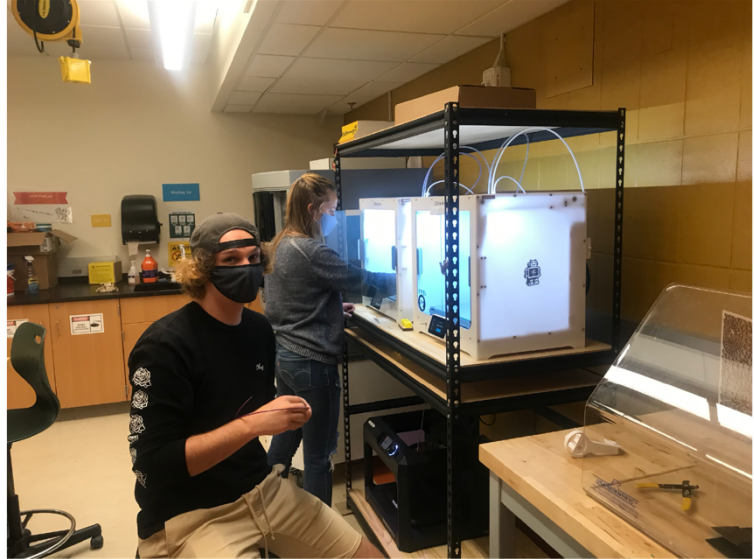


FabLab



Lab Supervisor:

Jennifer Karson, Lecturer, Department of Art and Art History

Lab Description:

The UVM FabLab provides digital fabrication technology and services for CEMS courses, research, faculty and students. Additionally, the facility includes soldering stations, microcontrollers, components and hardware to support student hands-on projects. The lab is staffed daily by student employees who are in undergraduate engineering programs.

Courses that use the laboratory:

- BME 001 - First Year Design BME Experience
- BME 081 – Biomedical Engineering Lab I
- BME 187/188 – Capstone Design
- EE 186 – Telecommunications Lab
- EE 187/188 – Capstone Design
- EE 001- EE Principles and Design
- EE 106 - QR:Embedded Programming in C
- ME 295 - Advanced Special Topics
- ME 183 - Mechanical Engineering Lab IV
- ME 186/186 – Capstone Design
- ENGR 195 - Special Topics
- ME 001 - First-year Design Experience

- ME 218 - Numerical Methods for Engineers
- CE 100 - Mechanics of Materials
- CE 001 – Statics
- CS 292 – Senior Seminar
- CS 121 - QR: Computer Organization
- ARTS 195 – Independent Study
- ARTS 144 – Digital Art
- ARTS 244 – Advanced Digital Art

CEMS UVM student clubs also routinely use the lab:
 AIAA, AERO, IEEE, Engineering World Health, UVM
 Innovation Fund, UVM Math Club.

Research Use:

The lab is used for faculty, graduate and undergraduate research.

Lab Facilities:

Votey 242: 1064 sq. ft.

Votey 248: 559 sq. ft.

Votey 227: 394 sq. ft.

Major Equipment:

Instrument	Make	Model	Year	Quantity	Comments
3D Printer	StrataSys	Uprint5	2017	1	#A093429
3D Printer	Dimension	Elite	2013	1	#A092166
Laser Cutter	Epilogue	Fusion M2	2019	1	#A093779
3D Scanner	Nextengine	2020i	2012	1	
3D Printer	Ultimaker	S5	2019	2	#A093799/800
Resin 3D Printer	Formlabs	Form2	2019	1	#A093798
3D Printer	MakerBot	Replicator	2018	2	n/a
3D Printer	MakerBot	Sketch	2021	2	n/a

Software:

Vendor	Software	Version
Stratasys	GrabCAD Print	1.38
Python Software Foundation	Python	3.9.0
Solidworks Corporation	Solidworks 2019	
Corel	CorelDRAW	18.1.0.661
NextEngine	ScanStudio	2.0.2
MakerBot	CloudPrint	2021
Adobe	Adobe Creative Suite	2021