

2020 MITx Impact Report

Reflections

Dear Friend of MITx,

Thank you. We are deeply grateful to you and to your many fellow learners who are able to [keep learning during these difficult times](#). Whether you come to MITx to advance your career, supplement your studies, satisfy your curiosity, or because some other way to continue learning has been curtailed, we very much appreciate your participation.

Your commitment to learn inspires everyone here, working to prepare the next semester of our massive open online courses, or MOOCs. In reflecting on this last year, we wanted to share some highlights to honor the growth of our online teaching and learning communities, the ways the MITx MicroMasters programs have supported career advancement for thousands of learners, and recognize the achievements of the MITx team in the trying circumstances of the last year.

With best regards,

Krishna Rajagopal

Dean for Digital Learning
William A. M. Burden Professor of Physics
MIT

Dana Doyle

Director
MITx Program

MITx: PROVIDING LEARNING OPPORTUNITIES TO THE WORLD

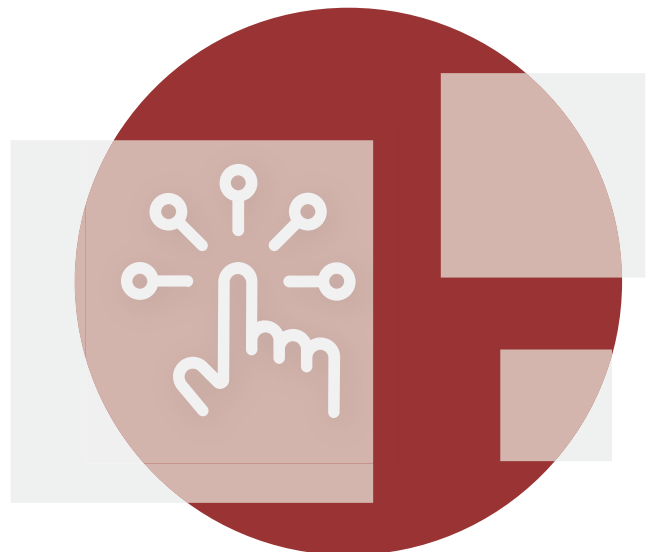
Since its launch in 2012, MITx has become an integral part of how MIT shares its knowledge and perspective with the world and is a central element of the global online learning opportunities offered by MIT. Learners around the world benefit from a curated selection of massive, open, online courses (MOOCs) from MIT on the edX platform that allow anyone to learn for free. These high-quality MITx MOOCs are drawn from MIT classes and built by MIT faculty and course teams with the support of MITx. They also offer the opportunity for learners to validate their educational achievement with certifications in a range of subjects and at a nominal cost, using such credentials to advance their education and careers.

MITx has helped me explore a new career path through amazing educational content. Lectures are so engaging that I feel I am actually sitting in the classroom. MITx has really made me love courses that I didn't like at my home university. I am extremely grateful.

Alandete, Lifelong learner, Colombia

ADVANCING DIGITAL LEARNING STRATEGIES

A joint program between MIT Open Learning and MIT's academic departments, the MITx Digital Learning Lab continues to work collaboratively with MIT faculty to enhance their pedagogy with the latest digital teaching and learning theories and technologies. As key team members who help produce digital content for MITx MOOCs and MIT residential courses, the Digital Learning Scientists and Fellows facilitate the design of the overall course structure and manage most of the development of the digital content and media for more than 800 course runs to-date. They offer critical guidance and support to students enrolled in these online courses. At the same time, many of them are playing absolutely



central roles within their departments in helping faculty to learn how to teach MIT's now-remote students effectively during the COVID-19 pandemic.

SUPPORTING DIVERSITY IN BIOLOGY RESEARCH

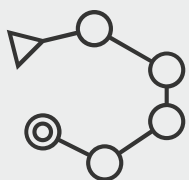
In an effort to encourage students from under-represented minority groups, first-generation college students, students from economically-disadvantaged backgrounds, and students with disabilities to attend graduate school and pursue a career in basic research, the MIT Biology Department hosts the MIT Summer Research Program (MSRP) in Biology. Students are able to conduct supervised research at MIT in a supportive learning environment with plenty of interaction with graduate students and faculty.

Unfortunately, due to the ongoing pandemic, the 2020 summer session was held remotely. As the session moved online, MSRP students were encouraged to take the MITx MOOC [7.QBWx Quantitative Biology Workshop](#) for a certificate. Mentors advised students that the course



certificate would bolster their graduate school applications as well as motivate them to learn more about programming, an essential part of any remote biology research project this year.

MITx IMPACT BY THE NUMBERS



807

TOTAL COURSE
RUNS



4.4M

UNIQUE
LEARNERS



9,587,623

TOTAL
REGISTRATIONS

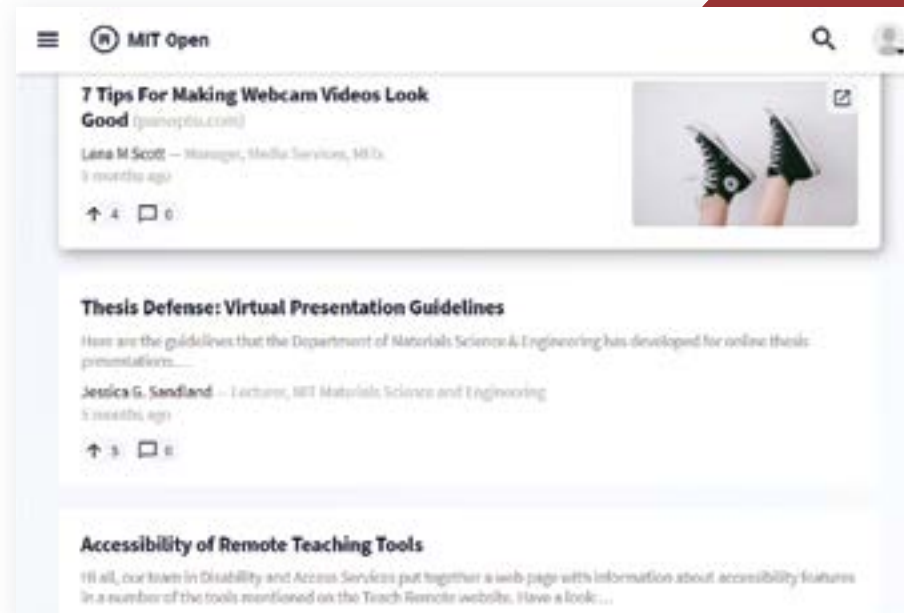


222,943

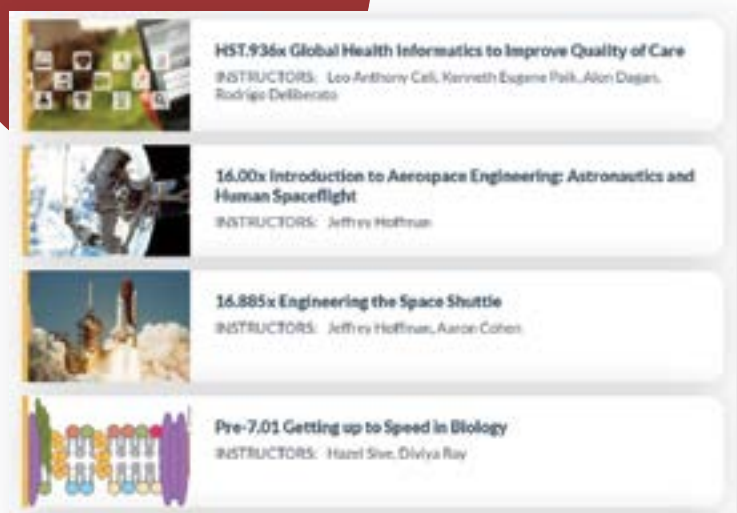
CERTIFICATES
ISSUED

SHARING TEACHING RESOURCES GLOBALLY

The value of a robust Digital Learning Lab was never more pronounced than in recent months as the effects of COVID-19 forced MIT to transition in March from in-person teaching to a remote experience for the remainder of the Spring semester. Drawing on their expertise, the MITx Digital Learning Lab Fellows and Scientists worked closely with faculty in their departments to help meet the unprecedented needs during the pandemic—creating tutorials and workshops on how to shift to teaching online as well as hosting open discussion on best practices and tools. They developed <https://open.mit.edu/c/teachremote>, a public website for the MIT community to share resources for teaching remotely, and are also part of the teams facilitating the transition to the new Institute-wide learning management system. Their contributions and existing relationships within the departments left faculty more equipped to respond with student-centered experiences as the semester moved online.



As part of our ongoing efforts to make more MITx resources available for online learners to learn at their own pace, featured content from several popular MITx courses is now available on the [MIT Open Learning Library](#). The MIT Open Learning Library is home to select educational content from [MIT OpenCourseWare](#) and [MITx](#) courses, available to anyone in the world at any time, and all material is free to use.



THANKFUL FOR YOUR SUPPORT

We are grateful to MITx supporters who help make education accessible to all learners, regardless of background or circumstance, and especially during times of economic or educational disruption. Their donations directly support the sustainability and growth of our efforts to create the MITx MOOCs millions of learners use and share the best of MIT's teaching with the world.

Many supporters have shared what inspired them to give to MITx.

Mastering and understanding some of the toughest subjects in engineering has been a strenuous journey. MITx has helped me understand what seems impossibly difficult, to be possible. I hope that more people can benefit from this.

Mike, MITx supporter

During our 2019-2020 year:

673

Supporters
donated to
MITx

Donors are from
63 countries on
6 continents



40 US states,
DC, Puerto Rico
and the U.S.
Virgin Islands

21%

of donors are
MIT alumni

SERVING MOTIVATED LEARNERS IN TIMES OF CRISIS

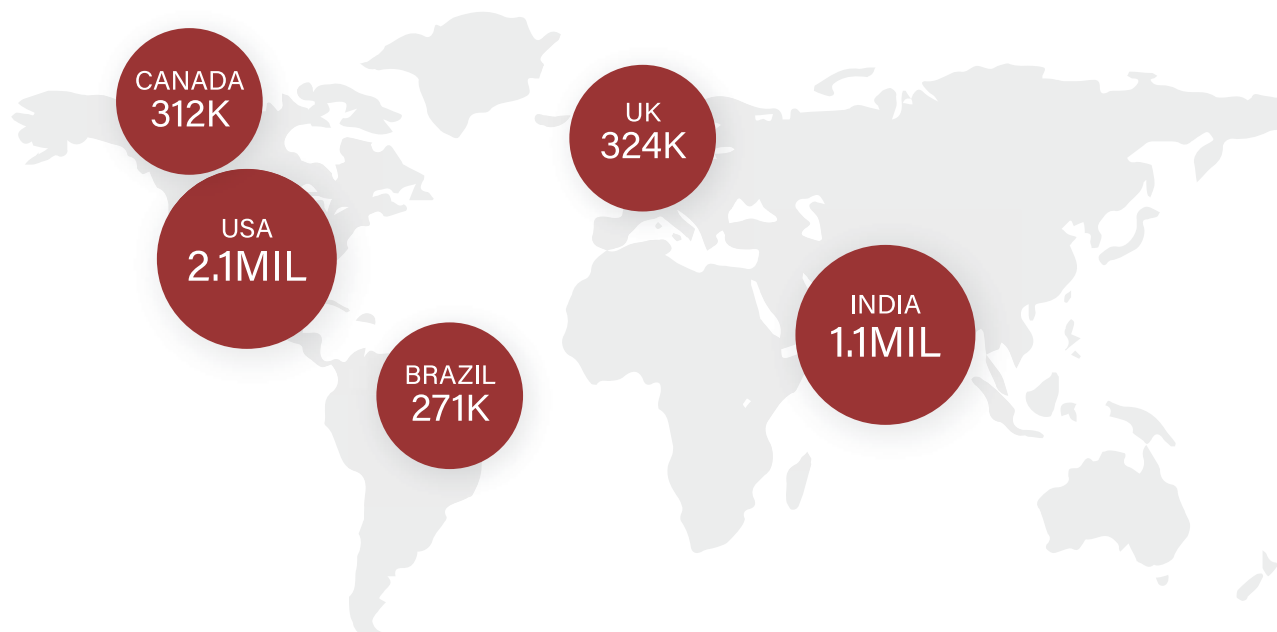
With a core mission to expand access to quality educational opportunities worldwide, MITx develops MOOCs that have garnered more than 4.4 million unique enrolled learners to-date.

When the Covid-19 pandemic compelled students and others to learn from a distance earlier this year, MITx received more than a half million new enrollments in their courses in the course of just four weeks, with the rate of enrollments jumping up by a factor of four. [Learners came to MITx MOOCs for numerous reasons](#), from a lack of online curriculum offered by their schools, a desire to pursue studies that finances or time previously did not allow, or simply as a welcome distraction while sheltering in place.

When Paula Unger, a learner from Peru was sheltering in place, she enrolled in Professor Eric Lander's [Introduction to Biology MITx course](#). Unger shared, "I'm mind-blown by how well the course is made. A lot of universities should learn to create courses that are as well-conceived pedagogically as these are. I could keep growing as a person, even though my life had been put on hold."

MITx IMPACT BY THE NUMBERS

Top 5 countries:



ADVANCING CAREERS AND FAST-TRACKING A MASTER'S DEGREE



MITx has been the foundation from which several learning opportunities have emerged, including the [MITx MicroMasters program](#). A new pathway for pursuing advanced degrees, the MicroMasters program provides a global cohort of learners an affordable way to advance their education and careers, or subsequently fast-track their completion of a professional Master's degree at MIT or elsewhere.

To date, there are more than 835,000 unique learners who have enrolled in one of our five MITx MicroMasters programs in Supply Chain Management; Data, Economics, and Development Policy; Principles of Manufacturing; Statistics and Data Science; and Finance.

The newest MITx [MicroMasters program in Finance](#) was announced in January of this year, with the first MOOCs for the program launching this September. The [MITx MicroMasters Program in Finance](#) includes a bundle of five online courses in finance taught by MIT Sloan faculty on the edX platform.

Enrolled learners are from **195** countries, **230** regions

5 - 7 years of average work experience

>35% have earned a graduate-level degree

2,852 MITx MicroMasters credential holders

139 MITx MicroMasters credential holders graduated from MIT as of August 2020

MITx MicroMasters credential holders are eligible to apply to **126** external graduate programs from **37** universities in **23** countries (including pathways at MIT)

For Robert Rains, a project manager for an organization charged with improving conditions in austere and hostile environments in developing countries, the MITx MicroMasters program in Supply Chain Management would give him a competitive edge in securing projects.

Importantly, the program also allowed Rains [the flexibility of time and geography](#) to continue working across Africa.

“The online program was very helpful in making sure that I could complete the bulk of that course work on my own schedule, which was very hectic,” Rains says. “Not only was I based in Africa at the time, but I moved countries almost every week. I had to study around different time zones and shifting work schedules.”

With support from his employer, he took a six-month leave of absence from work to spend time on the MIT campus as a graduate student, earning his full master’s degree in supply chain management in May 2019. The in-person experience, he says, was invaluable.

“MIT really makes the most of the time on campus,” Rains says. “I appreciated the time we had to work together in teams, which was an important complement to the independent work we did online.”



MITx opens the gateway to world-class teaching to all. Demotivated by the education standards at my college, I was almost about to quit pursuing my favourite subject, Physics. Shortly I came across MIT OCW and MITx on edX. The lecturers were highly motivating, and the teaching was filled with passion. I started regaining back my confidence and motivation.

Currently, I am doing MITx’s 8.02x and 8.03x to further strengthen my basics in Physics and to spend my quarantine (during the Covid-19 pandemic) usefully. These courses are really great and well structured. Till now I have been satisfied and more than satisfied with every MITx and MIT OCW course. I will always be eager to attend more advanced level courses that MITx might offer.

Purvaash, College Student, India

MIT ECONOMISTS ESTHER DUFLO AND ABHIJIT BANERJEE WIN NOBEL PRIZE



For their work in antipoverty research and relief efforts, MIT Professors of Economics Esther Duflo and Abhijit Banerjee and their colleague Michael Kremer, a Professor of Economics at Harvard, were named co-winners of the 2019 Sveriges Riksbank Prize in Economic Sciences in Memory of Alfred Nobel.

Professors Duflo and Banerjee helped create the [MITx MicroMasters program in Data, Economics, and Development Policy](#), which was launched in 2016. The program equips learners with the practical skills and theoretical knowledge to tackle some of the most pressing challenges facing

developing countries and the world's poor. Through a series of five online courses and proctored exams, learners gain a strong foundation in microeconomics, development economics, and probability and statistics, while engaging with cutting-edge research in the field.

SUPPORTING REFUGEE LEARNERS

Earlier this year, the MIT Refugee Action Hub [celebrated its second cohort of graduates](#) who completed the year-long Computer and Data Science certificate program. Designed for refugees and other displaced people around the world, the program offers them the opportunity to earn a free certificate and reactivate their education and career pathways.

Students work through the rigorous MITx MOOCs [Introduction to Computer Science and Programming Using Python](#) and [Introduction to Computational Thinking and Data Science](#) and are provided internships with local companies.

Mohammad Hizzani, a member of the graduating class, credits ReACT with giving him the resources to realize his potential, "ReACT gave me not just the knowledge, it gave me access to opportunities I never dreamed of."

The program is now [welcoming applications for the 2020-21 session](#).



AN AWARD WINNING MITx TEAM

The dedication and commitment of our MITx team is reflected in the remarkable MOOCs shared with the world. And in recognition of their service to the Institute, the MITx team was a recipient of one of this year's Infinite Mile Awards, an MIT award that recognizes teams who have made extraordinary contributions within their own organizations, "going the extra mile."

According to the selection committee, "This incredible team supports MIT faculty in making MITx MOOCs, going beyond delivering what people need, building trust and relationships, [and earning] many accolades from faculty. This team shows up day after day with such a positive attitude and is a shining example of people working together, putting their best foot forward, and delivering on the MIT mission."

The team also appreciates being part of a greater community of learners and educators. Sarah Davis, a project manager who helps grow MITx, [shared her thoughts](#) about what inspires her about this team, collaborations she drives, and the MITx mission.



NEW MOOCS TO COME

We are excited to share a number of [new MOOCs that are currently in our pipeline](#). They include courses that may be used in MIT classrooms, available on the edX platform, and directly support the academic department's digital learning strategies. Introduction to Algorithms, World Music: Global Rhythms II, Policy for Science, Technology, and Innovation Intelligence are examples of upcoming MOOCs in development.

MIT faculty are also encouraged to experiment with a targeted innovation such as a new tool or 1-2 week module covering a topic that can benefit more than one course. These express explorations include evaporative cooling technologies for use in low-income countries as a vehicle for interdisciplinary teaching modules and a web-based propulsion simulation learning tool.

We look forward to sharing more about these courses in the coming semesters.

Through online learning offered by MITx, I gained self confidence and was able to upgrade my knowledge on qualitative research. I discovered the better version of myself that amidst hectic schedules, I was able to finish the course and made me more equipped for work and for life. I'm pretty sure with my MITx learning, I will never be the same again.

Renetchie, Educator, Philippines