

# Lead With Purpose

WPI's Strategic Plan, 2021–2026



Worcester Polytechnic Institute





## Introduction

WPI has achieved significant impact in its more than 150-year history, even in times of great change. Whether inflection points are driven externally—by world wars, industrial revolutions, or economic downturns—or self-created, like the decision to invent the WPI Plan more than 50 years ago, WPI has responded to opportunities and challenges thoughtfully and with a strong grounding in our founding principles of theory and practice.

WPI again faces an inflection point. The COVID pandemic has dramatically shifted the landscape of higher education, resulting in new learner expectations and accelerating new opportunities to learn, collaborate, and discover enabled by technology. Meeting urgent global, civic, and human challenges such as climate change require STEM professionals who are committed to making their mark in ways that call upon broader intellectual foundations and that embrace more diverse perspectives to maximize positive impact.

This critical moment requires the distinctive, interdisciplinary, project-based approach to problem solving for which WPI is known. To lead with purpose today, WPI must directly address issues of student well-being, access, and affordability, and commit to building a thriving community of diverse learners and doers. We must continuously reposition and reshape our educational and research approaches to expand our distinctiveness and impact. We must always strive to ensure that our work—as scientists and engineers, business leaders and humanists—has a beneficial impact on people, society, and the planet. We must look inward to create a culture of inclusion, belonging, well-being, and respect that draws diverse minds and provides the support necessary for *all* to thrive. These goals are at the heart of this strategic plan.

As we look to a future in which WPI leads with purpose, our updated mission statement reflects our commitment:

### Our Mission

*WPI transforms lives, turns knowledge into action to confront global challenges, and revolutionizes STEM through distinctive and inclusive education, projects, and research.*

# Why We Do This Work

## To Transform Lives

WPI is a highly effective engine of social mobility. Our graduates lift their families through their success, while applying the skills they have learned to be career-ready at graduation and create value for society. We empower and support diverse learners to continuously achieve greater impact. We ensure that students who are historically underrepresented in STEM have access to and can leverage the transformative power of a WPI education.

## To Turn Knowledge into Action to Confront the World's Challenges

The great issues of our time require STEM professionals to apply what they know to create solutions locally and globally. By fully embedding our work with those it impacts in communities around the world, working seamlessly across disciplines, backgrounds and cultures, and effectively integrating STEM skills with humanistic and business skills, our diverse community of learners, doers, and scholars translates theory into effective practice, going beyond knowledge to impact.

## To Revolutionize STEM

We are committed to continuous innovation in how STEM influences the world. WPI makes STEM more relevant, inclusive, responsive, just, and inspiring by driving integration between STEM and non-STEM disciplines, including arts, humanities, business, and social sciences. We recognize that cultural competence, ethical reasoning, and historical understanding must align with technical capabilities to develop empathetic, collaborative, and creative STEM professionals. We continuously expand the work of hands-on, project-based learning rooted in real-world problems, with a sharp focus on including and valuing all voices and embracing new views of credentials and learner engagement.





## Our Values

The plan is about more than vision and action items. It is also about articulating our shared values and committing to living these values through our work.

**Respect:** We treat others with dignity at all times. We embrace expertise, including that earned through both education and lived experience. As global citizens, we respect our natural environment and acknowledge the responsibility we all have to develop and disseminate sustainable stewardship practices for our planet. We are committed to building a workplace and a campus where all can contribute, where all voices are valued, and where we engage and communicate with care and professionalism.

**Community:** We work from a collective vision and purpose to break down barriers to advancing our mission. We embrace opportunities to work collaboratively across disciplines, backgrounds, and organizations to craft better solutions to global and local challenges. We engage diverse perspectives to advance the university to greater heights. We embrace a true spirit of partnership to advance our shared mission, actively seeking partners across our campus and beyond as we commit to elevate our impact.

**Inclusion:** We seek a campus where everyone feels a sense of belonging and all can thrive. We respect differences and the complex identities of each member of our community. We are courageous in our efforts to reduce systemic barriers to success for minoritized groups. We promote and support diversity while actively working to advance equity on our campus and beyond.

**Innovation:** We commit to creating value in all that we do. We approach challenges with the creativity and resilience to make change where it is needed. We act as catalysts to make the world better. We embrace and celebrate learning for all. We act ethically, recognizing how innovation affects different populations by creating learning environments that reflect a broad diversity of experience, perspective, and identities.

**Achievement:** We are intentional in creating great experiences and results for all students, while embracing the importance of balance and well-being. We are outcomes-focused and are committed to creating positive societal change through our work. We tackle the world's great problems with innovative solutions born of diverse perspectives. We recognize and celebrate successes and proudly learn from failures.





## Our Plan

Building upon the success of Elevate Impact, WPI's last strategic plan, and while acknowledging the key global trends that impact our work, we have focused on the following broad areas in our planning:







## Student Well-Being, Access, and Affordability

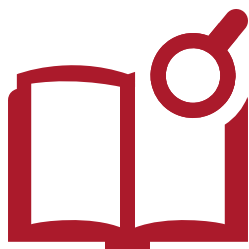
WPI is a rigorous, STEM-focused, student-centered institution. The immersive approach to WPI's educational experience, combined with stressors on students that have been exacerbated by the COVID pandemic, have created a need for intensified focus on well-being for our students and the community at large. WPI's needs in addressing student well-being are not unique but are aligned with trends across higher education. Current models of managing mental health are no longer adequate to establish the healthy campus environment we require, in which all students feel valued, welcomed, and supported. Our ability to create a campus hub focused on evidence-based practices for promoting well-being and managing to life's challenges will provide our community with the tools and support they need to thrive at WPI and in life.

The distinctive experience our students have through WPI's project-based approach puts our graduates in great demand. And that is unlikely to change: STEM job opportunities are expected to grow at twice the rate of the production of new STEM graduates, and employer demand for the "ready on day one" type of professionals WPI produces will continue to increase. But graduating great STEM professionals is not enough if a significant number of talented individuals cannot access what WPI has to offer. A WPI education must be more accessible to a more diverse population of students. There is a pressing need for STEM professionals, leaders, and innovators who better represent humanity as a whole. People of every race, gender, and socio-economic background are needed to co-create solutions to the world's greatest problems.

### Goals for This Area:

1. Take a holistic and inclusive approach to elevate student well-being across academic and co-curricular experiences, including launching the *WPI Center for Well-Being*
2. Increase the number of Black, Indigenous, People of Color (BIPOC) students and students from low-income families who attend WPI
3. Enhance the outcomes and experience of minoritized and underrepresented student populations at WPI
4. Reduce financial barriers to an undergraduate education at WPI





## Purpose-Driven Education and Research

WPI students' passion for STEM is fostered by our distinctive education that integrates humanistic and social understanding and transformative project experiences. Our commitment to driving integration across disciplines, to continuous expansion of hands-on, project-based learning, and our sharp focus on creating and nourishing an inclusive environment makes STEM more human-centered, relevant, and impactful.

We know that revolutionizing STEM will involve the multidisciplinary integration of knowledge. Learners need broad foundational capabilities (including STEM, critical thinking, creativity, cross-cultural, and business), the ability to easily refresh and enhance their skills, and flexible, personalized learning options to support their growth. Smartly leveraging new digital tools, WPI will provide project-based, interdisciplinary approaches to STEM professional development, and flexible, personalized opportunities for STEM professionals to continually learn at different stages of their careers.

Similarly, our investment in interdisciplinary and creative scholarship is critical, building on WPI's already fast-growing research enterprise. We are committed to growing our investment in research and supporting the innovations of our faculty and students as they seek to address some of humanity's most significant challenges, from improving health to addressing the risks and impacts of climate change. We must continually work to increase the relevance and impact of our research and build a strong research infrastructure to support the success of WPI's scholars. We must foster economic impact through external partnerships and transform innovation to commercialization. Finally, we must continue to work to ensure that more of our undergraduate students have access to research experiences, that our educational and research goals, especially around translating knowledge to impact, are intertwined, and that the knowledge we gain is applied to our own campus and community on issues such as alternative energy and climate adaptation.





## Goals for This Area:

1. Increase our global impact by incorporating online and tech-enabled learning options into WPI's already distinctive, project-based curriculum at the undergraduate level, including cohort models, blended and fully remote options, and online experiential learning
2. Revolutionize what it means to be a successful STEM professional by integrating important perspectives, experiences, and abilities not traditionally a part of STEM education into the undergraduate curriculum; assess the delivery of our existing undergraduate learning outcomes (technical, human, global/cross-cultural); and integrate pathways to additional foundational capabilities, including business/value creation, art/design, and sustainability/climate change adaptation into the undergraduate experience to prepare our students to be the STEM leaders of the future
3. Strengthen and grow new, demand-driven graduate programs through differentiated pricing, strategic partnerships, and innovation, including practice-based MS/PhD, graduate programs from The Global School, stackable credentialing, and workforce development
4. Expand scholarly work at WPI: Grow interdisciplinary discovery and address global challenges such as sustainability, climate change, human health, and socially just technologies, through increased funding, better proposal win rates, and greater student engagement in transformational research for impact on societal problems





## Our Inclusive Community

To thrive and lead in an increasingly diverse and competitive global market, WPI must create a community of ethical learners and leaders where all are included and are treated with respect. A diverse organization is more productive, more successful, and more creative. WPI will increase the diversity of our faculty and staff, which will positively impact our students, both in and out of the classroom. We welcome all types of diversity in our community, including LGBTQ+, invisible and visible disabilities, and racial and ethnic diversity. We commit to increasing the well-being and job satisfaction of those who work to bring WPI to life each day.

In addition, it is important that we build a culture willing and able to try new things, to experiment, and to create a “fail smart and learn fast” mindset as higher education and STEM become more demand-driven and fast-moving. From creating an equitable environment to engendering a growth mindset, WPI will ensure it remains a leader in STEM and higher education. Ultimately, as a university, we welcome and treasure the diversity of thought and approach that form the basis for true inspiration, imagination, and transformational innovation that follows.

### Goals for This Area:

1. Drive more explicit engagement with WPI’s mission and values to advance our campus culture; regularly take the pulse of our employees on how well we are living our values
2. Build an inclusive campus culture through the implementation of our divisional Inclusive Excellence plans, equitable practices, and inclusive policies
3. Recruit faculty and staff that increase the diversity of WPI and evolve structures and systems to ensure an inclusive campus community
4. Invest in advancing the professional development, well-being, and job satisfaction of faculty and staff: create stronger, more inclusive shared governance, including the creation of a Staff Council to expand the voice of the staff in steering the university



## Driving Results

The initiatives in this plan are important. We will lean into our core strengths, push the boundaries in critical areas of opportunity, and create new pathways allowing our community to incubate nascent ideas, making room for iteration and experimentation, and for sunseting when appropriate. We will devise new approaches to achieve our goals and serve our students and ensure that our current ways of working are aligned with our values and goals. We will leave no stone unturned as we commit to *Lead With Purpose*.

Together, we can meet this dynamic moment with the same level of creativity and innovation that has always driven this great university. In doing so, we will expand WPI's impact and fulfill our purpose to transform lives, turn knowledge into action to confront the world's greatest challenges, and continue our quest to revolutionize STEM.



## Measures Of Success

We commit to these efforts and will measure our success by tracking and regularly sharing key metrics, including:

1. Measures of student well-being, including outcomes of national surveys, use of campus counseling services, and well-being programming
2. Reduced average cost of attendance
3. Diversity of our undergraduate and graduate student populations
4. Student experiences with online, blended and technology-enabled approaches to PBL
5. Graduate enrollment trends, especially in new programs (<5 years), and alumni enrollment
6. Measures of local and global impact of our research, learning, and institutional practices on sustainability and social justice
7. Scholarly Work: Publications, research awards and win rates, and economic impact
8. Campus climate and employee satisfaction metrics
9. Employee diversity trends: Recruitment, departure rates, career advancement
10. Key financial health metrics, including fundraising results

## Our Vision for WPI's Ideal Future

*Lead With Purpose* is ambitious. It requires our entire community to think and act differently, to make robust financial commitments to achieve our goals, and to rise to meet new needs in higher education. It will require us to build new structures, processes, and capabilities as we seek to embody our values and create a campus community in which all can thrive. Such changes are in service of our vision of the future.

At the conclusion of this plan our campus will be diverse, with many more BIPOC students and students of all socioeconomic backgrounds increasing their representation in STEM—and making STEM better for it. Students of all backgrounds will thrive in our community where well-being and equity are prioritized and difference is welcomed. Likewise, our faculty and staff are more diverse, lighting the way for all students to succeed. Our academic offerings are more demand-driven and tech-enabled, our students will graduate with essential capabilities learned through transformational experiences, and our research profile is higher and its impact profound. We will have made significant progress in translating knowledge to impact through the scholarly and community work of our faculty, staff, and students. We will be globally and locally respected leaders by applying our purpose-driven research and education to such challenges as reducing our carbon footprint on campus and beyond, and our contributions to a sustainable society. Finally, we will be a more diverse, more respectful, and more collaborative organization whose purpose is clear and whose future potential is unbounded.

**Get the latest information about *Lead with Purpose*—including updates, community events, announcements, and more. Visit [wpi.edu/+strategicplan](https://wpi.edu/+strategicplan).**