

MIT EECS Diversity, Equity and Inclusion (DEI) Annual Report
September 2022-August 2023

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EECS Diversity, Equity and Inclusion Goals

The goals for EECS Diversity, Equity, and Inclusion this year were three-fold:

- Support and continue to grow DEI efforts already underway within the department
- Continue to build the DEI infrastructure within the EECS department to create supportive groundwork for current and future DEI initiatives.
- Launch new initiatives prioritized by the department

The annual report outlines the work done in these areas for our EECS community to review and to remain informed.

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Department Demographics Update

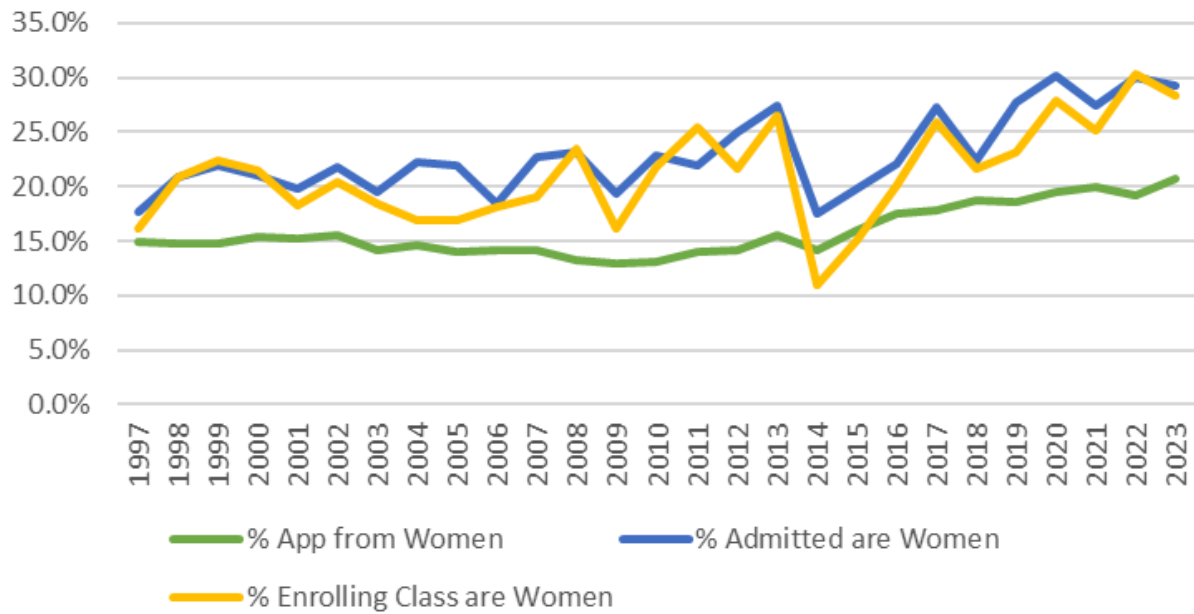
The department now publishes (requires MIT certificates) demographic information at <https://eeccsis.mit.edu/dashboard.cgi> and we give a quick summary in this section.

At the undergraduate level, the gender makeup of MIT EECS has significantly improved over the last two decades, going from 24% of students who identify as women in 2005 to 44% in 2023. Over the same time period, the proportion has gone from 20% to 33% for graduate students (which includes Masters of engineering students). For the PhD program, over 28.4% of the 2023 incoming class identify as women (with 28.0% overall).

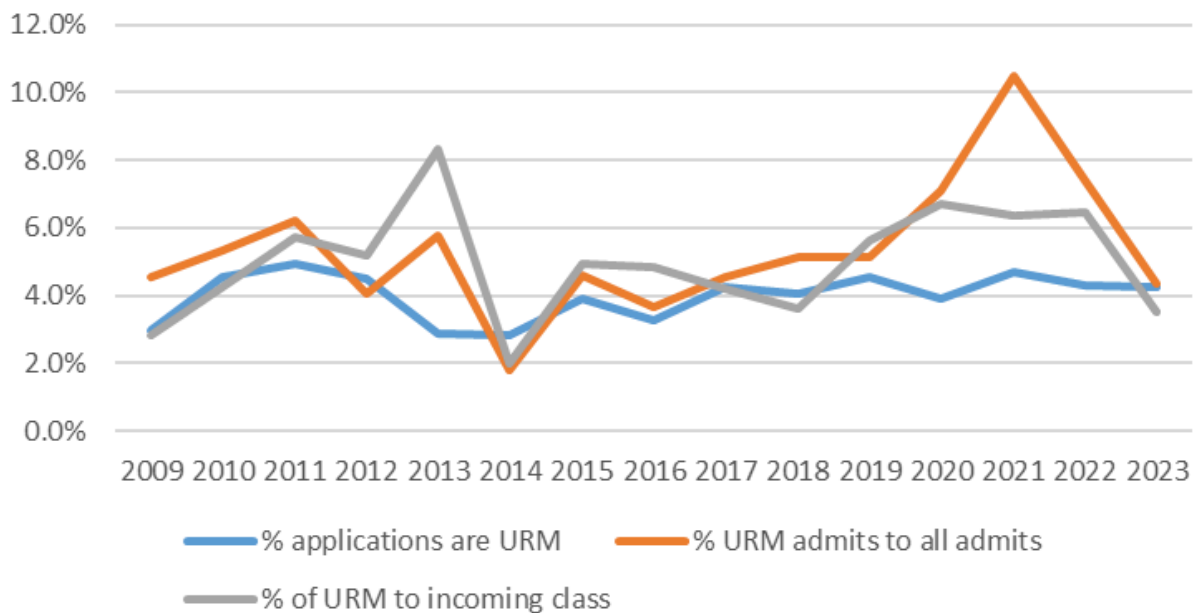
Underrepresented Minorities (URMs) make up 23.5% of our domestic undergraduates (vs. 32% of the US population). This number was 21% in 2005. At the graduate level (MEng, SM, PhD), the percentage has remained unchanged at 9% in 2005 and 9% in 2023.

In order to gain more insight about our PhD program demographics, we provide plots for the makeup of our applicant pool, admitted students, as well as the students who actually enroll.

EECS Doctoral Graduate Admission by Gender



Relative URM in Doctoral Graduate Admissions

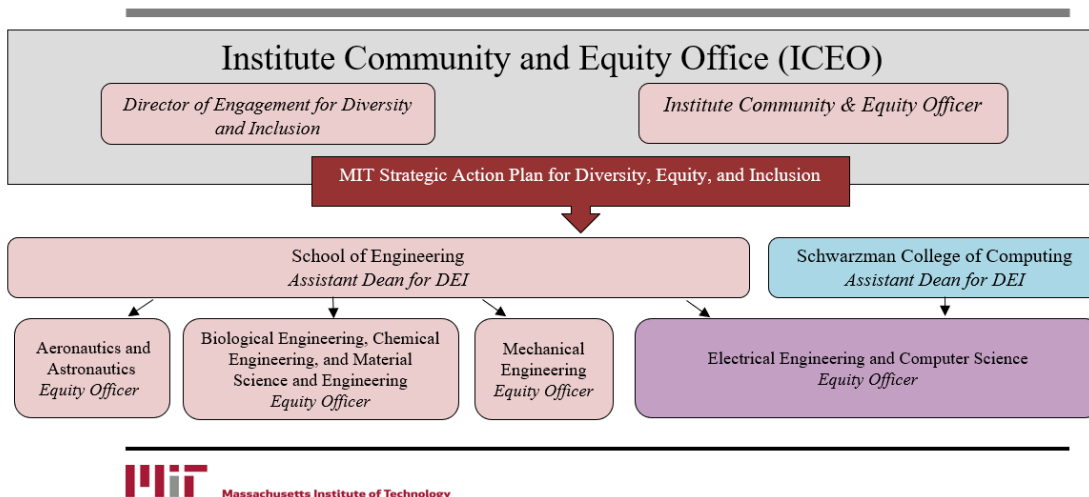


Working within DEI Infrastructure

MIT created an institutional DEI structure to implement change work around diversity, equity and inclusion throughout the institution. EECS DEI work is connected to the Institute Community and Equity Office (ICEO) which is overseen by Prof. Dan Hastings as the Interim Institute Community and Equity Officer and Beatriz Cantada, Director of Engagement for Diversity and Inclusion. EECS DEI work is also supported by the Assistant Deans for DEI in the School of Engineering and the Schwarzman College of Computing. The ICEO collected the individual Strategic Plans for Inclusive Excellence from all departments, labs, and centers in the Summer of 2023 and is doing the work this year of establishing resources that can assist and support commonly held goals for these units across the entire MIT campus.

The Diversity, Equity and Inclusion Program Director, Dr. Amanda Beyer-Purvis and the EECS faculty equity officers, Prof. Leslie Kolodziejski and Prof. Fredo Durand work as a team to develop partnerships within and outside MIT to improve inclusive excellence both in the department and in the broader EECS MIT-wide ecosystem. EECS has members on the School of Engineering DEI committee, has been meeting bi-weekly with the Office of Graduate Education, and joined the monthly DEI meetings hosted by the MIT Institute Community and Equity Office (ICEO), while also meeting regularly with outside peer university partners such as the LEAP Alliance and the Sloan Foundation directors group of the University Centers for Exemplary Mentoring across the US. EECS is also engaged in continued action and learning within the standing EECS-based Committee on Diversity, Equity and Inclusion.

MIT DEI Structure



EECS Committee on Diversity, Equity and Inclusion (CDEI)

The Committee on Diversity, Equity and Inclusion plays an oversight and information gathering role. It includes faculty members, undergraduate students, graduate students, postdocs and staff and is co-chaired by the DEI program director with participation of the equity officers. Members will serve two years, renewed in half every year. The committee may sponsor targeted task forces. This year the CDEI committee produced a group charter to clarify and outline its role as a committee within the department. The committee also implemented a community-based project: the EECS Community Pop-Up Space. The space was designed to host events highlighting the groups within EECS doing community and equity work, as well as to provide the community a space to connect with all members- staff, faculty and students. More can be read about the *EECS Community Pop-up Space* later in this annual report.

EECS Faculty Equity Officers

Equity Officers, Prof. Frédo Durand and Prof. Leslie Kolodziejewski continued to work with the program director on the many DEI efforts and initiatives within EECS. The EECS equity officers continue to be members of the department leadership group (DLG) that meets weekly during the academic year, and the equity officers also serve as members of the EECS Committee on Diversity, Equity and Inclusion (CDEI).

EECS Program Director of DEI

The Program Director of DEI has been working on several initiatives over the course of the year including:

- Collaboratively working with the faculty equity officers to launch the Strategic Plan for Inclusive Excellence in 2023.
- Organize, maintain inventory, and implement a computer lending program in EECS.
- Working to find a space in the EECS area for a Meditation/Prayer Room.
- Coordinating regular meetings and collaborations with the administrator of the MSRP: MIT Summer Research Program, Dr. Noelle Wakefield, to create EECS specific support in partnership with the MSRP program.
- Worked with the OGE on developing a plan for coordinated recruitment efforts for underrepresented students across the campus.
- Increase our departmental presence and coordination for attending conferences that promote diversity in STEM. EECS had a presence at 5 conferences this year to facilitate exposure of the department's graduate program and to support recruiting.
- Met with undergrads and grad students to discuss finding ways to provide administrative support and advocacy to help their organizational efforts.
- Supporting the connection of EECS to the LEAP Alliance of peer universities.
- Participating on the DEI Committee in the School of Engineering representing the EECS department, in addition to a number of other institute-level committee activities including the new SoE Post-doc program by serving on the admissions committee and the community track planning committee and the ICEO. institutional-wide diversity officer meetings.
- Help plan and run the DEI Town Halls (twice yearly- fall and spring semesters).
- Creating a data dashboard to look at course outcomes for students.
- Help organize EECS participation in the Grad Student Coaching Program.

EECS DEI Website

The new website contains extensive DEI content available at [Community and Equity-Diversity, Equity, and Inclusion – MIT EECS](#). Effort to improve the content and information on the website so that it is accessible and engaging is ongoing.

EECS DEI Town Halls

Each academic year, EECS holds two DEI Town Halls; one in the fall and one in the spring. The topics of these town halls vary based on the current DEI initiatives prioritized within the department. Previous town hall topics have included a review of current departmental DEI initiatives and updates on the development of the

Departmental Inclusive Excellence Strategic Plan. In the 2022-2023 academic year, the Town Hall topics included:

- Fall 2022: A review of the Campus Climate Survey results for the EECS department with a focus on mental health: A sub-committee of the EECS Committee on Diversity Equity and Inclusion met and reviewed the campus climate survey data in order to identify topics within the survey that emerged as important issues for the EECS department. One area that stood out after reviewing the data was the impact of stress and its effects on mental health within the EECS community. Based on this data, the topic of Mental Health was chosen as the focus for the Fall 2022 DEI town hall. Dr. Karen Singleton and Dr. Lior Givon from MIT Mental Health were invited to speak. Then community members were asked to go into break out rooms to discuss and advise on ways the department could take action to address these issues through policy, processes, or resource support.
- Spring 2023: With the launch of the *EECS Strategic Plan for Inclusive Excellence*, the Spring Semester Town Hall focused on outlining the method for implementing departmental initiatives. Each initiative requires: **Key stakeholders**, who are individuals with the most knowledge and greatest stake in the initiative and who are able to bring crucial institutional knowledge, contribute informed ideas and have important professional capital so as to make an impact. Each initiative must **Gather data**, including knowing what data is currently available and evaluate what data still needs to be collected. Each initiative has **Organization and steps**, for creating short, medium, and long term goals within initiatives to outline steps and progress in the work. Each initiative requires **Assessment/ Measurement** also. DEI work requires meaningful ways to assess if the initiatives in place are achieving the outcomes desired. The type of measurement can vary from initiative to initiative, but finding a way to assess intent versus outcome is crucial to progressing the work.

Conflicts and Reporting

No updates this year, but a summary is provided in the previous 2021-2022 annual report.

Synergies Inside and Outside MIT

DEI work across MIT has expanded greatly in the last year. Below are some updates from our partners in DEI work from around the Institute:

- *MIT ICEO (Institute Community & Equity Office)* has released an institute-wide [Strategic Action Plan for Belonging, Achievement, and Composition](#) that will help inform prioritizations and initiatives within departments and at the institute level.

The ICEO representatives are organizing meetings and retreats to coordinate and support departments.

- School of Engineering (SoE) and its DEI committee, planned a Postdoc program for underrepresented populations in 2021-22 and launched the program Fall 2022. EECS equity officers and Program Director for DEI participated in planning aspects of this post-doc program.
- Assistant Dean of DEI for the School of Engineering, Dr. Nandi Bynoe meets regularly with the EECS Program Director of DEI to coordinate broad initiatives like conference presence, developing relationships with historically Black colleges and universities (HBCUs), and strategic plan coordination.
- IDHR (Institute Discrimination and Harassment Response Office)
- OMEFAC (Office of Minority Education Faculty Advisory Committee)
- MIT EECS is a member of the LEAP Alliance (formerly FLIP alliance) and continues to attend meetings to coordinate opportunities for our LEAP fellow cohorts. LEAP is also starting to coordinate CS conference attendance to have LEAP Alliance presence and impact.
- OGE (Office of Graduate Education): EECS is developing a relationship with OGE in order to align with OGE efforts at recruitment and retention of URM students and to help craft our MSRP participation and expansion.

Activities Related to Faculty Hiring

In the Spring of 2023, faculty search chairs heard presentations from the Assistant Dean of DEI for the College of Computing and the School of Engineering Assistant Dean for DEI on best practices for diminishing bias and increasing equitable processes in hiring. In addition, EECS faculty searches continue virtual pre-interviews with the goal to increase engagement with potential candidates as full campus visits are limited in number due to time and resources.

EECS/CDEI Task Force on Graduate Admissions

Last year the EECS Department Leadership Group, along with the EECS Committee on Diversity, Equity and Inclusion (CDEI), formed a task force to consider all aspects related to EECS PhD graduate admissions activity. The overall goal was to ensure a diverse graduate student population with regard to all aspects of diversity, including gender and gender identity, ethnicity and race, citizenship, undergraduate institution and experience, socio-economic status, individual experience or circumstance, sexual orientation, family status and military engagement, as examples.

Over an 18-month period (Jan 2022 to Oct. 2023), the activity of the task force considered these aspects of the doctoral graduate admissions activity including:

- review the visibility of our EECS PhD program;
- engagement with applicants prior to admission decision;
- engagement with admitted student following admission decision;
- review of the Grad Apply application website;
- review processes carried out by sub-area chairs and admission committee members; and
- efficacy of current “guaranteed financial support” system for first-year PhD students in EECS.

The results of the grad admission task force’s research and list of recommendations were compiled and brought to the departmental leadership group, as well highlighted at the annual faculty retreat, so as to discuss the findings, recommendations and to determine next steps. Aspects of the committee recommendation have begun to be implemented, especially as related to the next PhD graduate admissions cycle 2024 for EECS. Recommendations from the Task Force include:

Improve sense of belonging and equal footing as a new or incoming PhD graduate student

- Recommendation #1: 1st semester, departmental support for all enrolling PhD students.

Application review – ensure applicants from under-represented groups are fully considered

- Recommendation #2: Revise graduate application to request two essay questions: (1) a statement related to research and (2) a statement through which applicants can express other assets and experiences. This recommendation has been implemented for the 2024 admission cycle.
- Recommendation #3: Develop an evaluation protocol to evaluate candidates in the first Round 0 review (best practice). For Round 0 review of applications in the faculty area of AI & Decision Making, an evaluation protocol is being utilized with a group of volunteer graduate students.
- Recommendation #4: Pilot a special subcommittee to identify top applications based on review of the second essay question. This augmented (best-practice-based) process includes review by someone who understands the candidate’s research area and a required explanation for a decision to not admit. A form of additional parallel review is underway for the 2024 admission cycle that focuses on the top applications from Round 0 and seeks to ensure careful review by faculty and research staff in the topical area of interest of the applicant.
- Recommendation #5: understand student decision-making by EECS URM undergraduates following completion of an undergraduate degree.

- Recommendation #6: explore potential to have common review practices for all 18 subareas for all of EECS PhD admission.

Continuously learn from experience

- Recommendation #7: establish an infrastructure and culture of establishing assessment metrics for the pilots undertaken by the department.

In summary, these Task Force recommendations have been adopted in the 2023-24 Academic Year:

- The EECS graduate application includes two essay questions; one asking specifically about research experience and one asking about a candidate's academic journey.
- The Round “Zero” application review uses an evaluation protocol to achieve a more consistent and equitable review of candidates before the top applications move on to Round 1.
- A “safety net” committee has been formed to make sure all 4000+ applications receive a review and, when appropriate, are routed to the appropriate faculty member who can best evaluate the application.
- The efficacy of each of these changes will be assessed through collecting and examining data: 1) Assess whether the answers to the additional essay question achieved the goals for recommendation #2 2) Evaluate the rubric pilot conducted by AI&D. Did AI&D have consistency in early ratings of applications vs. CS and EE who did not use this pilot 3) Evaluate any change to our admissions demographics 4) Conduct a quantitative analysis of the distribution of scores after the rubric pilot.

EECS Strategic Plan for Inclusive Excellence

This year, Equity Officers, Prof. Frédo Durand and Prof. Leslie Kolodziejski, and DEI Programming Director, Dr. Amanda Beyer-Purvis, began to develop the draft document of the EECS Strategic Plan on Inclusive Excellence. The strategic planning process began in 2020 with the CDEI gathering community information and feedback, reviewing available department data, reports, petitions and DEI best practices and then compiling a list of comprehensive potential recommendations for initiatives to include in the strategic plan. The CDEI then gave feedback on prioritization within the comprehensive list and worked on developing an organizational structure for the strategic plan. The drafting process for the strategic plan began in the Spring of 2022. The *EECS Strategic Plan for Inclusive Excellence* is organized into two levels of detail and follows the three pillars of the MIT-wide strategic action plan for belonging, achievement and composition.

EECS has six goals:

Strategic Plan Goals

Composition

Seek out overlooked talent, especially from groups underrepresented in the field of EECS

Achievement

Nurture all students regardless of prior EECS exposure.

Achievement

Strengthen mentoring and career development.

Belonging

Improve sense of belonging and community for all members.

Belonging

Support solutions to conflicts and stress

Cross-Cutting

Build integrated and sustainable infrastructure for inclusive excellence.



The plan seeks to provide a broad picture of the DEI work for the EECS department and includes existing as well as future efforts. It is not meant to be limiting but describes recommendations where EECS can have an impact on creating sustainable efforts to grow inclusive excellence in composition, achievement, and belonging within the department. This plan seeks to improve achievement and belonging for all community members and all roles: undergraduate students, graduate students, staff, faculty members and lecturers. The plan launched in Fall of 2023. A website to review recommendations and action items was created in Summer 2023 and can be found here:

<https://www.eecs.mit.edu/community-equity/dei/eecs-strategic-plan-for-inclusive-excellence/>

We aim to start the implementation of all recommendations within three years.

Improving DEI for Graduate Students

MIT Guaranteed Transitional Support Program

EECS continues to provide transitional support for PhD graduate students moving, or transitioning, from one research group to another research group. The availability of such support has been more broadly known since spring term 2021 with the institute-wide implementation of the [Guaranteed Transitional Support Program](#). [Note: EECS has always provided such transitional support using departmental bridge funds along with personal support from the EECS graduate officer.] As part of the MIT

guaranteed transitional support program, the support offered is personal support, academic and financial support, and coaching. Financial support may be in the form of a departmental teaching assistantship, a research assistantship or a departmental fellowship. For the period including fall term 2022, spring term 2023 (and through the summer session 2023), 34 graduate students (32 in EECS and 2 outside of EECS) were guided through the process by the EECS transitional support coordinator (TSC) Professor Leslie Kolodziejcki. All of the graduate students received personal support and coaching, whereas 16 received financial support from the department totaling \$608,059 along with personal support and coaching. Almost all of the transitions have been successfully navigated and the graduate student has a new project and research group; one transition is still ongoing and being navigated with support from the TSC. Of the 34 students, three individuals decided to withdraw from the PhD program with two pursuing an industrial interest and one started their own company. It is important to point out that all conversations between the TSC and graduate students are confidential with the goal of allowing open, supportive and honest conversation among parties. If desired, additional transitional support coordinators are available to help our EECS graduate students when a student desires to engage with a TSC outside of the department; the list of all TSCs is found [here](#).

Additionally, a [Strategic Plan for Graduate Advising and Mentoring at MIT](#) was produced by the Ad Hoc Committee on Graduate Advising and Mentoring that outlined recommendations around (a) the creation of a platform for faculty and thesis supervisors to acquire professional skill development and lifelong learning in mentorship; (b) tools and mechanisms for graduate students to provide feedback to research advisors; and (c) normalized, equitable metrics of assessment of mentoring that support professional development and can be readily adopted into performance and promotion reviews for research advisors. EECS has begun the work of reviewing how the strategic plan for advising and mentoring can inform best practices within our own department.

EECS PhD Student Check-in

In 2020, the EECS department piloted a new initiative that aimed to provide support to research advisors and their PhD graduate students with the creation of an online-tool accessible by both parties. The goals for the EECS PhD Student Check-in were to provide some structure, or guidance, to assess the activities and progress of the graduate student, to provide input to, and an opportunity for feedback from, the advisor, and a way to archive the information from year to year. The PhD Student Check-in would be completed each year from matriculation to graduation of the PhD student. The EECS PhD Student Check-in consists of three activities: (1) a reflection that is completed by the PhD student, saved and submitted, (2) feedback that is completed by

the research advisor, saved and submitted, and (3) a conversation, preferably face-to-face, of both parties to discuss the information shared by each. The EECS PhD Student Check-in covers each calendar year, and hence has been offered in 2020 and 2021; the third offering was for 2022. Thus far, the participation rate has been mixed, but is declining. For 2020, the first year that the tool was offered, approximately 75% of the graduate student body completed the student reflection, and about 50% of these students also received feedback from their research advisor. For the 2021 offering, 400 graduate students, or 53%, completed the reflection with 193, or 48%, receiving feedback from their research advisor. [Note: in 2021, for our 840 PhD students, there were 238 unique research supervisors.] Sadly, only 22% of research supervisors provided feedback using the online tool with 13 responding to some reflections from their graduate students. Additionally, 26% of research advisors responded to no submissions with 95 having no reflections offered and thus required no comment. For the first two years, participation in the EECS PhD Student Check-in was bimodal showing that some research groups use the online tool consistently with all members of a research group offering a reflection of their annual PhD activities and having feedback provided by the research advisor; the other mode is no participation at all by either the PhD students or the research advisor. The EECS department continued to offer the EECS PhD Student Check-in for 2022, and has it updated and available for use for 2023 as the tool is very helpful for some research groups. The research groups that have found the online tool valuable are new faculty members who have just started their research enterprise; the use of the online tool for 2023 will be thus targeted to new faculty members joining EECS as core faculty or as shared faculty.

Using MIT authentication via Touchstone, the EECS PhD Student Check-in can be accessed by either PhD student or research advisor using this link: https://eeccsis.mit.edu/check_in_report.cgi

MIT University Center for Exemplary Mentoring (UCEM)

The [MIT UCEM](#) program was originally established in 2015, and funded by Alfred P. Sloan Foundation as part of their Minority PhD in STEM effort, aimed at diversifying academia; the support from the Sloan Foundation ended June 2022. Beginning July 2022, the program will continue within the School of Engineering and is temporarily named SoE Program of Exemplary Mentoring. The SoE PEM has expanded by including additional departments- NSE, CEE and DMSE. Led by the UCEM program's director, Professor Leslie Kolodziejski, the mission of the UCEM/PEM is to recruit, to provide academic/professional/personal support, and to facilitate retention, by creating a supportive community, to underrepresented minority doctoral students. Presently, the UCEM/PEM program is in its 9th year and supports 104 scholars (9 cohorts) including the original five engineering departments at MIT (BioE, ChemE, MechE, EECS, and

HST). Community-building will continue to be emphasized, in addition to professional development by scholar participation in the Institute for Teaching and Mentoring and by the creation of their 'virtual self' for each scholar, along with re-engaging with the 25 MIT UCEM alumni for advice and guidance on careers after the PhD including academic career paths, entrepreneurial engagements and industry employment.



Group photo of many of the attendees at the close of UCEM Summer Retreat 2022 held in Falmouth, Cape Cod at AutoCamp. Thirty six UCEM scholars attended the retreat with all educational offerings provided in collaboration with Theater Delta Interactive Theater for Social Change.

EECS Thriving Stars

An important departmental initiative, launched on Ada Lovelace Day October 12, 2021, is the [EECS Thriving Stars](#) program designed to impact the representation of women and underrepresented genders in the PhD program in EECS. [Note: many events sponsored by Thriving Stars are described in greater detail on the EECS website hyperlinked above.] The effort strives to make inroads from all aspects of obtaining a PhD degree in EECS, including recruitment at the undergraduate level, graduate admission and enrollment into the PhD program, the journey to complete the PhD milestones, and then to graduation with the PhD degree. The effort works to increase exposure to undergraduates regarding the value of the PhD degree that will open doors for career opportunities and ultimately enhance career satisfaction. The effort will support the professional network of women studying in EECS at MIT and has numerous activities that will support the journey and nurture more rewarding engagement of

women in the department. Thriving Stars is an activity that has established an engaged Advisory Board of very accomplished women in industry and academia, and is partnering with the GW6 co-presidents for engagement with the enrolled graduate women. Much of the Thriving Stars initiative will focus on out-reach and multiple manners of communication to highlight the goals of the program and the dedication of EECS to improving representation of women and underrepresented genders. In year two, Thriving Stars hosted several activities: in the fall semester Thriving Stars hosted a [Boston Harbor Sunset Cruise](#), the [Erin M. Aylward Graduate Women's Community Dinner](#), and a [New Women in EECS seminar](#). In the spring semester, Thriving Stars hosted a virtual [Career Panel](#), a [Thriving Stars Research Summit](#) and a [Visit Days Buddy Program](#) for women admitted to the PhD program. For the two years of the Thriving Stars initiative, departmental records were broken with regard to the number of applications received from women and, importantly, the enrollment of the highest number of women applicants into the PhD program for fall 2023. A record number (48) of women and underrepresented genders matriculated with the incoming class at 28.4% women.

EECS Graduate Application Assistance Program (GAAP)

The [THRIVE](#) Graduate Application Assistance Program (GAAP) is a student-conceived and student-run initiative offered by PhD students in the MIT EECS department. GAAP leaders pair eligible applicants with current graduate student volunteers, to mentor undergraduate applicants one-on-one through the doctoral graduate application process, meeting periodically with applicants all the way up to the deadline December 15th. Since the inaugural offering in fall 2020, GAAP mentors have helped 806 mentee applicants through the application process. GAAP is a concerted effort made possible with the help of multiple student groups and offices within MIT, including THRIVE at EECS, the EECS Graduate Students Association, Graduate Women in Course 6, and the EECS Communication Lab, with support from the EECS Graduate Office and the EECS Committee on Diversity Equity and Inclusion. For the 2022-2023 mentoring activity, GAAP has rallied 117 current graduate students to volunteer as mentors to 266 undergraduate mentees; the number of volunteers exceeds previous offerings of GAAP. The EECS Department also covered 74 graduate application fees to enable the GAAP participants to submit their applications to the 2023 admissions cycle. This year, GAAP also worked with the Director of DEI Programming to create a plan to get the information about this mentorship program out to a greater number of underrepresented students who could benefit from this program. Specific literature was created to distribute during various recruiting events (such as at conferences that support diversity in the field) and to help our connection with our peer institutions through the LEAP (Diversifying **L**eadership in the **P**rofessoriate) Alliance where the literature was distributed to students in their networks who are interested in pursuing a PhD. We will

be analyzing the impact of these mentorship and recruiting efforts using a survey instrument sent to mentee participants by GAAP leaders at the conclusion of the GAAP program; the survey attempts to assess how individuals learn of the resources, evaluates if the structure of the GAAP program is effective, and seeks to determine if the mentees do continue onto the PhD program, at MIT or elsewhere.

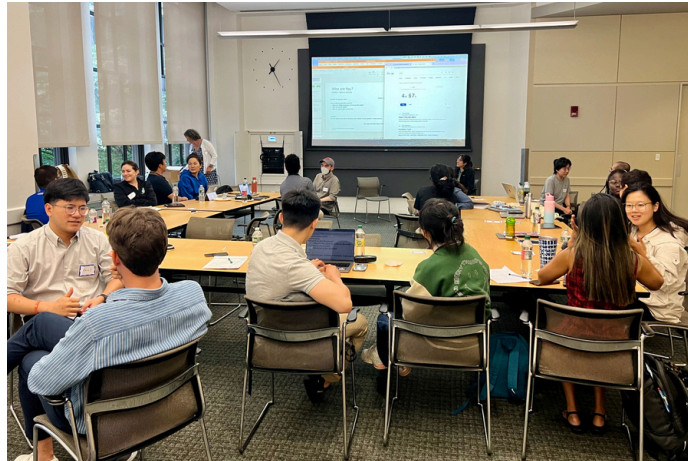
EECS Graduate Student Coaching Program

EECS is in the third cycle of offering a coaching program for graduate students who are interested in professional support and personal communication skills. EECS received funds from a generous donor allowing us to expand the graduate student coaching program so that the department is able to offer the following: two coaching sessions, and hence develop two cohorts of students every semester (fall, spring, summer), 1 EECS Coach Fellow, and will provide a 5% salary contribution to the Lead Coach. This provides the capacity for up to 48 graduate students per year to participate in the coaching program. Assuming an incoming class of 140 students, one-third of every incoming cohort will be able to participate and benefit from the coaching program.

EECS established summer and fall Coaching Cohorts where 12 EECS graduate students participated in the summer of 2023, and 20 EECS graduate students signed up to be a member of the fall 2023 cohort. [The Graduate Student Coaching \(GSC\) Program](#) helps graduate students develop skills of self-leadership and management. Through a community of peers, the program helps normalize the graduate student experience across research labs and disciplines within the department. The coaching program seeks to achieve individualized personal growth and professional development for graduate students. Providing space for students to tune out external pressures and judgments helps students focus on their own goals, discover their own workstyles, and develop strategies that will serve them throughout their professional careers. Students have reported that the program has made them more effective researchers and mentors, has helped them confidently navigate group meetings, and gives them guidance for how to better support others. The small cohort format of the program decreases the sense of isolation students often feel as they progress through graduate school.

The program is based around groups of 5 to 7 students each. Each cohort is led by a trained facilitator. The cohort meets weekly during the semester, which allows the students to get to know each other on a deeper level. The program currently offers three types of cohorts: onboarding, continuing, and accountability groups. Feedback collected by the Coaching program asked students: "Would [you] recommend this program to other graduate students" on a 5 point scale (strongly agree=5, somewhat agree=4, neither agree nor disagree=3, strongly disagree=2, somewhat disagree=1). The

average rating was 4.5, with all responses being strongly agree or somewhat agree. Students were also asked to rate their overall satisfaction within the program on a 5 point scale (extremely satisfied=5, somewhat satisfied=4, neither satisfied nor dissatisfied=3, somewhat dissatisfied=2, extremely dissatisfied=1). The average rating was 4.6, with all responses being extremely satisfied or somewhat satisfied.

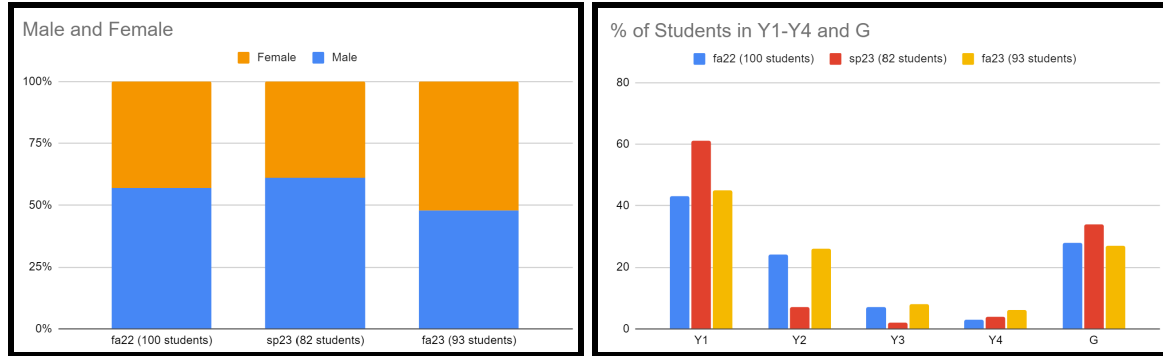


Cohort of Students participate in a coaching session. Since its inception, the Graduate Coaching Program has helped hundreds of graduate students, through group coaching sessions, accountability groups, and summer workshops.

Improving DEI for Undergraduate Students

On-Ramp to Computing in EECS

For the fall 2021 semester, the department introduced a strategically paced version of 6.0001 numbered 6.s061. The new class maintains the same content and problem sets as 6.0001, but stretches the 6-unit half semester class into a full semester 9 unit class. The launch of 6.s061 drew a significant number of interested students with 69 students enrolling in fall 2021. The course was re-named 6.001L after the pilot semesters and had 100 students enrolling in fall 2022 and 82 enrolled for spring 2023. Students have given feedback that they appreciate the more deliberate pacing, additional opportunities to get hands-on coding experience, and a growth-mindset-based environment that encourages skill building. One of the unexpected results of launching the class is the interest generated for Computer Science from students who self-reported they would not have considered registering in 6.0001 or other CS courses. Students noted that the course increased their programming confidence and provided opportunities to program at different granularity levels. Course instructors will continue to evaluate the success and benefits for students in order to provide an effective course that sets students up for success.



Conferences that Promote Diversity

As of fall 2023, we have enjoyed participation in the Richard Tapia Celebration of Diversity in Computing Conference, Grace Hopper Celebration of Women in Computing, the Society of Women Engineers (SWE) Conference, the Society for Hispanic Engineers (SHPE) Annual Conference, and EECS community members will attend the National Society of Black Engineers (NSBE) Conference again in the spring of 2024. Such avid and intentional conference participation has already had an impact in meeting students at all levels and welcoming them, while providing more information about our summer research programs for undergraduates, our GAAP program (described in detail above), about our doctoral graduate program, and about our postdoctoral research opportunities. Additionally, we stay connected to the undergraduate students by reaching out to students we had contact with at these conferences, and we have invited them to the Virtual Graduate School Fair hosted by MIT's School of Engineering (SoE) and OGE, and our own department virtual workshop to be hosted on Nov. 27th. We want to continue such outreach activities, and further expand our presence by coordinating with OGE and other departments to have EECS brochures present at conferences that we do not have the capacity to attend, allowing EECS to nurture contacts in future years as these undergraduates begin to consider graduate school options. Additionally, as EECS moves over to the Slate admission system next application cycle 2025, we will be able to monitor the impact of these conference activities. The Slate electronic instrument shows the following information: names of students who spoke to us at these conferences, were follow-up emails read by the student, did the student attend information sessions, did the student apply to the PhD program in EECS, and ultimately was the student admitted to EECS. This year's recruitment activities yielded 623 student contacts, with over 200 explicitly interested in the EECS graduate program. See example tracking page in Slate below:



Richard Tapia Celebration of Diversity in Computing Conference

On September 13-16th, 2023, EECS provided financial support for the attendance of 1 graduate student, supported by 1 faculty member and 1 staff member to enjoy the Richard Tapia Conference. Our EECS exhibition booth was staffed by our EECS graduate student, a staff representative for OGE and one of our EECS faculty members where we talked to students in all different stages of their academic career who were interested in learning more about MIT EECS; from summer research to grad school to postdoc programs.

Grace Hopper Celebration of Women in Computing

On September 26-29th, 2023, EECS in combination with donor funds through the Undergraduate Office provided full financial support to send 14 students and 1 staff member in person and 12 students virtually to the Grace Hopper Celebration of computing in Orlando Florida. All students were able to attend workshops and sessions, attend the career fair to look for jobs and internships and also assisted with running the EECS booth and speaking to prospective undergraduate, graduate, and postdoctoral students. We also participated for the first time in the coordinated effort through OGE to collect contacts to engage in a coordinated outreach after the conferences for all booth visitors. We were able to collect over 100 contacts with prospective students at this conference.



EECS community members hosted visitors to our department booth to learn about EECS at MIT and to grab some fun swag touting our new department logo, colors, and to highlight the departmental organization of EE, CS and AI&D.

Society of Women Engineers (SWE) Conference 2023

Eight EECS community members attended the Society of Women Engineers Conference in Los Angeles, October 26-28th including our EECS graduate officer and DEI officer, 2 PhD women and 6 undergraduates in EECS. EECS hosted a booth in conjunction with OGE and the School of Engineering to show a meaningful presence by MIT, to recruit prospective students and postdocs. We were able to collect over 50 contacts with prospective students at this conference.



After a long day chatting with visitors to the MIT EECS booth at the SWE conference, EECS conference attendees enjoy an evening of fellowship, conversation, delicious refreshments and a fun locale in LA!

Society of Hispanic Engineers Annual Conference

On Nov. 1-5th, EECS teamed up with the MIT SHPE chapter and sponsored 1 graduate student and 3 undergraduate students to attend the annual SHPE conference along with 20+ other members of the MIT SHPE chapter. Attendees were able to enjoy workshops, sessions, a vibrant career fair, networking, and socializing with other attendees. We even had a former member of our MIT MSRP program who worked with Professor Leslie Kaebling come help us with the booth for several hours to discuss the MSRP program on campus, despite not being an MIT student. We gathered over 75 contacts at this conference.

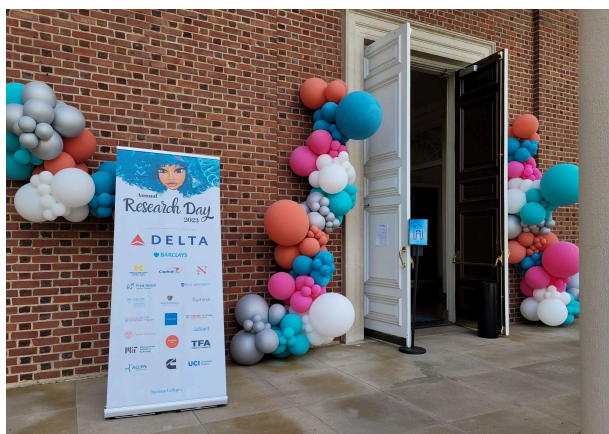


Abraham Mitchell who worked with Prof. Kaelbling in MSRP cohort 2022 assists with talking to prospective students about joining the Summer Research Program along with current EECS grad student, Leticia Mattos da Silva

Building Relationships with HBCUs*

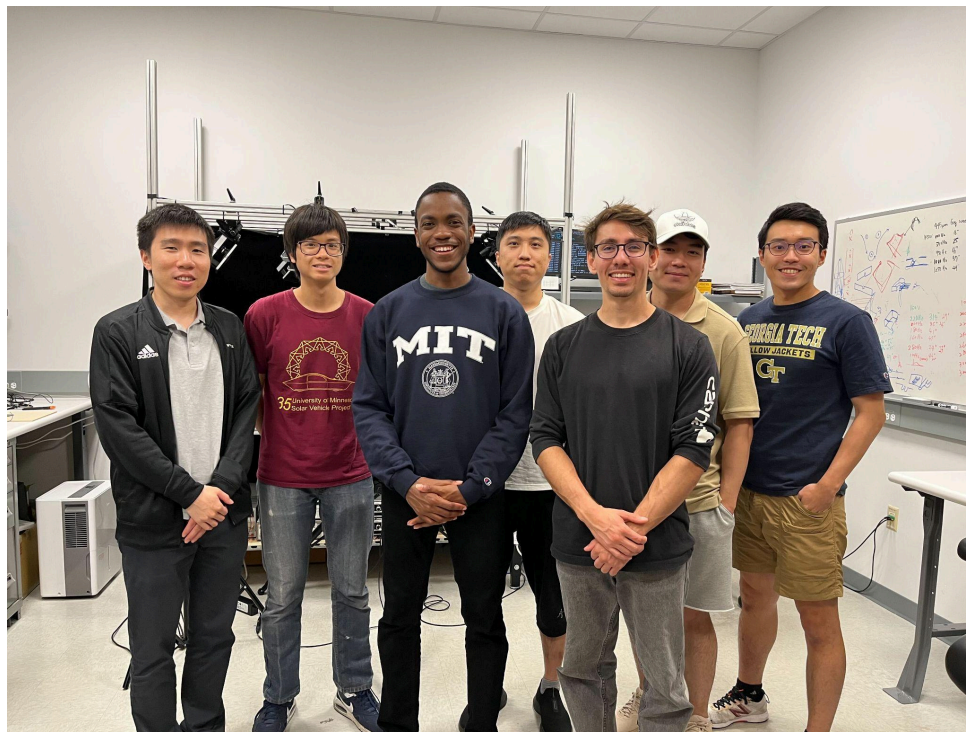
In April of 2023, EECS sponsored Research Day at Spelman College. Nandi Bynoe, School of Engineering Assistant Dean for DEI, Dr. Noelle Wakefield, Assistant Dean for Diversity Programming in the Office of Graduate Education, and Dr. Amanda Beyer-Purvis, EECS Program Director of DEI and graduate student, K'yal Bannister all attended Spelman's in-person research day to learn about undergraduate research at the college, promote summer research programs at MIT and make connections with Spelman students and faculty. This outreach will continue into the future and expand to additional HBCUs* in coordination with the Office of Graduate Education.

*Historically Black Colleges and Universities






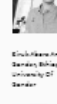


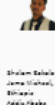








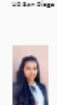

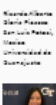
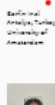












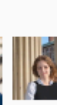
Expansion of the MIT Summer Research Program (MSRP)

This summer of 2023 EECS hosted 12 MSRP interns, mentored by 10 EECS faculty members. The EECS Program Director of DEI continued meeting weekly with the Assistant Dean of Graduate Diversity Initiatives within OGE who oversees the program to discover ways EECS can expand and engage further with the MSRP program. This year, EECS held a lunch with the EECS Department head, Prof. Asu Ozdaglar, to discuss the program, emerging fields in EECS and graduate education within the department. EECS Graduate Office provided an informational session focussing on the graduate admission process in the department along with a discussion of the PhD program in EECS at MIT. A laboratory tour was also organized and offered to show the MSRP interns the many different facilities available to carry out our research.



Two of our EECS MSRP interns, Matthew Crespo and Olaoluwayimika Olugbenle with one of their mentors, Kevin Chen, and the rest of their lab group at the conclusion of the summer program 2023.

EECS Professor Justin Solomon created an online outreach program for undergraduate students from groups historically underrepresented in the field and who are interested in research on Geometry Processing. The Summer Geometry Initiative (SGI) is the result of discussions among a worldwide network of geometry processing researchers, which started during the 2020 Symposium on Geometry Processing (SGP)—which, like many conferences in 2020, was held online for the first time. While researchers were disappointed to not see each other in person at a conference center in Utrecht, the online format actually allowed SGP to reach a broader and more geographically diverse audience than ever before. The virtual summer offering helped the conference attendees realize that similar opportunities should be created for students and early-stage researchers to enter geometry processing research, even if they do not have opportunities to try this discipline at their home institutions. Ultimately, this led to the design of SGI, which is a summer research program designed to introduce a broad pool of students to geometry processing research through immersive interaction with top researchers in the discipline. In summer 2023, we hosted the second annual Summer Geometry Initiative (SGI), a six week online program giving training and research experiences in applied geometry to a cohort of 32 undergraduates and master's students from all

Summer Geometry Initiative							
Name	Affiliated Secondary / Pre-university	2022 Fellows	How to Apply	Activities and Schedule	Organisation and Sponsors		
2022 Fellows							
	Aliya Akhyunova South Kazakhstan Univ, Uzbek University of Pennsylvania		Benjama Aksele Hyderabad, India (B.Tech. IITM) Hyderabad Campus		Siam Alkhas Adana, Turkey Technical University of Munich		Enish Albani Imbrani Sarajevo, Bosnia University of Sarajevo
	Sara Amari Pittsburgh, PA, USA Pittsburgh University		Sara Anwar Kingston, ON, Canada Queen's University at Kingston		Shahin Aslali Jenna (Austria), Bulgaria Johannes Kepler University		Pranavima Ural Datta Delhi Tatyasaheb Kore University of Mumbai
	Anna Dala Pittsburgh, PA, USA Hawkes College		Mathewale Silve France São Paulo, Brazil University of São Paulo		Gabriele Demetrio Udine, Italy University of Cambridge		Bibi Elgizeti Pittsburgh, PA, USA US San Diego
	Saraella Polina Moscow, (Russia), Belarus Lomonosov University		Kriszta Alkoss Szeged, Hungary University of Szeged		Sofia Elmi Amman, Jordan University of Amman		Sahana Kargi Barrington, NJ, USA University of Utah
	Parashada Houston University College		Van Le Tucson, AZ, USA Marine University		Kamran Ullah Lahore, Pakistan USC		Hassan Hattam Barrington, NJ, USA State College of NJ
	Shraddha Kerala, Karnataka, India International Institute of Information Technology Hyderabad		Ben Houshian Baltimore, MD, USA Smith College		Nyla Dargal Parsippany, NJ, USA USC		Sara Nour Parva Doha Virginia Poly, Canada University of Montreal
	Daniel Pavesio Rovato, Italy UNIFE, Federal Institute for Pure and Applied Mathematics		Munshi Somen Rajkot, Gujarat University of Engineering and Technology		Anthony Ramos Quito, Ecuador King Abdullah University of Science and Technology		Maria Soukier Vancouver, BC, USA Dalhousie University
	Temesse Barrington, NJ, USA Polytechnic University		Sadia Toje London, Brazil Unicamp Esperanza University		Jade Tsimre Juba, Sudan, Brazil Universidade Federal de Paraíba		Lany Xie Chengdu, China Tsinghua University

programs in geometry processing and related fields, leading to a measurable increase in the diversity and size of the graduate cohort in the field.

Broad Community DEI Initiatives

Pop-Up Space

In the spring semester 2023, the CDEI (EECS Committee for Diversity, Equity and Inclusion) proposed a pilot program to provide a space for socializing and programs that bring all the roles in the EECS community together in a casual setting to promote connection, belonging, and a welcoming environment. The types of events include: cultural organization events, meet-and-greets for student organizations, faculty-hosted mentoring events, grab-and-go community breakfasts, open socialization hours and department offices open-house events.

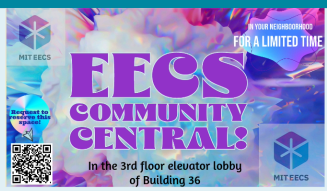
The committee budgeted, planned and secured space for the pop-up community space over the course of the spring semester and decided to establish the pop-up in the fall of 2023 between Sept. 15th and Oct 15th. Three weeks worth of community events were planned. An effort was made to highlight groups doing equity work in our department and beyond. After the events are offered, the CDEI collects feedback from the hosts and participants in each sponsored event and will adjust programming, location, and timing based on community feedback for the next pop-up community space activity (maybe spring 2024).



EECS COMMUNITY CENTRAL!
In the 3rd floor elevator lobby of Building 36

Schedule of Events for the Week of Sept 18th-Sept 22nd

Mon, Sept. 18 9:00am-10:30am	Community Breakfast Sponsored by RLE
Tues, Sept 19 2:00pm-3:00pm	"Snacks and Facts" with RELAY (RLE student org)
Wed, Sept. 20 3:00pm-4:00pm	Popcorn Hour Sponsored by EECS CDEI
Thurs, Sept. 21 12:00pm-1:00pm	Boba Tea Sponsored by EECS Undergrad Office
Fri, Sept. 22 3:30pm-4:30pm	Coffee Hour Sponsored by EECS GSA



EECS COMMUNITY CENTRAL!
In the 3rd floor elevator lobby of Building 36

Schedule of Events for the Week of Sept 25th-Sept 29th

Mon, Sept. 25	In observance of: Yom Kippur No events today
Tues, Sept 26 9:00am-10:30am	EECS Community Breakfast Sponsored by CSAIL
Tues, Sept. 26 11:00am-12:00pm	Community Catalysts Series with: EECS GAAP
Thurs, Sept. 28 2:30pm-3:30pm	Insomnia Cookie Pop-Up Sponsored by EECS Grad Office
Fri, Sept. 29 4:00pm-5:00pm	Community Catalysts Series with: GFLI@MIT



EECS COMMUNITY CENTRAL!
In the 3rd floor elevator lobby of Building 36

Schedule of Events for the Week of Oct. 9th -Oct. 13th

Mon, Oct. 9th	No events scheduled in observance of Indigenous People's Day
Tues, Oct. 10th 9:00am-10:30am	Community Breakfast Sponsored by LIDS
Wed, Oct. 11th 4:00pm-5:00pm	Faculty Fireside Chat: "Charting your Path"
Thurs, Oct. 12th 10:30am-11:30am	Popcorn Hour EECS Sponsored by the CDEI
Thurs, Oct. 12th 12:00pm-1:00pm	Community Catalysts Series with: EECS THRIVE

EECS Faculty Retreat

The EECS faculty retreat, which is in its second year, works to build community and connection among faculty members as the department returns to in-person community on campus. This year's retreat highlight include: 1) updates on important committee work done within the department, this year specifically on the report generated by the Graduate Admissions Task Force, 2) updates on department structure, new or updated course subjects, and advising work, 3) sessions highlighting the work of junior faculty, 4) updates for the faculty from the School and College, and 5) time to socialize and make connections. Making time and space for the faculty to stay informed about the School, College and Department, as well as learn more about their fellow faculty members and interact with them in a setting that allows connections and relationships to grow is crucial to fostering an environment where faculty feel connected, supported and part of the EECS community.

Undergrad Office Community Events

The Undergraduate Office in EECS began their community building initiative as an effort to keep community among undergraduates during the pandemic, but have expanded and evolved the initiative since our return to fully in-person work. The Undergrad Office staff members consulted with USAGE (the undergraduate advisory group) and distributed surveys to students, asking what kind of new activities they were interested in. The Undergraduate Office assessed their bandwidth and planned size, frequency, and complexity of events that could be held with the capacity in the office. Students requested more and smaller events and expressed interest in lunches with faculty members, coffee hours, undergraduate office pop-up events, and faculty interactions in more casual settings. The Undergrad Office outlined weekly events over the course of the fall and spring semesters that ranged from quick office pop-in events to organized talks for undergraduates. Feedback forms were sent to attendees and the office evaluated the timing of events, type of events, and how much these events contributed to their sense of community within EECS. These measures will be used to determine which events have the most impact on community building and which contribute to a growing sense of community and belonging for undergrads in EECS. Their plan is to assess this on a semester-by-semester basis.



Do you feel like this event contributed to your sense of belonging in EECS?
29 responses

