2016 2017 YEAR $\mathbf{\Gamma}$ MAKING





innovation initiative

The mission of Project Manus is to enable students to fully experience Mens et Manus. For many years, MIT has led by example on integrating making on campus. Maintaining this leadership requires adaptation of new technologies, tools, training and improving access for students. To this end, Project Manus is dedicated to

- training students on maker technologies
- upgrading spaces and equipment
- introducing new technologies
- creating new campus makerspaces
- fostering maker communities
- collaborating with peer universities, alumni, government and industry.

Through efforts in training, outreach and community building, the past year has been a productive one. For full details on all of our programs, please visit our website at project-manus.mit.edu.

Project Manus The Year In Numbers

1894 **Mobius App** Initiated 585 MakerLodge Training

Universities 115Represented at **ISAM 3D Printing** 1044 **Service Print** Attended the 625

Let's Make Event

Maker Tool 263**Kits Earned** Project Manus would like to acknowledge the generous support of the following individuals and organizations.

Erika N. '04 & Colin M. '89, SM '91 Angle Fidelity Charitable Gift Fund John Douglas Helferich '79, SM '11 Laurie & Ralph '82 Inglese Meghan & Peter Agustine '85 Quigley Heffernan & Quigley Trust Victor Robert Ambros '75, PhD '79 Rosalind Candice Lee '76 David A. Dobos '77 Craig L. Edelstein MBA '06 Bristol-Myers Squibb Foundation William James Fienup '03, SM '05 Lisa M. & John A. Sweeney P '16 Siamrut Patanavanich, '09, SM '11





MakerLodge

Designed to accelerate initiation into MIT's making culture, freshmen are trained in small groups by student mentors on 3D printers, laser cutters, bandsaws, drill presses, hand tools and more. Once training is complete, MakerLodge graduates gain access to a dozen makerspace communities, receive \$100 in MakerBucks and a maker tool kit. Since the program launched in September, over half of the freshmen have begun training and over a third have completed training. The MakerLodge is the first and only program of its kind in the country.

Mens et Manus: Building on the Science Core

This freshman seminar, presented by the Dean for Undergraduate Education, taught students modern engineering methods that related to their General Institute Requirements. Project Manus supported the DUE's effort by providing seminar students with accelerated shop training in the MakerLodge.

Freshman Maker Communities

After completing MakerLodge training, students can join any of twelve Maker Communities including the Edgerton Student Project Lab, the Hobby Shop, MakerWorkshop and others. These communities host regular social events for members such as MakerWorkshop's Fab Fridays and Maker Mondays.





<u>Mobius</u>

The Mobius app connects users to making resources on campus. A powerful database, the Mobius system also allows shops to manage their spaces, equipment and user training. Mobius features a payment system that allows makers to purchase supplies using a credit card, TechCASH or MakerBucks.

MIT Maker Connection

An iPad sign-in system for makerspaces across campus developed to better track usage of facilities.

3D Print Service

Project Manus partnered with CopyTech to provide a 3D Printing Service. Members of the MIT community can upload 3D models to the cloud for printing.

Community Events

Let's Make and Make Cool ShMIT, two evening events co-sponsored by the Martin Trust Center, attracted hundreds of members of the MIT community to come together and make.

Intro to Making

In partnership with the Martin Trust Center, the course 15.S50 Intro to Making was designed to act as an on-ramp to making for non-freshman students across the institute. Enrollment grew from 30 to 50 students from the fall to spring semester.

ISAM

The 1st International Symposium on Academic Makerspaces (ISAM) was held at MIT in November 2016. ISAM gathered over 330 professionals and students for the first event of its kind. Attendees from fourteen countries spanning six continents were represented. ISAM is a collaborative effort of the Higher Education Makerspaces Initiative (HEMI).

HEMI

Co-founded by Project Manus, the Higher Education Makerspaces Initiative (HEMI) is a collaboration of leading universities focused on solving the challenges of academic makerspaces and sharing best practices.

<u>Maker Share</u> Community Site

An online resource created by HEMI and seeded by Project Manus, Maker Share is where the academic maker community comes to share and learn best practices.

<u>makershare.mit.edu</u>

Academic Makerspace Courses

Courses designed to equip makerspace professionals with the means to maximize students' hands-on access to the best tools and technologies while minimizing risks, hazards and cost. Organized and taught by the Project Manus staff with guest speakers from HEMI, the courses were offered through MIT'S Professional Education Program and ISAM 2016.



Freshman Year in Making

The development of an online portal that will guide first year students through the system of makerspaces, resources and training available on campus. freshmanmakers.mit.edu

Summer Maker Kits

A program of engaging students and alumni in MIT's making culture through a series of maker kits mailed to them during the summer.

Consortium

Project Manus is launching a consortium of universities that share making resources, best practices and the Mobius system.

Maker Carts

Portable making carts for use in the classroom. We bring the makerspace to the classroom enabling making in freshman seminars.

