

MIT MechE DEI Statement & Community Values

Our Vision

As part of its mission to make the world a better place, the MIT Mechanical Engineering Department (MechE) aims to solve global challenges by training the next generation of mechanical engineering leaders.¹ We know inclusive diversity is central to this mission, which is why our community is built on a culture that prioritizes people. In addition to providing a world-class engineering education, our curriculum includes a robust examination of the historical, ethical, and social contexts of engineering to ensure our graduates are conscious contributors to their professions. Internally, we incorporate these values into the research we produce and give them substantial weight in faculty hiring and promotion decisions. Systemic injustice has historically excluded certain groups from academia and the fields of science, technology, engineering and mathematics (STEM). Our department employs measures to account for these issues in our admissions and hiring processes, and leverages MIT's resources to attract and support talented individuals regardless of their means. Once people arrive in MechE, we welcome them to our community through comprehensive orientations and open communication. One critically important aspect of any leadership position in our community is the responsibility to support others in their personal and professional growth. We promote a culture of teamwork and respect by acknowledging the value that each person brings to our collective efforts to advance science and engineering, and by acknowledging that prioritizing health is essential to personal productivity. For these reasons, all of our faculty and senior staff have extensive management and mentorship training as well as detailed knowledge of the many support resources available at MIT. These aspects of our community enable us to foster a diverse and inclusive environment, focusing on what makes MIT MechE truly special: the people.

Where We Are Now

MIT as a whole is committed to creating a workplace and educational environment that welcomes and supports people of diverse backgrounds and celebrates differences in race, gender, ethnicity, nationality, age, physical and language abilities, culture, religion, and sexual orientation.² Despite this goal, there is a lack of diversity at MIT and in MechE. The above vision statement for our department has not yet been fully realized. We strive to make it a reality.

In light of the recent surge in national recognition of anti-Black racism in the United States and globally, we can start by examining diversity along the axis of race and ethnicity. MIT defines an underrepresented minority (URM) as an individual who is Black, Indigenous, or Hispanic/Latinx; this is a domestic term that pertains specifically to the United States and Native American nations. As of 2020, the MechE domestic graduate and undergraduate student population is 21.7% URM and 66.9% non-URM, the faculty are 8.7% URM and 85.5% non-URM, the staff are 7.6% URM and 66.5% non-URM, and the postdoc population is 3.8% URM and 76.9%

¹ [Mechanical Engineering at MIT](#)

² [MIT Human Resources: Diversity, Equity, and Inclusion](#)

non-URM.³ Most of these demographics do not reflect the demographics of the United States, which, according to MIT's definition, is 33.4% URM and 66% non-URM.⁴ It is also noteworthy that the MechE international student population is approximately 16.9% European and 1.8% African, and the postdoc population is approximately 76% from Asia and the Pacific, 4.3% from the Americas, and 0% African.⁵ These populations are significantly different from the world's population for Asia and the Pacific (60%), Africa (17.2%), Europe (9.6%), and the Americas, not including the United States (12%).⁶

Systemic racism, which is codified racial discrimination at every level of society, is pervasive in all institutions in the United States. It is the legacy of four centuries of slavery in this country, colonialism, and global Eurocentrism. MIT was founded and developed in this context and, as a result, has historically been a predominantly White institution.⁷ Consequently, URMs, individuals from underrepresented international groups, and in particular Black, Indigenous, and People of Color (BIPOC), will face a unique set of obstacles to their success and wellbeing on this campus.

We must also consider how power structures in academia play a role in establishing and maintaining systemic issues. The power of direction and action in academia rests primarily with the faculty. Tenure, in particular, is designed to provide faculty members with academic immunity, the job security that grants them intellectual freedom as experts in their field. However, the mechanism of tenure can function as moral impunity, shielding tenured faculty from meaningful consequences when they abuse their power or act in a way that contradicts our community values.

Moving Forward

While race, ethnicity, and nationality are concrete starting points for examining institutional diversity, it is important to remember that an individual is the nexus of multiple identities. We must continuously account for this intersectionality by actively uprooting local systems of inequality put in place by racist, sexist, ableist, and other exclusionary ideologies.^{8,9,10} The faculty must lead by example in upholding these values. It is essential to our vision of a healthy community that the department continually examine the ways in which tenure and other power imbalances in academia harm our community members, and act to modify these structures accordingly.

Our strength and position as a world-class institution depends upon our ability to cultivate a diverse, equitable, and inclusive community of students and professionals. A diverse community

³ Analysis conducted with data provided by [Institutional Research](#); percentages for "mixed" and "unknown" race/ethnicity are left out of the values presented here.

⁴ [US Census Bureau QuickFacts: United States \(2019\)](#)

⁵ Analysis conducted with data provided by [Institutional Research](#).

⁶ [Population by Regions in the World \(2020\)](#)

⁷ [MIT and Slavery | An ongoing undergraduate research project](#)

⁸ [Black Graduate Student Association - Follow up on 2015 recommendations](#)

⁹ [A Study on the Status of Women Faculty In Science at MIT](#)

¹⁰ [Wheels on Campus: Choosing Academics Over Accommodation](#)

enables a wealth of ideas and perspectives that enhance our ability to solve global problems. However, diversity alone is insufficient. In an organization that is diverse, but not inclusive, individuals who are part of a minority group are unable to express their whole selves for fear of being embarrassed, ostracized, or otherwise harmed personally or professionally. This silences creativity, stifles innovation, and perpetuates exclusionist solutions. To build a community that is both diverse and inclusive, we must ensure equitable treatment of our community members. This requires us to dismantle exclusionist policies that are embedded in the foundation of our institution, address existing injustices perpetuated by these policies, and provide resources for individuals to learn and grow. In recognizing the systemic nature of the problem, we acknowledge that this must be a sustained effort to create a culture of attentive curiosity, compassionate action, and self-reflection that will ultimately improve everyone's experience in the department. This vision statement establishes our commitment to building and fostering a diverse, equitable, and inclusive environment in the MIT Mechanical Engineering Department where everyone in our community can thrive.

MIT MechE Code of Conduct:

I anchor my work in excellence, integrity, collaboration, and curiosity;

I act ethically and in service to the betterment of society;

I respect the dignity and capability of all people;

I acknowledge my biases and learn from those who have experiences different from my own;

I confront racist, sexist, and exclusionist behaviors in my own actions and those of others;

I commit to dismantling exclusionist ideas and structures in my spheres of influence;

And I commit to instilling and cultivating these values in my personal and professional circles.

Community Values:

As we embrace and apply these values in our daily lives, we will be able to collectively create an environment of cooperation, inquiry, and mutual respect, thus advancing a shared commitment to education, diversity, equity, inclusion (DEI) and professional excellence.

- 1. Academic Excellence and Scientific Inquiry:** As a premier educational and research program, we value curiosity, innovation, perseverance, and the scientific method. We strive for excellence and professionalism in our work as we seek to ethically address global challenges. To do so, we apply our collective knowledge, expertise, resources,

and understanding of social and historical contexts, and commit to supporting our community members holistically as they take on these endeavors.

2. **Collaboration and Mentorship:** We foster collaboration within and outside of the MechE community by respecting others' ideas, appropriately acknowledging their contributions, and willingly sharing our knowledge and skills. We also acknowledge that strong mentorship is essential to individual and collective success, and commit time to honing these skills and building supportive and productive mentoring relationships.
3. **Respect, Integrity and Accountability:** By demonstrating esteem and appreciation towards others and ourselves, we create an inclusive and supportive environment. This enables us to uphold MIT's high standards of honesty, fairness, respect, integrity and accountability (M&H 20-21). We commit to conducting our work honestly and ethically, and using our privilege and leadership positions to amplify the voices of those who are underrepresented in MechE and other professional STEM spaces. We will hold ourselves and others accountable to our shared values, while recognizing that this is an ongoing process of learning and building self-awareness. Practicing **personal competencies** (listed below) as an integral part of our daily educational and research efforts will enable MechE community members to attain this goal.
4. **Embracing Diversity:** Diversity in academia is the cultivation and holistic support of talented people of various identities, including race, gender, ethnicity, nationality, age, physical and language abilities, class, culture, religion, and sexual orientation. In addition to ensuring structural diversity, we cultivate a culture that views diversity as an advantageous necessity in our mission to solve global challenges.
5. **Establishing Equity:** The goal of equity is to ensure fair treatment. It differs from the principle of equality in that equality affords everyone the same treatment, while the principle of equity acknowledges existing inequalities and adjusts and tailors resources to afford everyone equal opportunity. We acknowledge the pervasive inequalities perpetuated by racism, sexism, ableism, and other exclusionary societal structures in the United States and abroad, and recognize that certain members of our community and applicants to our program face unique challenges and obstacles based on their identities. We commit to uprooting inequitable practices that, in concert, hinder the success of everyone in our community. Finally, we measure equity based on outcome rather than intent. If a policy, program, activity, building or other physical structure contributes to inequities, then it is unjust and must be modified to ensure all members of the community can thrive.
6. **Fostering Inclusion:** Inclusion goes beyond tolerance and acceptance to build a culture of belonging that actively invites participation and equally values the voices of all community members. Such an environment enables each member of our community to reach their full potential and upholds MIT's commitment to equal opportunity in education and employment (M&H 20-21).
7. **Safety and Wellness:** In order for our community members to thrive, we must create and maintain a safe working and learning environment that prioritizes wellness. Our daily functions must encourage and support community members in maintaining a healthy lifestyle, which includes physical, mental, emotional, and social health (M&H 20-21). This

means fostering a culture that prioritizes individuals' health over productivity, and by providing access to support systems for working through life's challenges. In other words, we treat each other as people who work, as opposed to workers who are people. We further acknowledge that underrepresented groups in MechE face unique challenges, and in some cases threats to their wellbeing, that must be accounted for when providing support systems that promote safety and wellness both on and off campus.

- 8. Responsible Impact:** We aim to confront global challenges with creativity, passion, and academic rigor to create solutions with lasting and responsible global impact. Furthermore, we commit to advancing diversity, equity and inclusion in professional and educational spaces beyond our community, particularly where we hold leadership roles or positions of influence. In doing so, we strive for personal, professional, and communal improvement. MechE, as a whole, will also use its position as a world-class program to lead by example and encourage our peer institutions to uphold similar values.

Personal Competencies:

Understanding of how class, culture, physical and language ability, ethnicity, gender, national origin, race, age, religion, and sexual orientation shape the environments in which we live and work, affect each of our personal identities, and impact the lives and opportunities of those in our community.

Seeking Resources to understand our own cultural identities, personal blindspots, and biases and take the next steps in our identity development and leadership journeys.

Analytical Skills to understand the implications of research and appreciate multiple points of view through active and careful listening; to be willing to confront views that impede or counter diversity, equity, and inclusion while honoring the dignity of those holding them.

Professional Skills to be able to enter any organization, read and interpret the current dynamics, help the organization identify the next developmental steps towards being an organization with a clear vision of equity and social justice and mobilize for improvement; to be able to respectfully engage across differences while holding difficult conversations and creating a climate for learning about equity and inequality.

Vision of how our individual roles can promote equity in all professional settings while encouraging an environment of resource sharing, learning, teaching, and decision making.

Courage, Commitment, and Persistence to act on all of the above, to be transformative change agents, and to develop networks and support structures that sustain us in this work.