

STEM for a Better World

Harvey Mudd College Strategic Plan
2025–2035





Our Mission

Harvey Mudd College seeks to educate engineers, scientists and mathematicians well versed in all of these areas and in the humanities, social sciences and the arts so that they may assume leadership in their fields with a clear understanding of the impact of their work on society.



The World Needs Harvey Mudd

The decade before Harvey Mudd College’s founding in 1955 was marked by extraordinary developments—the first electronic computer (UNIVAC), color television broadcasting, the transistor, the photovoltaic cell and the first surgically implanted artificial heart valve as well as medications for asthma, hypertension and rheumatoid arthritis. Amid a Cold War and the space race, artificial satellites were launched, powered by advancements in ballistic missile and thermonuclear technologies.

National leaders recognized the need for a new generation of scientific and technological leaders who could explore innovative solutions to the unprecedented challenges, including human spaceflight to the moon. They wanted leaders who could stand at the intersection of mathematics, chemistry, biology, physics, engineering and computing and help their teams develop new, human-centered solutions to these novel problems. They wanted innovative problem solvers who could work across disciplines and across cultures so that they ask the bold questions required to find innovative solutions.

Back in Claremont, California, our founders believed that integrating the humanities, social sciences and the arts into a rigorous and cross-disciplinary undergraduate STEM curriculum was key to creating this next generation of well-rounded leaders and compassionate problem solvers. They believed it could help students understand how these relationships can impact their work—relationships not just between the liberal arts and the STEM disciplines, but also between their work and its impact on society as well as how societal pressures often shape technologies and scientific advances.

Their idea was an innovative concept in undergraduate STEM education. It would focus on students. It would center the importance of strong undergraduate teaching with hands-on learning to build students’ capability to innovate and solve problems. The curriculum would explore the linkages and tensions between science and engineering on the one hand and the human condition on the other. Harvey Mudd was announced as “a new college of liberal arts emphasizing basic science and engineering.” To this day, we proudly refer to ourselves as the liberal arts college of science and engineering.

Despite its small size, Harvey Mudd College has had an outsized impact on STEM higher education in this country. That’s because *our focus has always been our students*. From the start, faculty have been focused

on teaching excellence and exploring new pedagogical approaches to help students learn, grow and thrive.

More than 60 years ago, our engineering department created the Clinic Program—a unique approach to engineering education that partnered industry with undergraduate student teams to solve real-world problems. This model, later adopted by colleges and universities worldwide, teaches students how to lead and manage teams, ideate and develop innovative solutions, develop written and oral presentations and translate their discoveries for both technical and nontechnical audiences.

Over the last 15 years, faculty members have redesigned curricular and co-curricular approaches in computer science, engineering and our other departments to diversify STEM education and close gender-based gaps in course performance among our students. These advances, which inspired broader change across higher education, helped Harvey Mudd achieve gender parity in STEM in 2014. We continue to recruit and support students from a wide range of backgrounds, ensuring that different perspectives are valued.

More recently, we’ve begun developing a new, innovative approach to preparing future STEM leaders to address climate change through joint major programs that partner STEM disciplines with deep study in climate science and policy.

Throughout our history, the Harvey Mudd College community has reached across disciplines and across departments to collaborate and develop unique solutions to help prepare our students to lead and address the greatest challenges facing our world.

Each of us believes in living our mission every day.

Our faculty *live our mission* by advancing innovative curricular approaches that strengthen learning outcomes for all students. They explore and advance pedagogical improvements and share what they learn so that others can benefit from their innovations in teaching. They understand the critical importance of research and practical, hands-on learning as keys to deepening our students’ understanding of STEM disciplines and fueling their innovative problem-solving.

Our students throw themselves into a rigorous STEM curriculum that demands they collaborate to be



successful. They begin with a foundational Core—a set of coordinated courses that engages every department on our campus—biology, chemistry, computer science, engineering, mathematics, physics and humanities, social sciences and the arts. Beyond the Core, more than a quarter of their coursework is completed through courses in the humanities, social sciences and the arts, including a specialization. Students deepen their knowledge in their major field of study and by completing a senior capstone requiring either a research thesis or a Clinic project. Through these experience-based learning opportunities, they *live our mission* by gaining knowledge and learning to translate it by presenting on campus, to industry partners or at academic conferences around the world.

Our staff *live our mission* by collaborating across departments and offices to support and empower every student so that they can be at their best. From managing the campus infrastructure to providing a welcoming living, learning and working environment for our community, our staff members partner with one another and with the faculty to provide exceptional experiences in our co-curricular and curricular programs.

Finally, our alumni *live our mission* every day by being the leaders, inventors and innovators who discover new technologies, cure or develop new treatments for diseases, identify creative solutions to address climate change, launch new companies to address critical societal needs, teach new generations of students, and elevate our culture through innovations in music, theater and film.

The deep relationships forged here—among students and faculty, among the liberal arts and STEM disciplines, among teaching and research—help prepare our students to graduate as creative thinkers, leaders and innovators who can collaborate across disciplines and across continents to develop human-centered, novel approaches to address the most important problems impacting the world around them.

For 70 years, our unwavering focus on students and our mission has guided us. As we envision the next decade, our community’s creativity and agility position us to continue innovating and sharing our discoveries to benefit others.

This is how we live our mission—and why the world needs Harvey Mudd now more than ever.



Our Vision

Our strategic plan is encapsulated in a simple yet profound vision: **STEM for a Better World.**

STEM for a Better World carries two essential meanings.

First, a liberal arts STEM education at Harvey Mudd must seamlessly integrate exceptional curriculum development, teaching and hands-on learning with top-tier residential and co-curricular programming. This combination aims to prepare a diverse group of engaged problem-solvers to lead through today's most significant challenges. As we look toward the future, the world faces a new array of challenges that demand the ingenuity and leadership of STEM professionals who understand that the humanities, social sciences and the arts power our ability to create technological solutions that positively impact society.

Some of the most pressing issues include climate change and environmental sustainability, healthcare and biotechnology, the ethical development and use of artificial intelligence and big data, space exploration and technology, cybersecurity and digital privacy and quantum computing. Addressing these challenges requires

interdisciplinary approaches and innovative thinking. The next generation of STEM leaders must blend technical expertise with a deep understanding of ethical, social and environmental considerations to develop solutions that benefit humanity and the planet.

STEM for a Better World also reflects our commitment to fostering a community of responsible and compassionate citizens of the nation and the world. Harvey Mudd strives to create and nurture a supportive, inclusive and accessible community of students, faculty and staff from diverse backgrounds and perspectives who believe that the health, wellbeing and success of every individual matters. Wherever in the world they call home, our students, faculty and staff now also have a home at Harvey Mudd within our community. At its core, this vision aspires to integrate technical achievement with a deep sense of purpose, empowering our community to contribute meaningfully in the world while upholding the values of justice, equity and peace.





Guiding Statements

Our community has articulated core values, aspirations and priorities essential to achieving our ambitious goals. These guiding statements serve as a foundation for future decision-making, ensuring that we remain aligned with our mission and uphold the principles that define our community. They reflect our commitment to a STEM education that embodies excellence, innovation, inclusivity and the wellbeing of all members of the Harvey Mudd community.

1. Joyful, Powerful Liberal Arts STEM Education

We celebrate the unique combination of liberal arts and STEM education at Harvey Mudd, offering a joyful and powerful undergraduate learning experience that fosters both technical expertise and broad cultural understanding.

2. Innovation and Scientific Discovery

We are stewards of the innovative spirit that inspired the College's founding. We believe in the power of scientific discovery and STEM education to address global challenges and are committed to exploring and sharing innovative solutions that enhance our curriculum and pedagogy. We also are stewards of the infrastructure and resources that power the unique curricular and co-curricular experiences we provide. We believe it is imperative to provide the resources and infrastructure to support our students, faculty and staff in order to secure the College's unique place in liberal arts STEM education for generations to come.

3. Inclusive Excellence and Social Justice

We are committed to attracting exceptionally talented and diverse students to the College. We are dedicated to advancing diversity, equity, inclusion and belonging in every aspect of campus life. By emphasizing an exploration of our societal impact, we empower our community to contribute to a more just and peaceful world.

4. Empowering Faculty as Teacher-Scholars

We are committed to empowering our faculty as teacher-scholars, fostering an environment that supports their professional growth, encourages innovative teaching and advances cutting-edge research. We recognize the importance of faculty development in maintaining academic excellence and enriching the student experience.

5. Teaching and Experiential Learning

Our students come first. Our faculty prioritize creative undergraduate teaching and hands-on learning experiences, offering students a rigorous and challenging STEM curriculum that provides a solid grounding across disciplines. We prepare our students to tackle real-world problems, while equipping them with the skills to lead and to develop innovative solutions to society's most pressing issues.

6. Integrity, Shared Governance and Leadership

We uphold the values of trust, integrity and mutual respect as expressed in our Honor Code. We are dedicated to shared decision-making, fostering transparency, accountability and engagement across our community. We defend academic freedom and freedom of expression. We believe that by leading with courage and respect we can bring about the structures and relationships that can help support the change we seek in the world.



7. A Healthy and Vibrant Campus Community

We celebrate a culture of fun and camaraderie, where good-natured pranks are embraced as part of our community's unique traditions. We prioritize the health and wellbeing of all community members, recognizing that personal fulfillment and holistic wellness are integral to academic and professional success. We are committed to creating a vibrant, inclusive residential campus that fosters meaningful connections, supports personal growth and provides a nurturing environment for all.

8. An Outstanding Place for Staff to Work

We value our professional and academic staff and are dedicated to making Harvey Mudd College an exceptional workplace, empowering our employees by prioritizing their professional and personal growth through comprehensive professional development opportunities and work-life integration, exemplifying healthy excellence in all aspects of work life.

9. Elevating Our Brand and Reputation

We aim to enhance Harvey Mudd's visibility and reputation, showcasing the College as an extraordinary institution worthy of being recognized and celebrated within the broader educational landscape.

10. Philanthropic Call to Action

We encourage and support a culture of philanthropy, recognizing the vital role that generous contributions play in advancing our mission and providing transformative educational experiences.



The Plan—Four Strategic Goals

The plan is organized into four overarching goals, supported by specific objectives and actions. These goals have been developed via community-wide engagement, working groups and task forces. Some actions have already begun, others continue existing work, and some are still in the early planning stages. The Strategic Plan Steering Committee will monitor progress on these goals and objectives as we move forward. This plan embodies Harvey Mudd College's commitment to continuous innovation and impactful contributions, solidifying our reputation as a global leader in liberal arts STEM education. Our mission, vision of STEM for a Better World, guiding statements and strategic goals aim to propel innovation in a world that greatly needs Harvey Mudd.

Goal 1: Innovative Education

Harvey Mudd College is committed to leading a STEM-education renaissance by pioneering transformative teaching methods, curricula and co-curricular programs through the establishment of an Innovation Accelerator. We will empower faculty and staff to create educational experiences that infuse creativity, innovation and inclusivity. Our initiatives aim to close historical performance gaps, enhance student mastery and ensure the material we teach addresses pressing global challenges. We will recruit, admit and retain a student body that reflects the richness of society and provide them with the resources and skills to be successful.

OBJECTIVE 1.1

Advance STEM Education and Practice for the 21st Century
Foster a diverse cohort of engaged STEM leaders through exceptional teaching, learning and research. This includes establishing new institutes and centers of excellence to develop innovative educational approaches for emerging STEM challenges, expanding support for endowed professorships, scholarships, undergraduate research, experiential learning opportunities and summer experiences, and the Core Impact course, ensuring these programs are accessible and beneficial to all students.

OBJECTIVE 1.2

Lead in Climate Education
Continue expansion of the Hixon Center for Climate and the Environment to provide comprehensive education on climate issues. Develop joint majors in climate + STEM fields, integrating interdisciplinary expertise to address global environmental challenges while fostering inclusive approaches to environmental education that consider diverse perspectives and knowledge systems.

OBJECTIVE 1.3

Build State-of-the-Art Educational Infrastructure
Construct a magnificent science and engineering building, residence hall and student union consistent with the highest “healthy building” principles. These facilities will transform the College's cutting-edge scholarship and residential opportunities, creating a comprehensively compelling experience for future students.

Goal 2: Transformative Partnerships

We will forge new partnerships and strengthen the most promising existing collaborative efforts between Harvey Mudd and The Claremont Colleges, external organizations, businesses and community groups. These partnerships will create a dynamic ecosystem that invigorates our students' educational experiences, reinforces our ability to carry out our mission and drives positive societal impact.

OBJECTIVE 2.1

Enhance Professional and Research Partnerships
Review, evaluate and expand partnerships with corporations, foundations, nonprofits and other entities through the Clinic Program and the Office of Career Services, including exploring ways to offer students a greater variety of opportunities, internships and career placements in high-impact areas, both domestically and internationally. Explore additional opportunities to partner with other educational institutions, federal and state government organizations, companies, venture capital organizations and nonprofits to enhance opportunities for research, innovation and societal impact.

OBJECTIVE 2.2

Foster Entrepreneurship and Interdisciplinary Education
Develop comprehensive entrepreneurship offerings, including the Entrepreneurship Studio program, in collaboration with companies, venture capital organizations and nonprofits. Explore new joint programs and majors with The Claremont Colleges in interdisciplinary areas like public policy, ethics and STEM disciplines. Create partnerships that allow students to engage with STEM challenges in a global context, promoting a holistic understanding of societal issues.

Goal 3: An Evolving Institution

We aim to strengthen Harvey Mudd College through intentional steps that further develop our institutional maturity by promoting shared responsibility and philanthropy, ensuring affordability for all students and reducing our environmental impact. By doing so, we will create a stronger foundation for the College's mission and ensure that it is in position to serve future generations of Mudders.

OBJECTIVE 3.1

Increased Visibility and Support of Our Cause and Vision
Build new approaches to engage alumni, parents and friends in supporting Harvey Mudd's cause of STEM for A Better World and our liberal arts-based, STEM educational approach. We will cultivate a culture of shared responsibility of philanthropy to secure resources that sustain and strengthen the College's leadership in higher education.

OBJECTIVE 3.2

Ensuring Access and Equity
Eliminate financial barriers by removing loans from financial aid packages, establishing a Secure Scholars Fund to cover students' indirect costs, and supporting first-generation and low-income students through programs, such as I'm a First and the Summer Institute. This will ensure that a Harvey Mudd College education is financially accessible and inclusive, fostering a diverse student body and providing essential resources and mentorship.

OBJECTIVE 3.3

Embedding Sustainability into College Operations
Renovate our facilities and incorporate alternative energy sources in alignment with sustainable practices. Integrate sustainability into the College's structure and operations to reduce our long-term environmental footprint.

Goal 4: A Thriving Community

We will support our students, alumni, professional staff and faculty in leading fulfilling lives and making positive contributions to our campus and to society. Our central campus serves as a hub of connection, offering the physical space, programs and resources needed to foster social and cultural support, personal growth and the development of impactful lives.

OBJECTIVE 4.1

Strengthen Collaboration and Community Engagement
Enhance our collaborative and socially engaged nature with the Office of Civic and Community Engagement. Build students' citizenship and global awareness through local, regional and global outreach, fostering a community that values diverse perspectives to enable creative problem-solving.

OBJECTIVE 4.2

Foster Holistic Wellbeing and Purposeful Growth
Provide comprehensive programs and resources to support students' personal and academic journeys, helping them achieve a healthy balance between professional and personal life. Use the Office of Wellbeing and other structures to promote programs that empower students to explore their personal philosophies and align their activities with their values and goals to design fulfilling lives.

OBJECTIVE 4.3

Empowered and Engaged Faculty and Staff
Prioritize the recruitment, retention, and professional and personal growth of outstanding faculty and staff by offering competitive pay, benefits and comprehensive professional development opportunities, and work-life integration initiatives. Foster a supportive and inclusive workplace environment, empowering faculty and staff to excel in their careers while maintaining a sense of fulfillment and connection to the Harvey Mudd community.



A Note on the Journey Ahead

It is a fundamental truth that institutions, like individuals, are always in a state of becoming.

At Harvey Mudd College, we honor a rich legacy that has brought us to this moment—a juncture between what we are and what we aspire to be. Our mission, deeply rooted in the integration of the sciences, engineering, mathematics and the liberal arts, will continue to guide us as we reimagine our role in today’s world and for the future.

For us, this *HMC Strategic Plan 2025–2035—STEM for a Better World* embodies our mission, bringing it to life for today’s needs as well as for the challenges ahead. It bridges our storied past to our innovative future, focusing on both our enduring long-term goals and the immediate needs of the students we educate today.

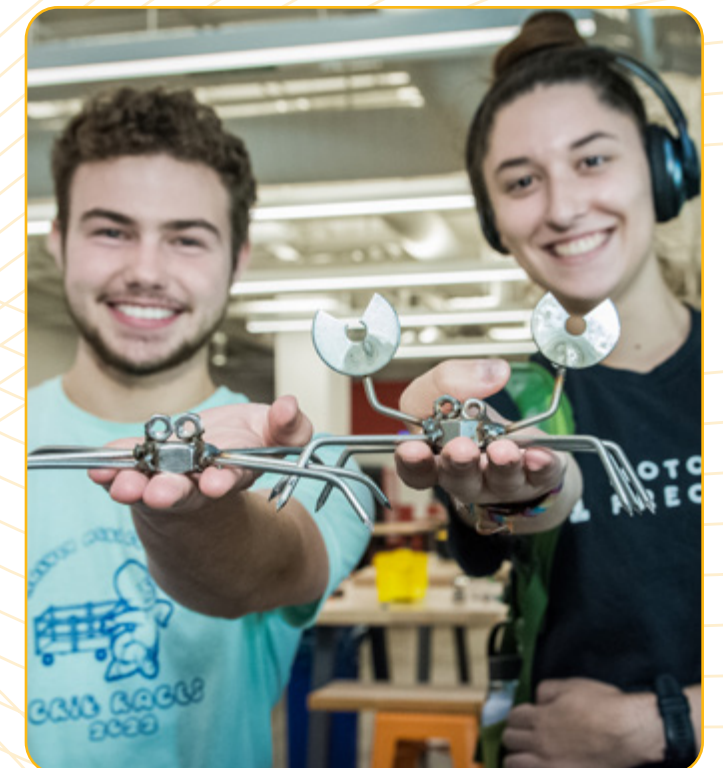
While we cannot provide a precise roadmap for the decade ahead—no map can predict every twist and turn—as a community, we know our destination.

In this document, you find a strategy that tells our story, shares our vision, outlines our guiding statements and presents four overarching goals. The strategy is responsive by design—a living document to guide us through an ever-evolving world.

Together, let us embrace this journey with optimism, courage, determination and a shared dedication to excellence. Together, let us continue propelling innovation as we push the frontiers of knowledge and inspire future generations of thinkers and leaders. Together, let’s soar to even greater heights!


Yours in the journey,

Harriet B. Nembhard
President, Harvey Mudd College



STEM for a Better World.





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