



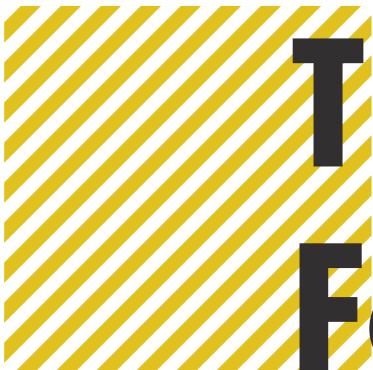
THE FAB FOUNDATION

# FAB LAB 2024

SOLUTIONS







# The Fab Foundation

The Fab Foundation is a US-based 501(c)(3) non-profit driving growth, innovation, and capacity-building for the global fab lab network.

Founded in 2009 as the educational outreach program for MIT's Center for Bits & Atoms, we align our work with their research exploring the boundaries between computer science and physical science.

- » An Anchor Foundation of the Global Maker Movement
- » Creators of Fab Academy: Learn How to Make (Almost) Anything
- » The Driving Force Behind Academany: The Academy of (Almost) Anything
- » Hosts of the annual Fab International Conference

**Our Mission: To democratize access to the digital fabrication tools and knowledge that allow anyone to make (almost) anything.**

Today's technologies make it possible to educate, innovate, and invent unlike ever before—but too often and for too many, they remain out of reach. By propagating fab labs that not only provide access to these technologies but also teach their use, we can facilitate rapid prototyping, radical collaboration, and open-source innovation on a grand scale.

Digital fabrication represents the future of innovation. We believe that future should belong to everyone.

## GLOBAL REACH

The Fab Lab Network: 2000+  
Fab Labs in 126 Countries

An Anchor Organization of  
the Maker Movement

Fab Academy - Education in  
over 50 countries

## HISTORY

### 2008-2010

Fab Foundation was created

### 2010-2015

Obtained non profit status

### 2015-PRESENT

over 100 labs set up all over the globe

## SERVICES

**DESIGN AND CONSULTANCY**

**PROCUREMENT AND SHIPPING**

**INSTALLATION AND TRAINING**

**WORKSHOPS AND EXTENDED EDUCATION**

**FAB ACADEMY**

## CONTACT

### MOBILE

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### WEBSITE

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### E-MAIL

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# What we offer

## Global Expertise, Local Impact

With over a decade of experience, Fab Foundation has launched more than 2,500 labs across 126 countries.

We take pride in tailoring spaces to meet user needs. From compact micro labs at refugee camps to “super labs” that cater to entire nations, our solutions are as diverse as the communities they serve.

Our labs make a real, local impact worldwide at schools and universities, workplaces, libraries, museums, community centers, research institutions, and more.

## Experience That Benefits You

We've built more than just fab labs. We've built a network.

Strong, established relationships with top industry vendors help us pass cost savings along to you. Beyond sourcing, we are well-versed in complex project management, including internationally.

Our multilingual, multinational team handles shipping and installation logistics, trainings, and more—all so you don't have to.



# Our Services

## End-to-End Fab Lab Deployment

We want to help you launch the fab lab of your dreams—whatever that means to you! Taking a DIY approach? Use our free resources as a guide. For a more tailored solution, hire us for bespoke support.

We handle quick or multi-year projects, advising on considerations like safety measurements, air handling, water supplies and drainage, and other setup needs in addition to handling procurement and deployment.

We also provide curricula, training, and other educational resources to help you activate your space—and users!—to their fullest potential.

## Services Include

- **Deployment expertise:** customized, comprehensive support for fab lab design, procurement, installation, and training—whether you’re tackling logistics yourself, or hiring us to handle things for you.
- **Educational support:** expert knowledge-sharing in the form of technical trainings, professional development opportunities, digital resources, classroom curricula, and more.
- **Access to a global network:** with over 2,5000 labs in 126 countries, we support each other to meet niche needs in diverse contexts.
- **Ongoing support to sustain impact:** resources and consultancy services to help labs of all sizes thrive.



# Standard lab packages

## Standard Lab Packages: Something at Every Scale

### Micro and Mini Labs

These smaller-format labs offer a great introduction to digital fabrication, whether for a library, museum, classroom, or corporate setting. They're ideal for educational workshops and tinkering.

Offering swift implementation, Micro and Mini Labs can be fully operational with a trained team in just 2–3 months.

### Standard Labs

Our flagship Standard Labs boast an expansive array of digital tools, from laser cutters and 3D printers to CNC mills, comprehensive electronics workstations, and specialized equipment for molding, casting, and making composites.

These tend to be a top choice for educational institutions, science centers, larger community hubs, and boutique prototyping centers.

They're also Fab-Academy-ready!

### Super Labs

Our most comprehensive option, Super Labs offer cutting-edge technologies best suited for highest education, advanced research, and manufacturing.

For these specialized packages, we work with you to determine your needs. Equipment may include electric discharge machines, waterjet cutters, and automated electronics manufacturing units. Since labs at this scale require the most specialized infrastructure in terms of air handling, water management, and other systems, they typically require the most support.

## Laser cutting

SPEED AND PRECISION ACROSS MULTIPLE MATERIALS



Ideal for both rapid prototyping and intricate designs on cardboard, wood, craft foam, acrylic, leather, and more. Popular for educational programming due to their speed, laser cutters can bring ideas into the physical world in mere minutes!

## CNC Milling

CRAFT FULL-SCALE FURNITURE AND MORE



A favorite at many labs, CNC mills precisely cut wood, plastics, composites, and other materials with ease. Durable, large-format models are well suited for crafting full-scale furniture and other large precision projects.

## 3D printing

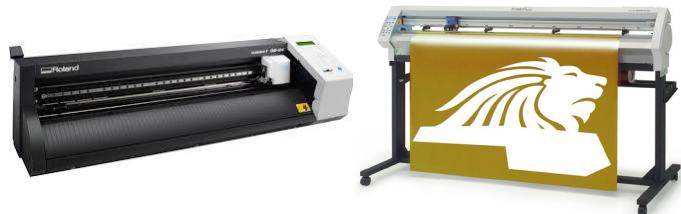
RAPID PROTOTYPING IN THREE DIMENSIONS



Perfect for custom parts, 3D printers transform digital models into physical artifacts, layer by layer. Advanced models are available for almost any type of material or project. Choose from PLA, ABS, flexible filament, resin, or more.

## Vinyl cutting

A VERSATILE WORKHORSE GOOD FOR MORE THAN STICKERS



Great for both entry-level and complex projects, vinyl cutters allow for easy creation of a, flexible circuits, screen-printing masks, and more. Cut more than just vinyl, like pop-up cards from paper or custom patterns from fabric.

## Electronics Workbenches



Thousands of items carefully curated to support users making custom electronics to drive advanced projects and prototypes: components, cables, soldering stations, and tools for testing and diagnostics, performance measuring, and debugging.

## Sewing & Embroidery

FABRICATE FOR FASHION OR FUNCTION



A staple in most fab labs, sewing and embroidery machines are incredibly versatile. Work with textiles to create wearables, inflatables, soft goods, or custom-embroidered garments (using up to 12 needles!).

## Molding & casting, composites

CRAFT EXACT REPLICAS OR SMALL-BATCH RUNS



Create 1–1,000 high-fidelity copies of existing objects, or custom molds for small production runs of original designs. Diverse materials yield a wide range of product characteristics: bouncy, transparent, durable, food-safe, and more.

## Advanced machining

METAL MACHINING AND MORE



From advanced milling centers and electric discharge machines to waterjet cutters and high end flatbed cutters, these advanced tools allow you to make your own machine parts and more, and even build full Fab Labs on site.



# Educational support

## Academy: A Global Gateway to Digital Fabrication Training

Fab Foundation proudly drives Academy, a worldwide distributed campus model that uses fab labs as classrooms and libraries to teach digital fabrication.

Students enroll in local workgroups to learn from peers and mentors and gain access to machines, connecting globally each week for synchronous, interactive classes and ultimately producing complex final projects.

- » Fab Academy is our flagship program and the worldwide adaptation of MIT's famous graduate-level class "How to Make (Almost) Anything" taught by Professor Neil Gershenfeld. Weekly modules provide a crash course in the fundamentals of digital fabrication, covering everything from CAD and proper documentation to computer-controlled cutting, 3D printing, embedded programming, and circuit board design and production.
- » Fabricademy merges fashion with sustainable development, exploring the interrelation of human-technology-environment through the notions of embodiment, materiality, ecodesign, biodesign, performance, smart textiles, and digital fabrication. Sessions offer a broad overview of the state of the art to tackle themes like personal fabrication, distributed manufacturing, industry 4.0, wearable technology, biofabrication, assistive technologies and sustainability.
- » Bioacademy blossomed from "How to Grow (Almost) Anything," a synthetic biology program at MIT. The course consists of three major modules: (i) a synthetic biology bootcamp; (ii) biofabrication and imaging; and (iii) genome engineering. Modules include: bio design, synthetic development biology, and bio production, among others.



## Additional Offerings: Educational Support & More

Education is central to our mission, and we are proud to provide supports for teachers and facilitators in all contexts.

For K-12 education, dive into SCOPES-DF: a platform designed for educators to document lesson plans and share educational insights.

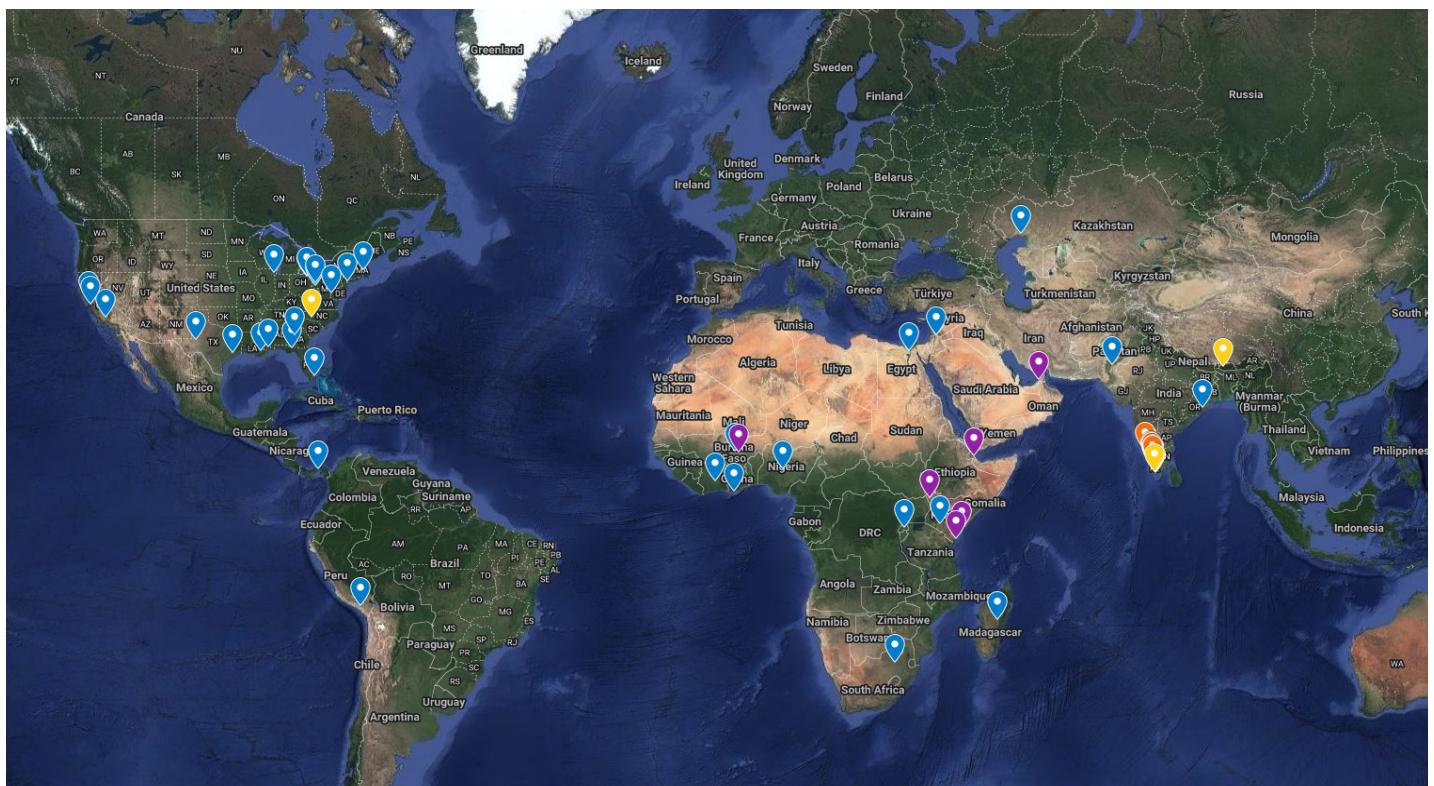
For more specialized needs, our Fab Learning Academy offers tailored trainings, resources, and strategies to harness the full potential of fab labs.

# Some of our previous clients...

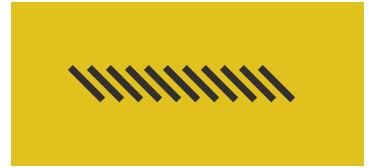


The Fab Foundation helped create more than 20 Mini labs, over 37 Fab Labs and 3 Super labs.

We work in over 15 countries, and counting...



# International Experts



While our headquarters are in Boston, Massachusetts, we work with experts from around the world, to install machines, tools and spaces, and train teams in their local language.

Our experts are all trained to use the diverse machines a Fab Lab offers, and individually have additional skills and knowledge which we employ where needed - be it in-depth knowledge of electronics manufacturing, development and deployment of digital infrastructure to serve the lab, or architectural knowledge to ensure the spaces are safe and well equipped, we have the needed knowledge in house.

We have set up over 30 Fab Labs in over 20 countries, allowing us to develop our knowledge on international deployment not only from a technical point of view, but also through a lens of equity, equality and a deep respect for local customs and cultures.



Luciano Betoldi

Boston, USA



Chelsea Lynn

Boston, USA



Rodney Williams

Chicago, USA



Jean-michel Molenaar

Chapreillan, France



Abubakari Abdulai Adam

Accra, Ghana



Norella Coronell

Barranquilla, Colombia



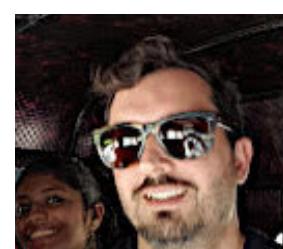
Claire Dorsett

Boston, USA



Sibu Saman

Kozhikode, India



Francisco Sanchez

Sitges, Spain

# More information

## Designing the perfect lab

Because every space is different, and you want to best fit for your project, we take time to speak with you and learn about your goals before offering you the solution that best fits your context.

Please contact us for a customized proposal for your project or community.

## Fab Foundation Fee

In order to ensure the continuity of the Fab Foundation and to ensure complete transparency, all equipment, materials and services delivered by the Fab Foundation are charged at cost, plus a 20% fee that ensures we can continue to provide a valuable service the Fab Lab network and supports our self funded community projects worldwide.

## Detailed Offers

We discuss pricing on a case by case basis taking into account the various stakeholders involved, we make considerations for non-profits and other institutions with a social mission and projects that are specially well aligned with our own mission.

**Coming  
soon !**

### Make it Mobile

Interested in a more modular approach? We can make our most popular machines mobile for easy transport within a single space or between locations. Perfect for educational outreach, these cart-based systems are optimized to fit through standard doorways and roll easily onto vans.

Features  
Locking casters  
Built-in material storage  
Fold-out work surfaces meet ADA standards  
Cabinets lock for added security  
Inherent whiteboard for quick diagrams  
Computer included

## CONTACT

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