

Institutional Self Study

New England Commission for Higher Education

August 2021



WPI



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INTRODUCTION

When Burton Clark, a noted educational sociologist, coined the term “institutional saga,” he might have had WPI in mind. According to Clark, “An institutional saga may be found in many forms, through mottoes, traditions, and ethos. It might consist of long-standing practices or unique roles played by an institution, or even in the images held in the minds (and hearts) of students, faculty, and alumni” [1972, p. 235]. A saga pervasively shapes the culture of a place and pervades the community.

WPI's saga *is* pervasive. If you were to stop nearly any person on our campus and say, “Tell me about this place,” you will hear many of the same messages and themes. You will hear about our motto, “Lehr und Kunst” (meaning theory and practice), and about the hands-on learning happening inside and outside the classroom. You will hear stories of the distinctive project-based learning articulated in the WPI Plan happening in campus research labs and classrooms and at 50+ global project sites. You will hear students, faculty, and staff talk about our vibrant student life, supportive and collaborative nature, and invested participation in university decision-making. You will hear alumni talk with conviction about the ways their WPI education taught them to be innovative, collaborative problem solvers.

This self-study has been led by a team of faculty, staff, and administrators. Charged and convened by the President and Provost in January 2020, we intentionally named the group the NECHE Engagement Committee because we wanted the core purpose to be clear: to hear the many voices within our community as we conducted the self-study. Each committee member was responsible for engaging individuals within their respective NECHE Standard to ensure representative voices were heard. In total, more than 50 individuals across the institution contributed to writing substantial portions of the self-study and compiling and reviewing data for the report; many more provided input.

Committee members attended faculty meetings, Board of Trustees meetings, and division meetings, and they met with student government leaders to make the community aware of the process and to solicit feedback. An article in WPI's daily news bulletin, sent to all faculty and staff, invited feedback about the ways WPI had changed and our priorities for the future. Graduate and undergraduate students were also invited to give feedback via a discussion board.

In the late summer of 2021, the full report was shared with the President and division heads and posted on an internal website where all faculty, staff, and students were able to review and post comments and questions.

As our engagement team worked with the community on this self-study over the last year and a half (no easy feat while also battling a pandemic), it affirmed the deep passion community members feel toward WPI. The process also demonstrated the shared goals that cut across departments and divisions. While stakeholders sometimes have different ideas about how to achieve the goals across constituencies, our aims remain aligned: ensuring an innovative, effective, high-quality educational experience for our students that equips them with the knowledge and skills they need to address the world's challenges.

As part of its work, the NECHE Engagement Committee asked the community what makes WPI special or unique. Below are excerpts from the more than 160 discussion forum comments. Predominantly, students talked about the sense of community, learning opportunities, and culture of caring:

“I think WPI is exemplary in their small community with a clear identity built around STEM fields and scientific thought. I found everyone very welcoming and love the professors’ commitment to their students and willingness to foster growth. Overall, I feel everyone is here because they truly enjoy their area of study and that creates a great experience.”—Undergraduate student

“I feel like I have a similar amount of learning opportunities as I did at my undergraduate [R1] institution. Long story short, I am learning a ton and have the opportunity for first-class research without having to get lost at a giant university.”—Graduate student

“There are four aspects in which I’ve found WPI to be special: commitment to diversity, project-based curriculum/opportunities, interdisciplinary programs, and willingness to change. First, WPI has become much more diverse by enacting important initiatives such as reducing barriers to admittance. The interdisciplinary programs and project-based curriculum are what drew me to WPI. They’ve given me the opportunity to work with many students with different education backgrounds and degrees. I’ve been impressed by the opportunities for undergraduates to be able to engage in research through the project-based curriculum. Lastly, I feel like I have a voice at WPI. Not only do I have the power to make some changes to my community at WPI, I have seen other changes I’ve suggested implemented as well.”—Graduate student

"The most important part of WPI is our community. The people here share a common bond, and rarely shy away from helping others. I can literally think of countless examples, working with other students, staff members in academics and student affairs, faculty members, and even trustees, when I've asked a question or requested help and they didn't hesitate to respond or go out of their way to lend a hand. This collaborative atmosphere is special, and even more so when compared to the competitive environment at peer institutions."
—Undergraduate student

Faculty and staff discussed the opportunity to experiment and innovate as well as the commitment to building community and supporting students. For example:

"There's a lot that I love about WPI that makes it special. First and foremost, there's the WPI Plan, including the heavy emphasis on projects and the seven-week terms...."

"Second, I appreciate how faculty are willing to be more proactive with the students.... Here, the faculty seem more willing to reach out and to offer advice and support."

"Third, there's a lot of faculty flexibility and autonomy. We can campaign for the classes we want to teach, the projects we want to co-advise, and the committees on which we want to work. We can push for policy changes, and the administration often (although not always) seems willing to listen."

"Fourth, there's a clear willingness to experiment and innovate (a cultural tradition that I'm sure dates back to the implementation of the WPI Plan). In our classrooms, we can try out new pedagogical techniques without fear of being reprimanded for it. At the college level, WPI will often take risks on cutting-edge new ideas.... There's clearly a lot of pride in the idea that WPI can help set a precedent."

"Fifth, there's clearly a strong camaraderie within and between the faculty and the students. I don't sense much disrespect when I watch faculty members interact, and there's more humility and less ego than at other well-established universities. The students seem much less entitled than when I was in college, yet they're clearly self-motivated and often possess a bit more maturity than their age would suggest. They're also incredibly supportive of one another."

Through this self-study, we are excited to share our proud past, our present passion for STEM education, and our future vision with you. Our saga is anchored by commitment to the purposes and goals of WPI and is grounded in a supportive, collaborative culture that is best captured by the concluding words of *Two Towers*, a history of WPI's first 100 years [Tymeson Petrie, 1965]:

"For these factors of uniqueness—the constant inquiry into identity, the contact with the workaday world, the reconciliation of the practical with the scientific, the community sense of belonging.... Today, the Institute stands solidly atop its rounded hill, still overlooking the city and reaching toward the sky. It stands there for more than any other reason because—by some strange and wonderful supply—there have always been enough people who cared."

The following list includes the members of the NECHE Engagement Committee and faculty, staff, and administrators who wrote and reviewed significant parts of a section or took leadership roles in the development of the final report. We are grateful for their ongoing commitment to telling WPI's story.

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INSTITUTIONAL OVERVIEW

INSTITUTIONAL HISTORY

WPI received its charter from the Commonwealth of Massachusetts on May 10, 1865, and has deep roots in New England's industrial revolution. The Institute's founders were manufacturers and mechanics who sought to create a new type of school that would prepare professionals to meet the needs of a rapidly expanding industrial economy. They also aspired to create an institution that would elevate the status of the professions in society.

Toward those ends, they crafted an innovative approach to undergraduate education that promoted the integration of theory and practice, valued the humanities, and emphasized the responsibilities of the professional in a broader society. In 1970 the focus that the founders placed on theory and practice was renewed and strengthened as the WPI faculty completely redefined the undergraduate program, a process that resulted in the creation of the WPI Plan. At the heart of this novel curriculum are three major projects: one in the major, to demonstrate mastery of the discipline; one focused on a problem at the intersection between technology and societal need, with additional emphasis on the student's ability to work on interdisciplinary teams and solve complex problems; and a third that serves as a capstone for a what is essentially a minor in the humanities and arts. The Plan placed much less emphasis on the courses a student has taken, and much more on what that student can actually do with the knowledge they have gained. In short, WPI defined a program where student learning outcomes were explicitly defined and assessed.

Since the adoption of the WPI Plan, WPI has developed project centers around the world to support collaboration with governmental, non-governmental, and corporate partners in solving interdisciplinary problems. Graduate and undergraduate student enrollments have grown as WPI's reputation has expanded beyond New England. WPI has also expanded the campus footprint substantially, including the addition of Gateway Park in 2007, which further cemented WPI's commitment to the importance of academic and business partnerships that facilitate multidisciplinary collaboration in solving the world's problems.

CONTEXT IN WHICH WPI OPERATES TODAY

The WPI Plan, now more than 50 years old, is still dynamic and evolving. For example, the undergraduate program, with its emphasis on engineering and science, remains a critical component of the WPI experience, but it continues to evolve with new interdisciplinary majors and new programs in engineering, business, and the social sciences. And while the core tenets of the Plan remain intact, the program has regularly been the focus of institutional strategic planning and evaluation, as demonstrated by two recent developments. The first is the ongoing investment in the Great Problems Seminar (GPS). Launched in 2007, GPS now engages about one-third of all first-year students. The second is the recognition of WPI as a *National Academy of Engineering (NAE) Grand Challenge Scholars Program* school in 2017, reflecting the ways in which WPI's curriculum engages students in tackling some of the world's most pressing interdisciplinary problems through curricular and co-curricular activities. In support of this effort, WPI is also reviewing data from a recent alumni survey of the long-term impacts of WPI's project-based curriculum.

In recognition of the ongoing relevance of the WPI Plan, in 2016 the NAE presented WPI with the Bernard M. Gordon Prize for Innovation in Engineering and Technology Education in acknowledgement of the university's distinctive approach to engineering education. WPI also launched the Center for Project-Based Learning in 2016. The center's goals include expanding the high-impact practice of project-based learning across higher education to benefit students everywhere. To date more than 139 colleges and universities have engaged with the center—collectively these institutions serve 1.89 million students in 16 countries.

Increasingly, undergraduate education at WPI is being integrated with the university's growing research and graduate programs. While the research enterprise grew more than 140% between 2016 and 2020 and WPI's graduate population has shifted from primarily part-time students to more full-time master's and PhD students, WPI strives not to see its academic endeavors as disparate efforts—teaching and research; instead, the university structures its efforts as teaching with research, where both graduate and undergraduate students engage in research and inquiry efforts under the mentorship of engaged faculty. It's one of the reasons WPI was recognized by the Wall Street Journal/Times Higher Education College Ranking as first in the nation in 2016 for the category *The Top Faculties; Schools that Do the Best in Combining Scholarly Research with Classroom Instruction*.

The physical campus, which you will hear students refer to as "the Hill," is a residential 95-acre campus situated in New England's second largest city, Worcester, Massachusetts. The campus, which houses about 62% of undergraduate students in on-campus or campus-affiliated properties, boasts a vibrant student life experience with over 230 student organizations, including a robust fraternity and sorority community, and 18 competitive Division III varsity athletic teams supported by the Sports and Recreation Center, which had just opened at the time of the last self-study.

From its early days, WPI's mission has focused on supporting pathways to STEM professions. Since the admission of women undergraduates in 1968, WPI has been committed to making STEM accessible. WPI has forged important partnerships to enhance STEM pathways, including, in 1992, opening the Massachusetts Academy of Math and Science, which was recently ranked the #2 STEM high school in the nation, and, in 2011, launching the STEM Education Center to support K-12 education. WPI has developed numerous summer pipeline programs such as Camp Reach, founded in 1997 to support middle school girls' interest in STEM, and which received the 2011 Presidential Award for Excellence in Science, Mathematics, and Engineering Mentoring from President Obama. WPI's commitment to helping all students, with particular attention to women, students of color, and first-generation students, access high-quality STEM education remains an important priority. Success with women students in recent years has been especially profound; WPI is now among the technological institutions with the highest proportion of women students. In 2018, WPI was ranked by the American Society for Engineering Education as 18th out of 301 schools for the highest percentage of engineering bachelor's degrees awarded to women.

THE IMPACT OF THE COVID-19 PANDEMIC

When the COVID-19 pandemic hit, WPI was prepared to mount a comprehensive response. In January 2020, WPI combined two groups, the Emergency Response Team (which manages the university's response to emergency situations) and the Global Travel Review and Response Team (which manages risks associated with travel, particularly in relationship to WPI's project centers) to form the Coronavirus Emergency Response Team (CERT). Composed of leaders from across the institution, CERT began meeting in late January 2020 to organize and manage WPI's response to the global pandemic. CERT's immediate concern centered on travel: by students and faculty advisors then working at WPI's Hong Kong Project Center, by Chinese students who would soon be heading to WPI for the spring semester, and by community members with plans to travel to and from China. The other looming concern was the potential effect of the viral outbreak on the campus community and potential threats to WPI's operations, including the threat posed by students, faculty and staff returning to the campus from Asia. But even at that time, only weeks out from its initial discovery in Wuhan, WPI's emergency management leaders believed this new strain of coronavirus had the potential to pose a serious impact well beyond its point of origin. WPI started to lay the groundwork for a comprehensive, university-wide response to the greatest public health threat the world has seen in over a century.

WPI's response to COVID-19 was organized under the Incident Command System (ICS), a federally recognized means of standardizing emergency response incident command. WPI utilizes the ICS system to respond to all emergency situations, such as a building fire, as well as planned events, such as Commencement. Using the ICS framework, CERT organized the university's response to COVID-19, and developed the systems and protocols to manage the campus' response, along with the staffing and resources that would be needed to support the efforts.

Since January 2020, CERT changed its structure and composition to suit the evolving needs of the university and has had six distinct phases. In each of the iterations, CERT reported to the university's senior leadership team, and ultimately to President Laurie Leshin, who would serve as the primary decision maker. At critical junctures, when the size and scope of the issues before CERT loomed large, President Leshin often attended CERT meetings to immerse herself more fully in understanding the challenges, providing real-time guidance and decision making, and studying and tracking the data presented at CERT. CERT built data dashboards to track rates of illness, testing compliance, and resource supply and utilization rates so that the university's decisions could be informed by science and data. From the early days of the pandemic, the baseline for CERT decision-making and deliberations was that the top priority would always be the health and safety of the community.

CERT 1 focused on the issues related to travel, to and from WPI's project centers, as well as from infected regions of the world. In early March 2020, at the end of this first phase, CERT decided to suspend travel to its project sites for D-term. CERT 2 was concerned with such pressing issues as how WPI's academic operation would have to change should the campus depopulate, how a prolonged shutdown might affect the university's operations, and how WPI could recruit a new class if campus visits could not take place. Like many institutions, WPI moved to remote operations in March 2020 and faculty worked to quickly pivot courses to allow for remote academic delivery. A short-lived CERT 3 explored options for Commencement, summer programs, and the logistics of moving students and their belongings out of residence halls once the decision was made to offer all classes remotely.

Recovery and reopening dominated the work of CERT 4, which began in the spring of 2020. The team spent the summer of 2020 formulating a robust COVID-19 testing, tracking, and contact-tracing protocol along with extensive operational changes that included changes to card access, residence hall occupancy, lab and classroom occupancy limits, and course delivery models. To compensate for the lost beds due to the de-densification of the residence halls, WPI leased space in a local Hampton Inn adjacent to the Gateway buildings and housed approximately 200 first-year students in the hotel. Other physical modifications to

campus included increased ventilation, enhanced cleaning, deep cleaning, and the addition of tents to allow for outdoor dining and studying. During the 2020-21 academic year, WPI operated a hybrid academic delivery model that enabled graduate and undergraduate students to take courses at WPI or from their homes around the globe. Approximately two-thirds of WPI students were present on campus to live, learn, or work while the remaining one-third were fully remote. Residence hall move-in and New Student Orientation were redesigned and reimagined to account for social distancing and health requirements. Staff returned to campus in a four-phased approach, starting in July 2020 through August 2021.

The decision to require weekly or twice-weekly COVID-19 testing for all community members was a critical component of the reopening plan; to date, WPI has administered over 271,000 COVID-19 tests. Additional medical and public health staffing was brought on board to manage the testing, contact tracing, and the care, support, and feeding of students in isolation/quarantine space. Volunteers from across the institution assisted with contact tracing, quarantine check-ins, and meal delivery. WPI partnered with student leaders to develop educational materials, social media campaigns, and peer-led campaigns to influence student behavior and compliance.

The mission of CERT 5 was to execute the return and recovery plans while also adapting and adjusting to the changing conditions on the ground. CERT tracked changes in federal, state, and CDC guidelines, and monitored decisions made by other universities in relationship to their responses to COVID-19. When there was a change in state or federal regulations, or new guidance on a particular part of campus operations, CERT analyzed it, mapped it against current protocols, and adapted or modified protocols to ensure compliance. CERT understood that it was important to look ahead, plot out the range of scenarios that could befall the campus, and develop contingency plans for many of them. Key to this kind of planning is the identification of triggers that signal the need to change course and put a new plan into action. Triggers include pre-identified numbers of new COVID-19 cases, low levels of cleaning supplies, and nearly full quarantine and isolation space. Any decisions to change course or put more restrictions in place to keep the campus open and people safe were made based on these triggers.

Working closely with the WPI Board of Trustees, WPI created a financial plan based on worst-case assumptions to help safeguard against the potential financial impact of the epidemic. Budgets were reduced across the university in certain spending categories, and only essential spending was allowed. The student health fee was increased to help offset some of the costs of COVID-19 testing as well as the additional health and public health staffing needed to manage the virus. An early retirement incentive program was put into place, and the university's retirement contribution for employees was temporarily reduced. This conservative financial approach led the university to end the fiscal year in a positive position. To support students who were experiencing financial hardships, WPI issued HEERF and CARES funding to eligible students. As a result of gifts from generous donors who wanted to support students impacted by COVID-19, the Dean of Students Office was also able to provide 114 financial grants to students through the Emergency Assistance Fund, totaling \$102,048. The Dean's office also implemented a program to provide meals for students experiencing food insecurity, as well as providing a hot meal to the many students who remained on campus during the Thanksgiving holiday.

As the eventful 2020-21 academic year neared its end, CERT switched to its sixth and current iteration, with a focus on the fall of 2021 and the transition to something approaching the post-pandemic "new normal." CERT has continued to support WPI's ongoing operations and will continue to adapt to whatever the university needs to manage the response to the coronavirus on our campus.

CERT continues to monitor operations in a number of areas. First, the number of students who took a leave of absence during 2020-21 was a bit higher than normal. We will be tracking these students as they return to the university. A Sophomore Experience (SophEx) program has been established for the upcoming academic year for students who felt that they missed out on some of the traditional experiences during their first year and to help them forge stronger connections with their peers and the university. In this academic year, WPI will not be implementing a wholesale re-densification of student housing and will continue to house students in the leased Hampton Inn along with housing formerly occupied by Becker College students. While the university is returning to fully in-person course delivery, it will still have some international students who are not able to return to the U.S. WPI is offering an online option for the incoming first-year international students who are unable to come to campus for the fall 2021 semester. Based on the evolving pandemic across the globe and within individual countries, WPI will evaluate each project center and the health conditions on the ground to reinstitute travel to project centers when it is prudent and safe to do so. The university will continue to provide COVID-19 testing during the year ahead but has switched to pooled testing once a week for all community members, rather than individual PCR testing. CERT continues to keep a close watch on the Delta and other emerging variants and will modify operations as needed.

MAJOR FINDINGS OF THE SELF STUDY

In reviewing the 2012 self-study and the report from the previous visiting committee, and in drafting the current document, it has become clear that the university has progressed considerably over the past decade. As you will learn in the pages that follow, WPI has grown in size and complexity; it has addressed fiscal challenges; and it has weathered a global pandemic, emerging in robust financial health.

Several themes intertwine throughout the individual standard narratives in this report. They are derived from WPI's experience during the past 10 years and its reflections on the future. These themes will help inform WPI's ongoing and future work.

Since the last self-study, WPI hired its first female president and successfully completed nearly all the objectives identified in *Elevate Impact*, its 2015 strategic plan. The plan identified and executed on efforts to add value to WPI's distinctive undergraduate education, grow both research and graduate education, and increase WPI's reputation and visibility. Building on the success of the 2015 plan, the university will put forward a newly finalized strategic plan in the coming year that prioritizes student access and well-being and an effort to measure the long-term impact of a WPI education; a recommitment to purpose-driven education and research growth; and increased efforts to enhance and foster a more inclusive campus culture along with efforts to provide a voice to all stakeholders.

Ten years ago, WPI had experienced extensive growth in the student population (while maintaining or improving every measure of student qualification) and was focused on the physical and human resources needed to support that growth. Since that time WPI has hired more faculty and staff and invested in substantial physical infrastructure to support ongoing resource needs. WPI has expanded its physical plant: for example, it built two new residence halls and the Innovation Studio, which is designed to support interdisciplinary programs and innovation and entrepreneurship. It has also created numerous spaces to support WPI's research growth; for example, the Lab for Education and Application Prototypes (LEAP), which is designed to support integrated photonics manufacturing in Massachusetts in partnership with Quinsigamond Community College, and PracticePoint, a member-based healthcare development and testing facility.

Diversity, equity, and inclusion efforts have continued since 2012. WPI hired its first Chief Diversity Officer, engaged in Project Inclusion, a community-wide three-year assessment and goal setting effort, and formulated a recently unveiled Diversity, Equity, and Inclusion Strategic Framework. This important work is critical as WPI seeks to recruit, retain, and support excellent and diverse faculty, staff, and students.

WPI has continued a commitment to building community where varied experiences and perspectives lead to the best in science and engineering. Toward this end, WPI increased the diversity of the undergraduate population over the last decade (from 31% women to over 40%; from 11.7% underrepresented minorities to 13.2%). In 2018 WPI joined the American Talent initiative, which focuses on expanding college access for low-income students. In 2021 WPI also became one of the first STEM institutions to become test blind in undergraduate admissions. WPI's retention rates, graduation rates, and job placement rates remain competitive with its peers.

Expanding the diversity of the faculty and the engagement of all faculty in governance remain ongoing priorities. Through the implementation of a diversity advocate on all faculty searches and ongoing efforts to evaluate competitiveness of faculty salaries, WPI continues efforts to recruit and retain diverse talent. Faculty governance made immense strides over the last decade to give voice to non-tenure-track faculty in governance activities. These initiatives include a significant update of criteria for faculty promotion from associate to full professor, collaborating with the administration to create longer term contracts for non-tenure-track faculty, the creation of a promotion and tenure process for teaching faculty, and the provision of voting rights for all full-time faculty, regardless of tenure status, in faculty governance matters.

WPI has also addressed important issues relating to its graduate programs while expanding its research mission. Graduate programs are placing increasing emphasis on full-time graduate study. In tandem, research funding has grown substantially with the creation of a full-time Vice Provost for Research, and the establishment of the Research Solutions Institute, which supports faculty and collaborative teams in gaining funding for new research. In the coming years, WPI will seek to balance faculty workload through the ongoing integration of research and teaching.

WPI has also focused on growth in fundraising, having exceeded the goals of one campaign by more than 25%, launched the silent phase of another campaign, and garnered more than 45 gifts of \$1M or more over the last decade.

Physical space has been an ongoing challenge. However, with the increasing demand for remote work among employees and extensive investment in WPI's physical infrastructure that maximizes space use, this challenge is manageable. For example, WPI's new 100,000-square-foot academic building, to open in January 2022, will intelligently combine several student services with

classrooms and research space. WPI opened a new research and design facility on Sagamore Road, and there are plans to break ground on a new residence hall in the next year. WPI is also investing significantly in upgrades to older buildings.

Perhaps most important, as WPI celebrated its sesquicentennial and the 50th anniversary of the WPI Plan, it created mechanisms to deepen the commitment to impactful project-based education delivered across the globe while meeting the needs of modern-day learners. This included a dramatic increase in the number of students completing projects at global sites, the creation of a global scholarship for every student to remove barriers to this high-impact experience, a revised undergraduate learning outcome focused on global competency, and the creation of The Global School. Additionally, WPI established the Institutional Research Office, which evolved into the Office of Strategic Initiatives and University Analytics, to ensure the university's educational effectiveness remains closely aligned with strategic institutional priorities.

As WPI prepares to meet the challenges of the fourth industrial revolution and adapt to the rapidly changing higher education landscape, it seeks to become more agile in decision making, more experimental in initiatives, and more responsive to the needs of future learners, while also becoming more affordable and accessible, and achieving the goals of shared governance. Finding balance with these occasionally competing priorities remains an important focus for the coming years.

DATA FIRST FORM

GENERAL INFORMATION

Institution Name: Worcester Polytechnic Institute

OPE ID: 00223300

Financial Results for Year Ending:		Annual Audit	
		Certified: Yes/No	Qualified Unqualified
Most Recent Year	06/30/2020 2020	Yes	Unqualified
1 Year Prior	2019	Yes	Unqualified
2 Years Prior	2018	Yes	Unqualified

Fiscal Year Ends on: 06/30 (month/day)

Budget / Plans

Current Year	2021
Next Year	2022

Contact Person:	Dr. Arthur Heinricher	Dr. Emily Perlow
Title:	Dean of Undergraduate Studies	Associate Dean of Students
Telephone No:	508-831-5397	508-831-5060
E-mail address	heinrich@wpi.edu	eperlow@wpi.edu

INSTITUTIONAL CHARACTERISTICS

1. Corporate name of institution: **Worcester Polytechnic Institute**
2. Date institution was chartered or authorized: **May 10, 1865**
3. Date institution enrolled first students in degree programs: **November 11, 1868**
4. Date institution awarded first degrees: **July 26, 1871**
5. Type of control:

Public	Private
<input type="checkbox"/> State	<input checked="" type="checkbox"/> Independent, not-for-profit
<input type="checkbox"/> City	<input type="checkbox"/> Religious Group
<input type="checkbox"/> Other	(Name of Church) _____
(Specify) _____	<input type="checkbox"/> Proprietary
	<input type="checkbox"/> Other: (Specify) _____
6. By what agency is the institution legally authorized to provide a program of education beyond high school, and what degrees is it authorized to grant?

Commonwealth of Massachusetts; Bachelor's, Master's, and Doctoral degrees

7. Level of postsecondary offering

<input type="checkbox"/> Less than one year of work	<input type="checkbox"/> First professional degree
<input type="checkbox"/> At least one but less than two years	<input checked="" type="checkbox"/> Master's and/or work beyond the first professional degree
<input checked="" type="checkbox"/> Diploma or certificate programs of at least two but less than four years	<input type="checkbox"/> Work beyond the master's level but not at the doctoral level (e.g., Specialist in Education)
<input type="checkbox"/> Associate degree granting program of at least two years	<input checked="" type="checkbox"/> A doctor of philosophy or equivalent degree
<input checked="" type="checkbox"/> Four- or five-year baccalaureate degree granting program	<input type="checkbox"/> Other doctoral programs _____
	<input type="checkbox"/> Other (Specify) _____
8. Type of undergraduate programs

<input type="checkbox"/> Occupational training at the crafts/clerical level (certificate or diploma)	<input checked="" type="checkbox"/> Liberal arts and general
<input type="checkbox"/> Occupational training at the technical or semi-professional level (degree)	<input checked="" type="checkbox"/> Teacher preparatory
<input type="checkbox"/> Two-year programs designed for full transfer to a baccalaureate degree	<input checked="" type="checkbox"/> Professional
	<input type="checkbox"/> Other _____

9. The calendar system at the institution is:

- Semester
 Quarter
 Trimester
 Other: **Two 7 week terms/semester**

10. What constitutes the credit hour load for a full-time equivalent (FTE) student each semester?

- a) Undergraduate **18 credit hours**
 b) Graduate **9 credit hours**
 c) Professional **18 credit hours**

11. Student population:

- a) Degree-seeking students:

	Undergraduate	Graduate	Total
Full-time student headcount	4661	720	5381
Part-time student headcount	143	1216	1359
FTE	4717	1185	5902

- b) Number of students (headcount) in non-credit, short-term courses: N/A

12. List all programs accredited by a nationally recognized, specialized accrediting agency.

Program	Agency	Accredited Since	Last Reviewed	Next Review
Aerospace Eng (BS)	ABET	2006	2020	2026-2027
Architectural Eng (BS)	ABET	2013	2020	2026-2027
Biochemistry (BS)	ASBMB	2017	2017	unknown
Biomedical Eng (BS)	ABET	2001	2020	2026-2027
Business Administration (MBA, PhD)	AACSB	2003 (MBA) 2016 (PhD)	2016-2017	2021-2022
Chemical Eng (BS)	ABET	1942	2020	2026-2027
Chemistry (BS)	ACS	>25 years	2020-2021	2026
Civil Eng (BS)	ABET	1936	2020	2026-2027
Electrical & Computer Eng (BS)	ABET	2001	2020	2026-2027
Environmental Eng (BS)	ABET	2006	2020	2026-2027
Industrial Eng (BS)	ABET	1995	2020	2026-2027
Information Technology (MS)	AACSB	2003	2016-2017	2021-2022
Management (BS, MS)	AACSB	2003	2016-2017	2021-2022
Management Eng (BS)	AACSB	2003	2016-2017	2021-2022
Management Information Systems (BS)	AACSB	2003	2016-2017	2021-2022
Mechanical Eng (BS)	ABET	1936	2020	2026-2027
Operations Analytics & Management (MS)	AACSB	2003	2016-2017	2021-2022
Robotics Eng (BS)	ABET	2009	2020	2026-2027

13. Off-campus Locations. List all instructional locations other than the main campus. For each site, indicate whether the location offers full-degree programs or 50% or more of one or more degree programs. Record the full-time equivalent enrollment (FTE) for the most recent year.

No locations

14. International Locations: For each overseas instructional location, indicate the name of the program, the location, and the headcount of students enrolled for the most recent year. An overseas instructional location is defined as “any overseas location of an institution, other than the main campus, at which the institution matriculates students to whom it offers any portion of a degree program or offers on-site instruction or instructional support for students enrolled in a predominantly or totally on-line program.” **Do not include study abroad locations.**

No locations

15. Degrees and certificates offered 50% or more electronically: For each degree or Title IV-eligible certificate, indicate the level (certificate, associate, baccalaureate, master’s, professional, doctoral), the percentage of credits that may be completed online, and the FTE of matriculated students for the most recent year. Enter more rows as needed.

Name of program	Degree level	% on-line	FTE
Bioscience Management	MS	100%	4.9
Biotechnology	MS	(50-99%)	13.8
Business Administration	MBA	75%	24.3
Business Analytics	MS	100%	1.2
Computer Science	Certificate & MS	100%	6.3
Construction Project Management	Certificate & MS	100%	4.7
Data Science	Certificate & MS	100%	13.8
Electrical & Computer Engineering	Certificate & MS	100%	28.5
Environmental Engineering	MS	100%	4.7
Fire Protection Engineering	Certificate & MS	100%	18.1
Information Technology	MS	100%	0.4
Innovation with UX	MS	100%	0.4
Life Science Management	Certificate	100%	1.6
Manufacturing Engineering	Certificate & MS	100%	5.7
Materials Science & Engineering	MS	100%	0.4
Mechanical Engineering	MS	100%	24.5
Power Systems Engineering	Certificate & MEng	100%	31.8
Power Systems Management	Certificate & MS	100%	4.7
Robotics Engineering	Certificate & MS	100%	42.1
Supply Chain Essentials	Certificate	100%	0.8
System Dynamics	Certificate, MS	(50-99%)	2.0
Systems Engineering	Certificate, MS, PhD	100%	30.3
Systems Engineering Leadership	MS	100%	1.6

16. Instruction offered through contractual relationships: For each contractual relationship through which instruction is offered for a Title IV-eligible degree or certificate, indicate the name of the contractor, the location of instruction, the program name, and degree or certificate, and the number of credits that may be completed through the contractual relationship.

Name of contractor	Location	Name of program	Degree or certificate	# credits
BAE Systems	New Hampshire	BAE Employee Leadership Development Program (ELDP)	Credits count towards the WPI MS or MEng degrees	6 to 9, depending on the program

**WPI learned in June that this 15-year-old agreement was not reviewed by NECHE. Upon learning this, WPI contacted NECHE immediately and will submit a substantive change proposal for the committee's review in September.*

17. List by name and title the chief administrative officers of the institution. **See table to follow.**

18. Supply a table of organization for the institution. While the organization of any institution will depend on its purpose, size, and scope of operation, institutional organization usually includes four areas. The following outline may be helpful in charting and describing the overall administrative organization: a) Organization of academic affairs, showing a line of responsibility to president for each department, school division, library, admissions office, and other units assigned to this area; b) Organization of student affairs, including health services, student government, intercollegiate activities, and other units assigned to this area; c) Organization of finances and business management, including plant operations and maintenance, non-academic personnel administration, IT, auxiliary enterprises, and other units assigned to this area; d) Organization of institutional advancement, including fund development, public relations, alumni office, and other units assigned to this area.

Organizational charts are available in the electronic workroom, Standard Three.

19. Record briefly the central elements in the history of the institution:

Worcester Polytechnic Institute was incorporated under the name “Worcester County Free Institute for Industrial Sciences” under MGLA Ch. 180, Sec. 1-11 as an educational institution by an act of the Massachusetts Legislature on May 9, 1865. It was granted the power and authority to grant degrees “appropriate to the several courses of study pursued in said intuition” on March 3, 1870. On May 26, 1887, the Legislature endorsed the Institute’s change of name to its present title, Worcester Polytechnic Institute. The first Bachelor of Science degrees were awarded in 1871 and the first graduate degrees were awarded 1898. A formal athletic program began in 1916 and the first dormitory was built in 1926, with fraternities providing the only campus-related housing prior to that time. Women undergraduates were first enrolled in 1968. WPI was first accredited by NEASC in 1937. The programs in civil, electrical, and mechanical engineering were accredited by the Accreditation Board for Engineering and Technology (ABET) in 1936, with chemical engineering added in 1942. The computer science program was first accredited by the Computer Science Accrediting Board in 1986. The program in management was accredited by the Association to Advance Collegiate Schools of Business (AACSB) in 2003. The first Bachelor of Arts degree was awarded in 2009. In 2010, WPI’s robotics engineering program became the first such program accredited by ABET in the United States. In 2014, WPI inaugurated its first female president. In 2021, WPI became one of the first STEM institutions to become test blind in undergraduate admissions.

CHIEF INSTITUTIONAL OFFICERS

Function or Office	Name	Exact Title	Year of Hire	Year of Most Recent Appointment
Chair Board of Trustees	Andrew Aberdale	Chair Board of Trustees	N/A	2021
President/CEO	Laurie Leshin	President	2014	2017
Executive Vice President	Michael Horan	Executive Vice President and Chief Financial Officer	2021	2021
Chief Academic Officer	Wole Soboyejo	Senior Vice President and Provost	2016	2019
Deans of Schools and Colleges	John McNeill	Dean of Engineering	1994	2021
	Jean King	Dean of Arts and Sciences	2017	2017
	Deborah Jackson	Dean of The Business School	2021	2021
	Mimi Sheller	Dean of The Global School	2021	2021
Chief Financial Officer	Michael Horan	Executive Vice President and Chief Financial Officer	2021	2021
Chief Student Services Officer	Philip Clay	Vice President for Student Affairs	1993	2015
Planning	Eric Beattie	Vice President of Campus Planning and Facilities Management	2018	2018
	Rachel LeBlanc	Associate Vice President, Strategic Initiatives	2005	2021
Institutional Research	Melissa Leahy	Director of Strategic Initiatives	1997	2021
Assessment	Arthur Heinricher	Dean of Undergraduate Studies	1992	2008
Development	Donna Stock	Vice President, University Advancement	2006	2021
Library	Anna Gold	University Librarian	2017	2017
Chief Information Officer	Patricia Patria	Vice President for Information Technology, CIO	2018	2018
Corporate and Professional Education	Stacy Chiaramonte	Executive Director, Corporate and Professional Education	2010	2010
Grants/Research	Bogdan Vernescu	Vice Provost for Research	1991	2014
	Kola Akindele	Assistant VP, External Relations and Strategic Partnerships	2020	2020
Admissions	Andrew Palumbo	Assistant VP for Enrollment Management and Dean of Admissions and Financial Aid	2015	2019
Registrar	Sarah Miles	Registrar	2014	2016
Financial Aid	Jessica Sabourin	Director of Student Aid and Financial Literacy	2019	2019

CHIEF INSTITUTIONAL OFFICERS (CONTINUED)

Function or Office	Name	Exact Title	Year of Hire	Year of Most Recent Appointment
Public Relations	Maureen Deiana	VP of Marketing Communications and Chief Marketing Officer	2010	2020
Alumni Association	Donna Stock	Vice President, University Advancement	2006	2021
Other	Kent Rissmiller	Interim Dean of Integrative and Global Studies Division	1988	2016
	Terri Camesano	Professor and Dean of Graduate Studies	2000	2015
	Arthur Heinricher	Dean of Undergraduate Studies	1992	2008
	Gregory Snoddy	Assistant Vice President and Dean of Students	1996	2002
	Amy Morton	Vice President and Chief of Staff	2011	2018
	David Bunis	Senior Vice President and General Counsel	2017	2017
	Kola Akindele	Assistant VP, External Relations and Strategic Partnerships	2020	2020
	Dana Harmon	Director, Physical Education, Recreation and Athletics	2002	2002
	Alicia Mills	Interim Vice President for Talent and Inclusion	2019	2021

TABLE OF NECHE’S ACTIONS, ITEMS OF SPECIAL ATTENTION OR CONCERN

NECHE’s November 15, 2012, letter to Worcester Polytechnic Institute requested that the university give emphasis to its success in the following areas of special attention:

Item of Special Attention	Standards Cited*	Where Addressed
Addressing the impact of undergraduate and graduate enrollment growth on faculty workload, advising, and student services	Standard 2.3, 5.7, 6.11	Standard 6 Standard 5
Developing clear terms of appointment and promotion for non-tenure-track faculty and provisions for their meaningful participation in governance, to include updating the faculty handbook to reflect the status of non-tenure-track faculty and the new decanal structure	Standard 3.10, 5.1, 5.9, 5.10	Standard 3 Standard 6
Revising the student course report to accurately estimate time on task	Standard 4.34	Standard 4
Systematically using the Great Problems Seminar and the Major Qualifying Project to assess student achievement and using the results to improve academic programming	Standard 2.5, 4.48, 4.49	Standard 8
Achieving its goals for the recruitment and retention of faculty, staff, and students of color	Standard 5.4, 6.1, 11.5	Standard 2 Standard 5 Standard 6 Standard 7

NECHE’s January 12, 2017, letter to Worcester Polytechnic Institute requested that the university give emphasis to its success in the following areas of special attention:

Item of Special Attention	Standards Cited*	Where Addressed
Achieving the goals specified in the strategic plan	Standard 2.3, 2.5	Standard 2
Clarifying strategic enrollment plans for its undergraduate and graduate programs and ensuring that student support services are sufficient	Standard 2.3, 2.4, 5.7, 5.9	Standard 2 Standard 5
Evaluating the impact of enrollment growth on faculty workload and addressing the concerns related to the fraction of credits delivered by non-tenure-track faculty	Standard 2.7, 2.8, 6.1, 6.10	Standard 6
Ensuring that non-tenure-track faculty are appropriately integrated into the institution’s governance structure	Standard 3.13, 3.15, 6.1	Standard 3 Standard 6
Implementing plans to improve the effectiveness of space utilization and expanding the space allocated for academic activities	Standard 7.21	Standard 2 Standard 7
Achieving diversity goals set for faculty, staff, and students	Standard 6.5	Standard 2 Standard 5 Standard 6 Standard 7

* Standard numbers reflect the standards cited in the letters. These standard numbers may have been revised since the letters were issued.

STANDARD ONE: MISSION AND PURPOSES

The challenges humanity faces are urgent, complex, and demanding of our best work. And so, it is even more important to remember that these goals I have laid out are not ends in themselves. They matter because WPI matters—the intensive, empowering way that WPI educates students, and the problem-focused research that we do here matters—now more than ever.

—Inaugural Address, President Laurie A. Leshin (November 2014)

DESCRIPTION AND APPRAISAL

On May 10, 1865, the Act of Incorporation for WPI, then called the Worcester County Free Institute of Industrial Science, was signed by the Secretary of State of the Commonwealth of Massachusetts, setting forth the Institute's institutional purpose: to "aid in the advancement, development, and practical application of science in connection with the arts, agriculture, manufactures, mercantile business and such other kindred branches of practical application as said corporation shall determine."

For more than 150 years, the story of WPI's founding purpose has been well understood within the community, its relevance woven into goal-setting and strategic planning even as the university's student body, academic and research enterprise, and reach have grown—in size, complexity, diversity, and impact. One WPI founder wanted to start a college to provide a scientific education to young people destined for emerging technical careers. The other dreamed of starting a school to elevate the traditional apprenticeship system for mechanics and other technical tradespeople. Through their compromise, these visions were blended to create what remains at the core of WPI's distinctive approach to education—theory and practice—a translation of the founding motto, *Lehr und Kunst*. When the Institute opened in 1868, students learned the theory of engineering and science in the classrooms and labs of Boynton Hall, named for John Boynton, a successful tinware manufacturer. Next door, in the Washburn Shops, named for Ichabod Washburn, who built the nation's largest wire-making enterprise in Worcester, students applied that theory by making products for sale. In 1882, the first hydraulic elevator, faster and cheaper than steam elevators, was built in the Shops. It was the first of countless innovations, businesses, and meaningful careers born of the power of theory and practice consistently and creatively applied at WPI.

Mission and Purposes

WPI is a place deeply committed to excelling in cutting-edge research and discovery and highly impactful teaching and learning. Core to the university's educational process and distinctive character is the WPI Plan, which redefined the undergraduate program in the 1960s while remaining true to WPI's founding mission and purpose. The Plan challenges students to learn how to learn and requires that students apply their classroom experiences (theory) to real-world projects (practice) that challenge them from proficiency, social, and global perspectives.

As WPI approached its sesquicentennial year (2015), the inauguration of WPI's 16th president—the first woman at the helm—served to recommit the university to its founding ideals and challenge the community to measure the positive impact that its students and faculty, staff, and alumni have on communities around the world through their projects, research, and careers: in essence, "for the betterment of society," as expressed in the university's mission statement (adopted by the Board of Trustees on May 22, 1987, accessible on the WPI website, and published in the course catalog):

WPI educates talented men and women in engineering, science, management, and humanities in preparation for careers of professional practice, civic contribution, and leadership, facilitated by active lifelong learning. This educational process is true to the founders' directive to create, to discover, and to convey knowledge at the frontiers of academic inquiry for the betterment of society. Knowledge is created and discovered in the scholarly activities of faculty and students ranging across educational methodology, professional practice, and basic research. Knowledge is conveyed through scholarly publication and instruction.

In WPI's prior self-study, it noted "the need to focus the whole community on examining the existing goal and mission statements." That examination has spanned the seven years since President Leshin's arrival in 2014, including 17 months in 2014 and 2015 of listening and integrating ideas for *Elevate Impact*; four years of that plan's implementation starting in 2015; the preparation for and discussion at a 2019 Board of Trustees session on mission and values; and work to introduce the university's next strategic plan. The ongoing effort is indicative of a thoughtful and invested community, one that expects methodical, community-driven, consensus-based change—a theme throughout this self-study.

A Foundation for Reevaluation

Through open retreats and a focused planning effort across the 17 months referenced above, more than 1,000 faculty and staff members, students, alumni, trustees, partners, and friends took part in framing *Elevate Impact*. From that input, the university informally abridged and expanded its mission, purpose, and values, publishing the following as a prelude to the strategic plan:

Our Core Purpose: *WPI's mission is to create, discover, and convey knowledge at the frontiers of technological academic inquiry for the betterment of society.*

Who We Are and What We Stand for:

As passionate educators and scholars, we are:

Distinctive – *We embrace high-impact educational practices, perform groundbreaking research and innovation, value rigor and data-driven analysis, and deliver impact in communities worldwide.*

Inclusive – *We value the diversity of thought, culture, and perspective that our students, faculty, alumni, and partners bring to our shared goals and mission.*

Steadfast – *We make lasting commitments to the WPI community around the globe.*

As bold innovators, we are:

Courageous – *We take on grand challenges and ask tough questions to shape the future of technological higher education and research.*

Strategic – *We educate leaders with entrepreneurial and global mindsets to approach challenges with the curiosity and courage needed to improve the human condition.*

Dynamic – *We seek to understand and adapt to evolving opportunities to make an impact on our students and the world; we embrace disruptive technologies and are a force in transformative paradigms.*

As dedicated leaders, we are:

Driven – *We continuously focus on delivering the highest value education and scholarship.*

Catalysts – *We enable tangible outcomes and measurable success to advance our mission worldwide.*

Impactful – *We make a positive difference for our students and in communities around the world.*

The mission-driven messaging in these statements is woven throughout print and digital recruitment materials, social media, news releases, and university publications—all of which have been continually enhanced across the past 10 years. This includes a new wpi.edu, an enhanced quarterly magazine, the *WPI Journal*, and new publications such as *WPI Today*, an internal daily newsletter; the *Herd*, a digital platform that tells stories of people and programs; *Research News*, an e-newsletter sharing purpose-driven research; and an annual *Impact Report*.

WPI's founding purpose and mission and goal statements—and the accompanying narrative in the prelude to *Elevate Impact*—have effectively directed the university's decisions and enhanced effectiveness over the last 10 years. Evidence of this includes:

- *Expansion of global project centers.* Since 2014, WPI has launched 20 new project center locations, the crown jewels of WPI's global network where student teams immerse to collaborate with local sponsors for societal impact; the university now has 59 of these center locations.
- *Removal of financial and other barriers to impactful global experiences.* WPI has increased global scholarships so more students have the experiential opportunity, and even amidst the pandemic, faculty and sponsors collaborated to virtually immerse students in real-world problem solving.
- *National recognition of educational model.* In 2016, the National Academy of Engineering (NAE) presented WPI with the Bernard M. Gordon Prize for Innovation in Engineering and Technology Education. WPI was recognized “for a project-based engineering curriculum developing leadership, innovative problem solving, interdisciplinary collaboration, and global competencies.”

- *National recognition of diversity and inclusion efforts.* WPI received a 2020 Higher Education Excellence in Diversity (HEED) Award. The award comes after an intensive three-year initiative to set standards for a campus environment that is accepting and welcoming to all—and as the university rolled out the process for developing, implementing, and measuring Sustainable Inclusive Excellence plans. These plans aim to blend diversity, equity, and inclusion (DEI) into WPI’s full fabric.
- *Growth of WPI’s research portfolio.* The university’s longstanding emphasis on applied research translates to faculty and students doing research, first and foremost, to solve problems and make the world a better place. In 2020, WPI saw its research awards grow to a record \$56.2 million, up 50% from the previous year and up 140% across the five-year span of *Elevate Impact*.
- *Improvement in the graduate student experience.* New investments included hiring staff, providing professional development programming, and increasing social and advising outreach. Both the offerings and student population have grown in size, diversity, and quality, as evidenced by such programs as the Presidential Fellows, which offers doctoral fellowships to underrepresented women and minority students working in STEM or business disciplines.

Structural and Associated Leadership Changes

Along with a new president, the 10 years since WPI’s last self-study have seen significant changes in organizational structure and leadership. While academic deans were first installed in 2010, only The Business School’s structure was formalized at that time; in 2019 the School of Arts and Sciences and the School of Engineering were formalized. In 2020, WPI launched The Global School, building on the university’s half-century of leadership in project-based learning. Through a project-based education, students discover the value of learning by doing. Through projects, WPI students in every major are challenged to take the hypothetical and make it real, applying skills and concepts from the classroom to societal problems, which results in real-world experience and impact “for the betterment of society,” as WPI’s mission states. WPI undergraduate students experience The Global School through project work—locally and globally—that addresses social, technological, ecological, and economic challenges through interdisciplinary, purpose-driven research. The Global School will also partner with the other schools on graduate program offerings, in the interdisciplinary model that is prevalent across WPI.

Each school aligns its vision, mission, and purpose with those of the university. For example

The School of Arts and Sciences positions itself as a hub of innovation and imagination. Its vision—to *inspire members of our community to be creators, scholars, inventors, and responsible global citizens*; its mission—to *bring together cross-disciplinary and diverse perspectives to promote discovery and communication, advance knowledge, and improve the human condition*.

Within the schools, programs and departments have mission statements. For example

Robotics Engineering combines sensing, computation, and actuation in the real world, defined as intelligent connection from perception to action. Intelligent robotics is playing a key role in the fourth industrial revolution as it fuses technologies that connect physical, digital, biological, and social spheres. Robotics is becoming omnipresent in serving societal needs, with wide range applications, including medicine and healthcare, transportation, manufacturing, material handling, exploration in space and deep sea, defense, domestic help, search and rescue, and emergency responses.

As part of a university that prides itself on preparing and serving the whole student, the **Division of Student Affairs** mission emphasizes professionalism and caring as it works:

... to influence attitudes, change behaviors, develop skills, and expand students’ knowledge in the areas of citizenship and leadership. In partnership with students, parents, faculty, and staff, we shape and enrich a learning community that fosters self-esteem and personal development, and prepares students to work, live, and lead in a pluralistic society.

The undergraduate and graduate governance organizations publish their missions. For example:

Student Government Association (SGA/Undergraduate) seeks *... to improve the quality of undergraduate student life at the University both academically and socially by addressing student needs and concerns, providing financial structure for WPI’s student clubs and organizations, and representing the student body in a professional manner.*

Toward a New Mission Statement

In late 2019 and early 2020, as the university prepared for a new five-year strategic plan, a working group of faculty and staff came together to revisit and revise the WPI mission and value statements. The Mission, Vision, and Values Working Group (MVV-WG), a cross-functional group of staff, faculty, and student leaders, convened to represent the broader community; conducted and discussed research on themes; and agreed to propose a one-sentence mission statement and provide an accompanying set of core values. The goal in writing this single sentence was to make it memorable, relatable, and easily recitable by anyone at any level of the university.

The group was led by the Director of Diversity, Equity, and Inclusion (DEI) and the Dean of the School of Engineering. Among the staff members represented was the University Librarian, who shared relevant history upon which to anchor a new mission statement. The eight-person group also included the Dean Ad Interim of The Business School, a department head and a professor in the School of Arts and Sciences, leadership from student activities and residential services, and a DEI specialist. As part of its work, the group was asked to review the existing mission statement, which has served the university well; though the group felt WPI's mission should more purposely integrate diversity, equity, and inclusion, and that its focus should remain on teaching and learning and global impact.

Meeting notes document the repetition of words and phrases by constituencies including *student-centered*, *societally oriented*, *project-based learning*, *inclusive excellence*, *impact*, *global citizenship*, *interdisciplinary*, and *accessibility*. With the disruption of the global pandemic beginning in March 2020, the MVV-WG stalled, picking up again in late winter 2021. Its work, as well as input from the leadership team and another working group focused more broadly on the 2021-2026 strategic plan, informed new mission and values statements. Community input—to assess how well the mission resonates and to what degree the values are practiced and worth committing to—was sought, initially, through an anonymous survey, and later in division and departmental meetings and in community-wide town halls. The mission and values are being finalized as this self-study is being released.

Our Mission

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

This mission is informed by three pillars that explain why WPI does this work.

To Transform Lives	To Turn Knowledge into Action to Confront Global Challenges	To Revolutionize STEM
<p>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 work-ready at graduation and create value for society. We strive to empower learners to continuously increase their readiness to achieve impact, and to enable more students who are traditionally underrepresented in STEM to access the transformative power and possibility of a WPI education.</p>	<p>Most knowledge does not result in systemic change. 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, and effectively integrating STEM skills with human and business skills, our community of learners, doers, and scholars seeks to go beyond knowledge to impact.</p>	<p>We are committed to continuous innovation in how STEM influences the world. We strive to make STEM more relevant, inclusive, responsive, and inspiring by driving integration between STEM and non-STEM disciplines, continuous expansion of hands-on, project-based learning rooted in real-world problems, a sharp focus on valuing all voices, and embracing new views of credentials and how learners engage.</p>

The mission is further informed by WPI's values.

Respect	Community	Inclusion	Innovation	Achievement
<p>We treat others with dignity at all times. We embrace expertise, including that earned through both education and lived experience. We are committed to a workplace and a campus where all can contribute, where all voices are valued, and where we communicate with care and professionalism.</p>	<p>We work from a collective vision and purpose to break down barriers to advancing our mission. We embrace opportunities to work collaboratively across disciplines and organizations to craft better solutions to global and local challenges. We actively seek partners from beyond our campus to help us elevate our impact.</p>	<p>We seek a campus where everyone feels a sense of belonging. 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 marginalized groups. We celebrate diversity while working to advance equity on our campus and within STEM.</p>	<p>We strive to create 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.</p>	<p>We are intentional in creating great experiences and results for our students. We tackle the world's great problems with impactful solutions born of diverse perspectives. We are outcomes-focused. We recognize and celebrate successes and proudly learn from failures.</p>

PROJECTIONS AND ASPIRATIONS FOR THE FUTURE

WPI arrived on the scene as the nation set its sights on advancing from an agrarian economy to an industrial economy, in the center of a region that gave birth to the American Industrial Revolution. Technology growth is faster than ever, and WPI continues to prepare its undergraduate and graduate students to lead in the fourth industrial revolution by educating them to excel, often in careers that do not yet exist. By delivering on its purpose and mission and living its values, WPI will remain true to its heritage of balancing theory and practice—and teaching and research—as it prepares students to transform their own lives and those of their families as they translate what they learn and experience at WPI into action as budding STEM professionals to impact the world.

The next strategic plan (in its final stages of development after nearly two years) will be driven by the finalized mission and value statements reflective of the work done as a community over the past several years to reaffirm who WPI is, what it stands for, and why it is here. With its roll-out, the new mission will be published in the course catalog (moving to a digital-first system in 2021), posted on the website, and explained in university publications. It will also inspire new content for all stakeholders. The themes of the new plan, described in Standard Two, are *Student Access and Well-being*, *Purpose-driven Education and Research*, and *Who We Are and How We Work*. Each is designed to help WPI meet its mission and retain its distinctiveness as it navigates the changing STEM and higher education landscape.

DATA FIRST FORM

STANDARD 1: MISSION AND PURPOSES

Attach a copy of the current mission statement.

Document	Website location	Date Approved by the Governing Board
Institutional Mission Statement	www.wpi.edu/about/mission.html	05/22/1987

Mission statement published	Website location	Print Publication
Undergraduate Catalog	www.wpi.edu/academics/calendar-catalogs	PDF download option
Employee Handbook	www.wpi.edu/sites/default/files/FinalEmployeeHandbook.pdf	PDF download option

Related statements	Website location	Print Publication
Trustees Mission and Goals	www.wpi.edu/about/mission	
WPI Values Statement	www.wpi.edu/about/diversity-inclusion	
	Undergraduate Statement of Values: www.wpi.edu/sites/default/files/2020/01/23/WPI_UG_Cat-2020-21-Final_WEB.pdf	
WPI Plan	www.wpi.edu/project-based-learning/wpi-plan	
Strategic Excellence Initiative	hub.wpi.edu/spread/88/sustainable-inclusive-excellenceprereading	PDF download option
Undergraduate Learning Outcomes	www.wpi.edu/sites/default/files/2020/01/23/WPI_UG_Cat-2020-21-Final_WEB.pdf	PDF download option
IQP Learning Outcomes	www.wpi.edu/academics/undergraduate/interactive-qualifying-project/outcomes	
MQP Learning Outcomes	www.wpi.edu/academics/undergraduate/major-qualifying-project/learning-outcomes	
Humanities and Arts Learning Goals	www.wpi.edu/academics/undergraduate/humanities-arts-requirement/learning-outcomes	
Great Problems Seminar Learning Outcomes	www.wpi.edu/academics/undergraduate/great-problems-seminar	
Student Government Association	wp.wpi.edu/sga/	
Graduate Student Government	www.wpi.edu/academics/graduate/resources	
Alumni Association	www.wpi.edu/alumni/community/alumni-association	

Please enter any explanatory notes in the box below

WPI is in the process of revising the mission statement to be approved by the Board of Trustees at the October 2021 meeting.

WPI Mission (adopted 1987)

WPI educates talented men and women in engineering, science, management, and humanities in preparation for careers of professional practice, civic contribution, and leadership, facilitated by active lifelong learning. This educational process is true to the founders' directive to create, to discover, and to convey knowledge at the frontiers of academic inquiry for the betterment of society. Knowledge is created and discovered in the scholarly activities of faculty and students ranging across educational methodology, professional practice, and basic research. Knowledge is conveyed through scholarly publication and instruction.

Proposed WPI Mission

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

STANDARD TWO: PLANNING AND EVALUATION

DESCRIPTION AND APPRAISAL

Planning and evaluation processes at WPI are driven by the university's mission and include university-level strategic planning and goal setting, financial planning, facilities and IT infrastructure, personnel, and enrollment management planning. These processes drive the development of strategies and ensure appropriate allocation of resources in order to deliver on university goals. One of the hallmarks of the WPI planning and evaluation process is that it is broadly inclusive and often consensus-based. WPI is a connected community and, as such, solicits regular planning and evaluative input across different constituencies. Examples of these mechanisms are a cross-functional annual planning and budgeting process, monthly faculty meetings (which are attended by tenured, tenure-track, and non-tenure track faculty as well as staff from every WPI division), meetings of student governance associations, and student representation on most WPI committees. The President's Office organizes regular Town Hall meetings to engage faculty, staff, and students in open discussion of current issues, and to celebrate community achievements.

Planning and evaluation occur at the university, dean, and department levels in an iterative way, where goals and associated needs are shared across levels to develop consistency and drive innovation. WPI regularly evaluates academic and administrative programs using both internal and external reviewers. WPI also has a recent record of significant progress in developing and implementing programs that deliver on strategic goals, as well as responding to needs identified through evaluation. Longer term financial planning (as discussed in Standard Seven) and a renewed focus on risk (as discussed in Standards Three and Nine), both achieved through an inclusive and representative process, has kept WPI on firm financial footing and enabled a longer-term planning and evaluation cycle.

Planning

Planning is driven by strategic initiatives at the university level and feeds into annual planning processes at all levels. It encompasses financial, human resource, enrollment, academic, and space planning.

University Strategic Plan

WPI's Strategic Plan lays out goals for the university and plans for their implementation. Financial and capital planning at the university level support the implementation of these goals, informed by inputs from departmental- and dean-level planning processes. Enrollment planning plays a critical role in driving WPI's academic mission and assuring its financial health.

At the time of WPI's last NECHE self-assessment, the university was midway through the 2010 strategic plan. In 2014, having largely achieved the goals of that plan, the university, under the leadership of President Laurie Leshin, engaged the community in a new strategic planning process that resulted in *Elevate Impact, A Strategic Plan for WPI 2015-2018*. More than 1,000 stakeholders from within and outside WPI participated in the strategic planning process, which began with listening sessions and culminated with a plan focused on three broad goals, each with three specific areas of implementation. These initiatives are shown in the table below. In addition, several cross-cutting enablers were identified, including diversity and inclusion, local and global partnerships, technology and systems, faculty and staff development, data-driven decision making, and sustainability.

For each of the initiatives, several specific and measurable outcomes were developed. At regular intervals, progress on the strategic goals was presented at community meetings open to faculty, staff, and students, and at Board of Trustees meetings. The various forums not only communicated the state of the project, but also allowed community members to provide feedback, ideas, and constructive criticism. This feedback loop was helpful in refining the activities associated with the initiatives and provided the opportunity to incorporate innovative ideas.

Elevate Impact Goals and Initiatives

Goals	Initiatives
Extend the success of our distinctive undergraduate education	<ul style="list-style-type: none"> • <i>More in Four</i>: Lower cost of a WPI education through accelerated paths and co-op • <i>Global Projects for All</i>: Expand the number and document the impact of global projects • <i>Major and a Mission</i>: Empower students to pursue a more intentional path at WPI
Expand transformative research and graduate education	<ul style="list-style-type: none"> • <i>Competency-Based Online Education</i>: Pioneer online CBE program • <i>WPI PhD Plan</i>: Implement a distinctive WPI PhD plan and elevate PhD programs • <i>Research Enterprise</i>: Enable critically important research where WPI can have an impact
Enhance WPI's reputation and visibility	<ul style="list-style-type: none"> • <i>Center for Project-Based Learning</i>: Establish WPI as a global leader in project-based learning • <i>Develop a global strategy to maximize shared goals and opportunities</i> in key regions of the world • <i>Showcase and expand WPI's distinctive academic programs</i> through the Innovation Studio

The emphasis on defining specific metrics for each initiative in the strategic plan, as well as the ongoing process of tracking and reporting on results, has provided actionable feedback that is being used in future planning. Results for each initiative in the *Elevate Impact* strategic plan were summarized and communicated to the campus community, as well as to the WPI Board of Trustees. The table below provides sample results based on metrics that were established for each initiative.

Sample Results from *Elevate Impact* Initiatives

Metric	GOAL	AY 15-16	AY 16-17	AY 17-18	AY 18-19
Distinctive Undergraduate Education					
Students graduating with 4-year BS/MS	50	8	30	18	25
Off-campus project participation	90%	67%	74%	76%	92%
Research and Graduate Education					
Increase research awards by 50% to total of \$35M	\$35,000,000	\$23,089,534	\$25,735,268	\$32,968,562	\$34,500,000
PhD students involved in internships	20%	0	4%	15%	42%
Reputation and Visibility					
Students using the Global Impact Lab in the Innovation Studio	300/year				410
MOU with academic partners established	6	9	12	23	23
Institutions served by the Center for Project-Based Learning	40/year	18	38	40	40

*The Innovation Studio opened in AY 2018-19

WPI continues to monitor the success of the goals and initiatives of *Elevate Impact*; the structures and activities put in place to support it continue. Work on the next strategic plan, *Lead with Purpose*, has been informed by what was learned from the last plan, including an earlier focus on metrics and measures of success. This work has commenced and initial communications about the plan have begun. The planning effort was guided by three major themes and six goals, as shown in the table below.

Lead with Purpose Goals and Initiatives

Goals	Initiatives
Student access, well-being, and outcomes	<ul style="list-style-type: none"> • <i>Pricing Strategy and Student Access</i>: Increase access, reduce student debt, and become more market competitive • <i>Student Well-Being and Outcomes</i>: Create a more holistic approach to student well-being; acknowledge the criticality of student mental health needs; align postgraduation metrics with long-term career outcome and social mobility indicators
Purpose-driven education and research	<ul style="list-style-type: none"> • <i>The Future of WPI Education</i>: Ensure WPI's distinctive education meets the need of current and future students • <i>WPI Research Impact</i>: Advanced impact through multidisciplinary areas and increased support
Who we are and how we work	<ul style="list-style-type: none"> • <i>Diversity, Equity, Inclusion, and Social Justice at WPI and in STEM</i>: Align WPI's DEI-Related goals with strategic goals • <i>Building the Acumen and Team to Advance Our Mission</i>: Advance the development of leaders, inclusion of staff voices, and collaboration while responding to market dynamics and learner needs, to operate with greater agility, innovation, accountability, and efficiency

Teams of faculty and staff have convened to develop strategies, action plans, and success metrics associated each of these areas. President Leshin has encouraged thinking over three horizons: core initiatives based in existing offering and practices, emerging initiatives that focus on growing and adapting the current core, and vision initiatives that might be disruptive to the core.

Diversity, Equity, and Inclusion

As articulated in the past and current strategic plans, WPI believes that a community-wide focus on sustainable inclusive excellence is imperative not only to fostering an inclusive learning and work environment, but also to elevating the impact a culture of belonging can have on the greater STEM community. As a critical step in promoting diversity, equity, and inclusion (DEI), WPI hired its inaugural Vice President of Talent and Inclusion in 2016 and initiated [Project Inclusion](#), a three-year, university-wide initiative in 2017. Guided by the New England Resource Center for Higher Education (NERCHE), the interdisciplinary, cross-functional Project Inclusion team spent three years engaging students, faculty, and staff in a campuswide self-assessment designed to guide long-term structural and cultural change. To understand the campus climate as it relates to DEI and to determine strategic priorities and commitments, the self-assessment rubric focused on six dimensions: 1) Philosophy and Mission; 2) Faculty Support; 3) Curriculum; 4) Staff Support; 5) Student Support; and 6) Administrative Leadership. WPI established a series of steering committees and the DEI Council, which was tasked with gathering and assessing institutional data in the six dimensions. The data gathered supported the development of recommendations to advance DEI and implementation plans for the three years. In collaboration with the DEI Leadership Council, each unit developed a series of measurable goals to guide efforts to foster a climate of inclusion and belonging. These efforts led to a unified, shared responsibility for this critical transformation and served as a means of promoting accountability and community agency.

Project Inclusion recommendations and implementation plans also laid the foundation for the [DEI Strategic Framework](#), which serves as a foundational commitment to creating and sustaining a culture of sustainable inclusive excellence at WPI. To actualize the framework, WPI is currently engaged in the development of the [Sustainable Inclusive Excellence \(SIE\) Action Plan](#). This initiative has centered the voices and lived experiences of marginalized and underrepresented communities and engaged the community in updating the university mission and values. Additionally, every division leader must develop a DEI action plan within their area, one they are accountable to deliver on. During spring 2021, informed by community listening sessions, all of the divisions engaged with their teams to develop implementation goals for their plans.

University-Level Financial, Capital, and Resource Planning

WPI creates near-term (annual) and long-term (five-year) institutional plans that seek to effectively allocate human, financial, physical, and technological resources across the institution. The Finance and Operations Division, in collaboration with President Leshin and the Board of Trustees, leads a collaborative planning and implementation process that includes all university stakeholders. Planning processes include budgeting, enrollment management, personnel, and facilities.

Annual Planning and Budgeting Process (APBP): Beginning shortly after President Leshin joined the university in 2014, the annual budgeting process was expanded to incorporate a strategic planning component. This new approach to budget planning brings together the leaders and financial managers from each university division and representatives from the faculty in a formal, multi-day “retreat” to present and discuss short- and long-term plans for their areas. In the first phase, area leaders can hear from their colleagues about the strategic opportunities and challenges that are important to the success of their divisions, from the perspective of strategic initiatives. These presentations are a result of the leaders working with their program managers and department heads, who, in turn, have collaborated on identifying the opportunities and risks associated with financial matters. This phase of APBP allows for a cross-functional understanding of strategic plans and opportunities and risks for each division. In the second phase, divisional leaders request resources necessary to achieve their goals, in line with their phase-one plans. Those resources include operating budgets (including faculty and staff lines), along with capital project, capital equipment, and capital information technology budgets.

Overarching discussions during APBP focus on forecasting funding sources, including projected tuition revenues from undergraduate, graduate, and professional and corporate enrollment programs, endowments, and auxiliary sources such as room and board. Opportunities, risks, and structural budget deficiencies are identified, prioritized, and assessed, and there is an emphasis on what resources may be reallocated to achieve financial balance while satisfying the strategic needs of the university. Results from prior periods and forecasts for subsequent fiscal periods help identify what resources may be available to support ongoing and new initiatives.

In addition to near-term planning, divisional leaders are also asked for a long-term perspective and forecast. As the leadership team considers longer term goals (e.g., growth of undergraduate and graduate student populations or growth of research), forecasts are developed to determine the downstream effects: for example, on hiring faculty and staff, investments in facilities and labs, and investments in student support to support such growth. The result is a five-year pro forma budget that articulates the forecasted expenses and revenues needed to support them.

The President, in collaboration with the CFO, makes the final budget decisions based on plans, the data presented, the alignment with university and divisional strategy, and the availability of funds. Once budgets are implemented, budget managers from all divisions formally report on results and forecasts quarterly, identifying any projected variances and addressing concerns in real time.

Enrollment Planning: Since WPI relies on tuition for the vast majority of its operating revenue, enrollment planning is a critical function. The five-year financial plan addresses enrollment and the associated tuition-driven revenue forecasts as a top-line forecast for each year. It estimates the level of revenue based on metrics associated with the applicant pool, selectivity, and probability of admitted students enrolling at WPI. During the planning process the institution carefully assesses internal and external factors that may impact student demand and the propensity for students to matriculate at WPI (for example, the impact of foreign policy decisions on the enrollment of international students). The results of these assessments, which impact recruiting plans, are factored in when forecasting applicant pools, offers of admission, and financial aid packages. The enrollment management process and resulting outcomes are described in greater detail in Standard Five.

Resource Planning—Personnel: Planning for a well-qualified, diverse, and professional faculty and staff allows WPI to support and empower its students and prepare them for the positive impact they will make through their careers and on society. WPI recognizes the importance of attracting and retaining top talent that reflects its values of diversity, equity, inclusion, and social justice. At the university level, personnel planning responds to needs identified by departments and deans. It also creates broader programs and initiatives that address strategic goals, as evidenced by the staff and faculty investments to support the formation of The Global School in alignment of WPI’s “long-held vision of building a true global polytechnic with a reach and an impact far beyond what has previously been possible,” as stated by Provost Winston Soboyejo. Another example of strategic personnel planning is the Office of Institutional Research (IR), established in 2016 to collect, coordinate, analyze, and report data to enhance the quality of programs, services, and processes. IR recently evolved into the Office of Strategic Initiatives to better align data management and evaluation with strategic goals. Another significant organizational change was the establishment of the office of the Vice Provost for Research in 2014 to enhance faculty research efforts and increase external support for research. The Vice Provost for Research leads the offices of Sponsored Programs, Sponsored Programs Accounting, Technology Commercialization, and (as a result of *Elevate Impact*) the Research Solutions Institute (RSI). RSI is driven by its mission to help faculty researchers form teams, prepare well for funding opportunities, and develop winning proposals as they pursue solutions to society’s most important and pressing challenges.

Resource Planning—Facilities and IT Infrastructure: The Campus Master Plan is regularly updated in concert with other annual planning activities. This is a formalized process, involving many internal and external campus constituents, that includes an assessment of existing conditions, program development, conceptual design, and project implementation. As with many aspects of strategic planning, the facilities plan is closely tied to the plans for growth in student, faculty, and staff populations, as well as programmatic initiatives such as facilities for new programs, research labs, and campus housing and dining facilities. These are added to a five-year capital plan, a high-level document detailing the various projects and their associated budgets. This plan dovetails with the five-year financial plan and is included as capital investment.

In 2016, WPI conducted a detailed academic space inventory and assessment, documented in the Campus Master Plan. As WPI had grown over the previous five years, academic space was thought to be at a premium. Department heads and deans participated in the study, which cataloged academic space and evaluated it based on usage rates and overall quality. The space inventory and assessment project clearly identified which departments were allocated what space; created the basis for widely distributed floor plans for use in planning renovations to accommodate new personnel; confirmed that academic space was of generally high quality; and identified targets for capital improvement. Most important, it confirmed that current space was inadequate for the planned growth of students and faculty.

In response to growing needs, the physical infrastructure at WPI has been significantly expanded during the past 10 years, and work continues in 2021 based on the formal evaluation of current and future needs for academic space. In addition, \$16 million of the annual FY 2022 capital budget is allocated to deferred maintenance to bring buildings and systems on WPI’s 150-year-old campus up to date. The table below summarizes significant projects over the past 10 years.

Physical Infrastructure Improvements, Past 10 Years

Project/Location	Opened	Description/Features
Gateway II	2013	<ul style="list-style-type: none"> • Faculty offices and classrooms for The Business School • Fire Protection Engineering Department (including the 190-square-meter UL Fire Protection Engineering Performance Lab) • PracticePoint (featuring a new MRI lab), a membership-based healthcare development and testing facility opened in 2017 • Labs including the AIM Photonics Lab and Neuroscience Lab • Biomanufacturing Education and Training Center (BETC)
Recreation Center, Field, and Parking Garage	2013	<ul style="list-style-type: none"> • 530 vehicle spaces • Rooftop fields for soccer, lacrosse, field hockey, softball, and other recreational activities • Accessible handicapped spaces and an elevator to the fields above
Faraday Residence Hall	2013	<ul style="list-style-type: none"> • LEED Certified Silver • 260 beds for upperclassmen, in suites complete with kitchens • Tech suites and lounges to support collaboration
85 Prescott Street	2015	<ul style="list-style-type: none"> • Robotics Engineering, including several offices and lab spaces • University Advancement • Research Solutions Institute (RSI) • Massachusetts Academy of Math and Science at WPI, a free public high school of excellence for junior and senior students
Center for Project-Based Learning	2016	<ul style="list-style-type: none"> • Located in a former residence on the periphery of campus • Provides a summer institute and training grounded by WPI’s expertise in project-based learning

Physical Infrastructure Improvements, Past 10 Years (Continued)

Project/Location	Opened	Description/Features
WPI Seaport	2018	<ul style="list-style-type: none"> • A 6,400-square-foot facility that accommodates tech suites, meeting areas, open-concept spaces, and working spaces • In Boston’s Innovation District
Innovation Studio and Messenger Residence Hall	2018	<ul style="list-style-type: none"> • LEED Certified Gold with active learning classrooms and collaboration spaces, a robotics engineering lab, and fully equipped makerspace for student project prototyping • Office of Innovation and Entrepreneurship • MassDiGi Digital Gaming Institute • Messenger Residence Hall: 140 beds, tech suites, and open lounges to support collaboration; sits atop the Innovation Studio
108 Grove Street	2019	<ul style="list-style-type: none"> • Office of Institutional Research • Enterprise Information Systems, including Change and Project Management
15 Sagamore Road	2019 Ongoing	<ul style="list-style-type: none"> • Retrofitted former metal plating facility to include labs for Advanced Additive Manufacturing; Battery Research; and Center for Autonomous Vehicles and Design (coming soon)
New Academic Building	Opening 2022	<ul style="list-style-type: none"> • Will house interdisciplinary “smart world” activity, including offices, teaching spaces, and research labs; 100,000 square feet • Academic departments: Robotics Engineering, Data Science, Cybersecurity, Learning Sciences and Technology, and Interactive Media and Game Development • Student-facing administrative offices: Academic Advising, Accessibility Services, Office of the Registrar, and Career Development Center

WPI has also explored creative ways to repurpose and reallocate space. For example, offices that do not have high student traffic (such as the Office of Sponsored Programs and Sponsored Programs Accounting) have been relocated to WPI properties on the periphery of campus, thereby keeping space on the Hill available for services that directly serve students. WPI anticipates that the changing nature of work in the post-pandemic era will enable additional new and creative opportunities for space reallocation. And in summer 2021, WPI engaged the work of a consulting firm to plan for the reconfiguration of the campus space made available by the opening of the new academic building. This process maps stakeholder needs against the realities of physical, financial, and strategic resources. This thoughtful and data-driven approach to the reallocation of space is an important ongoing priority.

Additional investments have been made to support the cross-cutting enablers identified in the *Elevate Impact* strategic plan. For example, WPI has invested in an enterprise digital transformation to improve customer service and information security. This investment included a move to the integrated enterprise Workday system. In addition, the faculty was supported by a move to a new learning management system and the installation of lecture capture technology in every classroom. The addition of Zoom and Microsoft Teams allowed faculty, staff, and students to schedule virtual meetings from anywhere, at any time. These investments also allowed WPI to quickly move to remote operations in response to the pandemic.

Resource Planning—Sustainability: WPI put a comprehensive Sustainability Plan in place in 2014. Serving as a valuable guide for sustainability programs and initiatives, the plan includes a set of goals and objectives to meet the university’s vision for sustainability in four areas: academics, research, campus operations, and community engagement. The plan has led to more awareness of sustainability needs across campus, the elimination of straws, the use of more compostable disposables, and energy audits of numerous power systems, among many other initiatives. In December 2019 WPI embarked on the process of developing a new sustainability plan to guide activities over the next five years; the plan was completed in the fall of 2020, with mobilization postponed due to the pandemic. As with most of WPI’s community-wide efforts, the planning included a launch event to invite input from the WPI community. Other milestones included a World Café and other opportunities for community input; a set of

working groups to develop goals, objectives, and tasks; and final report preparation and review. The 2021-2025 plan includes the following focuses:

- Graduates will leave campus with the mindset and abilities to develop sustainable solutions to the world's problems.
- The principles of sustainability will guide operations, as well as WPI's academic and research programs.
- WPI will make significant contributions to the technologies, policies, and mindset needed to help assure a sustainable world.
- To achieve positive, long-lasting change for all of its communities, every member of the WPI community will engage in sustainability related education, awareness, action, and service.

Dean/Division-Level Planning Processes

All deans and division heads participate in the university strategic planning and assessment process. They also have a seat on the President's Management Council and, for academic personnel, on the Provost's Academic Leadership Group. Participation in these forums facilitates open communication among the members of the university's leadership.

The School of Engineering, the School of Arts and Sciences, The Business School, and the The Global School are each headed by an academic dean. The deans play a key role in planning and evaluating the academic, human, financial, and facilities aspects of their schools to deliver on WPI's academic mission. In addition, the deans work together when it comes to the planning for and evaluation of WPI's many interdisciplinary programs. For example, the deans have the ability to evaluate opportunities for synergies among disciplines, resulting in a "cluster hiring" strategy (hiring faculty members whose expertise can strengthen an existing cross-disciplinary group of faculty members). Working closely with the department heads and the Provost, the deans develop strategic initiatives that dovetail with the university's academic mission, and then assure that the departments and programs within their schools are meeting the needs of that mission. As an example, for the last 10 years, hiring for Robotics Engineering has been a collaboration between Arts and Sciences and Engineering. Business and Arts and Sciences have also collaborated in cluster hiring and in space allocation to support the Bioinformatics and Computational Biology program.

There are also two cross-cutting deans: one for undergraduate studies and one for graduate studies. They support programs that cut across all departments and schools and focus largely on populations of students and the faculty that serve them. The Dean of Undergraduate Studies is responsible for academic scheduling, advising, faculty course evaluations, the administration of the winter and summer sessions, and faculty development. In addition, the Dean of Undergraduate Studies oversees regular reviews of IQPs and MQPs, which supports university-level planning and improvement processes within academic departments. The Dean of Graduate Studies, which became a full-time position in 2014, is responsible for graduate admissions, the development and administration of the graduate school schedules for master's and PhD students, graduate advising, corporate education, teaching and research assistants and related funding, and programming related to graduate student career success. Also in the last 10 years, the positions of Assistant Dean and Associate Dean of Graduate Studies were created to support graduate programs and initiatives. The Dean of Undergraduate Studies and the Dean of Graduate Studies play key roles on various administrative and faculty governance committees.

The divisions that support university functions (e.g., student affairs, talent and inclusion, etc.) also work to determine collaboration opportunities, and to assess cross-functional human, financial, and facilities resource needs to achieve the university mission.

Department-Level Financial, Capital, and Resource Planning

Departments and divisions follow an annual cycle of evaluation that is tied to and helps inform the personnel, facility, enrollment, and budget planning processes. This internal evaluation, involving administration, faculty, and staff, allows for reflection on past accomplishments and clarification of future goals.

In addition to a formal review of personnel and programs, each department reviews its budget annually in preparation for the Annual Planning and Budgeting Process (APBP). In October, department heads begin assessing their needs for faculty (tenure/tenure-track, non-tenure track, and adjunct) and/or staff, operating dollars, and capital (equipment, building projects, and information technology), generating a prioritized list of requests that department heads deem necessary to satisfy the university mission. These requests are submitted to the dean or division head as part of APBP and are evaluated alongside other priorities during the process. Data from ongoing facilities planning and benchmarking, conducted largely by the departments, is also updated annually. When faced with a space need, department heads work with their dean or division head, and can review floor plans and data in order to make recommendations for the reconfiguration or renovation of space to better serve students. One result of this type of process has been the reconfiguration of classrooms to better accommodate active teaching and learning practices.

As student enrollment has grown, additional faculty resources have been required to support the academic program. The role of teaching faculty has also evolved and has been elevated at WPI over the past 10 years, largely due to the increased commitment to research by tenured and tenure-track faculty. Recently, changes have been made to elevate and make permanent the role of teaching and research track (TRT) faculty (discussed in greater detail in Standard Three and Standard Six). These proposed changes were carefully examined over time by numerous stakeholders and were approved by the faculty in spring 2021. Benefits to the TRT faculty include greater job security with longer-term contracts, an anticipated reduction in the attrition rate for these faculty, greater protection of academic freedom, greater representation of this important group, and a voice in the governance of the faculty. These benefits will provide greater opportunities for these faculty to engage with the university long-term and will help retain its best talent. The biggest risk to the university is that a greater proportion of instructional budgets are now committed for a longer period. However, this risk is mitigated by the staggered nature of the implementation plan (not all contracts renew at the same time) and the provisions for non-contract renewal, such as just cause, performance below expectations, financial emergency, and long-term restructuring.

Evaluation

WPI's system for evaluating its operations and academic programs provides data that is used to improve quality and effectiveness as well as ensure the achievement of its mission and purposes. Evaluation occurs at the university, dean, and department levels, and explicitly includes mechanisms for getting systematic feedback from constituencies. Whether gleaned through internal workgroup or task force, advisory board recommendation, external consulting group, or external reviewer, results are used to inform planning and to make changes in resource allocations and academic program delivery.

University-Level Evaluation Processes

At the university level, the metrics established through strategic planning are tracked and the results are reviewed annually. The process of strategic planning develops initiatives tied specifically to furthering WPI's mission and purposes, framing new academic initiatives, and identifying resources to support them. For the 2015-2018 *Elevate Impact* strategic plan, summaries with all metrics and lessons learned for each of the plan's nine initiatives are provided in the workbook. For example, faculty development was identified as a key enabler within *Elevate Impact*, which resulted in the hiring of a research and evaluation associate in the Morgan Teaching and Learning Center and the Center for Project-Based Learning. Two instructional designers were hired in the Academic Technology Center to work with faculty on effective course design. Through 2019, 123 faculty members had participated in the Faculty Institute for Online Teaching (FIOT); with the switch to online teaching during the pandemic, the FIOT course was a critical resource supporting faculty.

Institutional priorities and strategic goals have also led to the reorganization of several offices. For example, given the importance of achieving enrollment goals in an increasingly competitive market, in 2019, WPI relocated Undergraduate Enrollment, Student Aid and Financial Literacy, and Pre-Collegiate Outreach into the President's Office under the purview of the VP/Chief of Staff. WPI also shared responsibilities for its (former) Academic and Corporate Engagement Office between the Office of Government and Community Relations and Academic Affairs under the direct supervision of the Dean of Graduate Studies. This move consolidated graduate admissions activities for on-campus, on-site, online, and professional programs, resulting in greater staffing synergies. As a result, WPI has elevated the focus on these critical areas and serves students and internal and external stakeholders more strategically.

The university also regularly seeks feedback on its programs and academic mission from its constituencies, including current students, alumni, and professional advisors. Advisory boards of industry experts provide feedback at the department and school or division level. In one example, a survey of advisory board members and alumni conducted by the Electrical and Computer Engineering Department led to a detailed revision of one of the department's educational objectives. WPI also seeks external input through regular accreditation reviews, such as those conducted by NECHE, ABET, and AACSB. Specific approaches are described in more detail below and outlined in the e-series forms. The Board of Trustees provides input from a community and business perspective, as in the case of innovator and trustee Curt Carlson '67, who serves as an executive-in-residence to support WPI's innovation and entrepreneurship initiatives. Additionally, WPI regularly consults subject matter experts by working with consulting companies. For example, WPI has worked with firms with specializations in sustainability, space planning, and financial and organizational efficiency.

Mechanisms for Collecting Feedback from Constituencies at the University Level: WPI regularly seeks input from its constituencies to evaluate its programs and inform improvement and new opportunities. WPI regularly uses the National Survey of Student Engagement (NSSE) to collect student feedback on engagement and learning, most recently in 2016 and 2020. Students have also provided feedback on MQP and IQP outcomes, which are analyzed and shared every three years. The information collected provides a view across the university, and the data, which is available by major, is also useful for department and program evaluation. Evidence of the use of this data is demonstrated in the senior MQP survey completed by students in which they identify their progress toward MQP learning outcomes. Data from this survey is in the workroom. These data are compared across departments, and where results demonstrate progress below the average, department faculty discuss strategies to make change.

Feedback from alumni is also collected. In 2012, the University of Massachusetts Donahue Institute completed a survey followed by in-depth interviews with alumni and employers of WPI alumni. During a previous study, the university found that the experiences its students have during their project work is life-changing; the purpose of the 2012 study was to explore why project work had such a beneficial impact. Among the key findings: projects significantly fostered professional development; adversity encountered in projects was an asset; and completing both an IQP and MQP was advantageous. This feedback led to the formation of the Center for Project-Based Learning. These findings have been affirmed by additional alumni surveys.

The university regularly surveys its alumni and students about their overall WPI experience; alumni surveys were conducted in 2017, 2018, 2019, and 2020, and the Noel Levitz Student Satisfaction Survey was conducted in 2012, 2014, and 2016. In addition, an Enrolled Student Survey (ESS) was completed in 2019 to replace the Noel Levitz Survey. Results of the 2019 ESS and recent alumni surveys demonstrate that current students and alumni report high levels of satisfaction with their education. Overall, 91% of the alumni survey respondents indicated they were generally or very satisfied with their WPI education. Among the students who responded in the 2019 survey, and consistent with past Noel Levitz student satisfaction surveys, 88% were generally or very satisfied with their WPI education so far, with 88% indicating that they would go to WPI again.

Undergraduate Student Satisfaction 2010-2019	Year				
Question	2010	2012	2014	2016	2019*
Satisfied with WPI education so far	88%	84%	83%	85%	88%
Would go to WPI again	84%	84%	82%	86%	88%

*WPI moved from the Noel Levitz Student Satisfaction Survey to the Enrolled Student Survey in 2019.

The 2019 ESS survey also probed student satisfaction with key elements of their WPI experience:

- 91% were generally or very satisfied with the opportunities for project work
- 92% were generally or very satisfied with the size of their classes
- 93% were generally or very satisfied with the overall quality of instruction
- 95% were generally or very satisfied with faculty availability
- 89% were generally or very satisfied with the sense of community on campus

One example of the way WPI used this data was related to student feedback on counseling services. Black students reported using the counseling center at a far lower rate than other students. As a result, the Student Development and Counseling Center created a Men of Color support group that often met beyond the established weekly timeframe because students were so engaged.

WPI not only asks for student feedback, but it also works collaboratively with students to implement solutions. In 2019, the ESS showed only 75% of students were satisfied with study space. As a result, a collaborative workgroup formed in partnership with the Student Government Association, Facilities, Undergraduate Studies, the Gordon Library, and others to assess campus study space and make it easier to find on campus through a phone-based app. WPI also uses student research to improve the student experience. For example, an Interactive Qualifying Project in 2017 led to more visible and accessible gender-inclusive restrooms, and a Major Qualifying Project in 2020 conducted a cost and labor analysis to support the implementation of free hygiene products in women’s restrooms across the campus.

The working environment and satisfaction of faculty and staff is also important. In 2014, 2017, and 2020, WPI deployed the Collaborative on Academic Careers in Higher Education (COACHE) faculty satisfaction survey to generate data that can be used to improve the workplace. The COACHE results allow WPI to compare itself to peer institutions and to compare the experiences of subgroups and schools within WPI. The 2014 and 2017 COACHE survey data, discussed in Standard Six, showed dissatisfaction with mentoring opportunities and concern among women faculty about advancement. These data catalyzed important conversations and led to a full overhaul of the criteria and process for promotion of associate professors to full professors, mid-career mentoring, and the inclusion of TRT faculty. Results for the most recent survey are overwhelmingly positive, with 20 areas of strength and zero areas of concern.

Financial Evaluation: WPI Forward

One of the biggest risks in higher education is the escalating cost of an undergraduate degree. In 2019, WPI evaluated its operational efficiency with an eye toward increasing aid available to students. This initiative, WPI Forward, used a continuous improvement process and identified savings of \$12 million, or 5% of the operating budget, that could be redeployed into financial aid and other significant needs while maintaining WPI’s distinctive approach. An internal Steering Committee that included different university stakeholders worked with an outside consultant to identify the most promising potential areas of cost savings, avoiding an involuntary reduction in force if possible. The Steering Committee identified several opportunities and created a cross-functional taskforce for each area. The resulting nine projects, which are at various stages of implementation due to the pandemic, as shown in the table below.

WPI Forward Initiatives

Project	Initial Projection	Expected Savings	Expected Completion	Status
Administrative Review	\$3M	\$3M	FY23	Achieved year 1 target of \$500K in FY21
Academic Portfolio	\$500K	\$500K	FY22	Initially delayed due to pandemic
403(b)/Merit Increases	\$4.5M	\$4M	FY22	403(b) contribution reduced to 9.5% resulting in a \$500K annual shortfall from goal
Health Plans	\$1M	\$1M	FY22	Complete, new plans launched Jan. 2021
Mobile Devices	\$200K	\$160K	FY22	\$130K in year 1; projection not realistic
Strategic Sourcing	\$1.05M	\$1.05M	FY22	Supplies, dining, travel budgets adjusted
Events	\$200K	\$200K	FY22	Delayed due to pandemic
Professional Services	\$850K	\$850K	FY22	New policy in place
Executive Reorganization	\$1.3M	\$1.3M	FY20	Complete
Total	\$12.6M	\$12.06M		

One example of the outcomes achieved by the WPI Forward task force was the work done to assess WPI’s merit/403B contribution. As a result of that work, proposed reductions to both the annual merit pool (from 3% to 2%) and employer contributions to the 403b plan (from 11% to 9.5%) were analyzed and approved, the latter bringing WPI more in line with benchmarked institutions. Paired with the WPI Forward effort and given pandemic-related uncertainty, salary increases were suspended for academic year 2021. Effective in AY 2022, a salary pool was reinstated effective October 1. In addition, the university entered a hiring freeze, few promotions were awarded, and the senior leadership team agreed to a significant compensation reduction to offset anticipated COVID-19–related financial risks.

The work of WPI Forward continues. There are also several new policies under review or approved by the Administrative Policy Group (APG): mobile devices, catering/dining, events, travel, and professional services. Within the academic portfolio project, initial framing was presented to the faculty in May 2021. Work will continue through the academic year with a focus on developing and operationalizing metrics that are transparent and understood by academic decision makers. Specifically, these metrics will lead to 1) a better understanding of the ways faculty contribute to the academic mission and at what levels instructional staff are necessary to achieve its goals; 2) insight into how best to create a budget model that provides incentives for program growth and reallocation of resources to achieve financial outcomes; and 3) an institutional view of program performance, based on financial and non-financial criteria.

Department-Level Evaluation Processes

At the department and division level, the annual reporting process helps inform progress toward strategic priorities and measures established metrics. Additionally, through an annual report, the head of each department reviews the contributions of its employees and key departmental staff and then identifies needs and priorities for resource allocation in the coming year.

Performance Review Processes: Data is also gleaned from the faculty and staff performance management process. For staff, the annual review cycle includes a self-appraisal and a discussion with one's supervisor. Part of this discussion focuses on the position and how its responsibilities have changed. This information may be used by the supervisor in meetings with his or her division head to propose changes to business processes, organizational structures, and resource allocation. A similar cycle of evaluation exists for tenured, tenure-track, and teaching- and research-track faculty. Faculty submit annual reports, which guide faculty development and allow for data collection for planning and resource needs. For example, faculty members are asked to describe innovations in classes and projects during the previous year; this information is shared with the director of the Morgan Teaching and Learning Center to support planning for faculty professional development during the coming year.

Advisory Boards: Many academic departments, interdisciplinary programs, and research centers have advisory boards with representation from industry as well as academia. While these boards provide valuable external perspectives, they also provide resources in terms of financial support, access to equipment and expertise, and project and research opportunities for faculty and students.

External Reviews for Program Development and Accreditation: As is standard in higher education, WPI schools and departments participate in accreditation processes or external reviews as required by their respective accrediting bodies with a focus on ensuring a high-quality, effective educational experience for learners.

WPI School of Engineering departments complete a self-assessment and undergo a rigorous evaluation by visiting teams from ABET every six years. The most recent review occurred in 2020-21; official results will be available by September 2021. Ten programs were included in the review: Aerospace Engineering, Architectural Engineering, Biomedical Engineering, Chemical Engineering, Civil Engineering, Electrical and Computer Engineering, Environmental Engineering, Industrial Engineering, Mechanical Engineering, and Robotics Engineering. Program elements, faculty qualifications, and facilities provide a foundation, and the ABET standards emphasize a continuous improvement process that results in achievement of specified outcomes (including, for example, the ability to apply appropriate engineering approaches to solve problems, to work effectively in teams, and to communicate effectively).

The Business School was reviewed and accredited by the Association to Advance Collegiate Schools of Business (AACSB) in 2018. WPI is the only institution in the United States with both AACSB- and ABET-accredited programs housed in the business academic unit. The Business School is currently preparing its study for an external review in spring 2023.

Arts and Sciences programs conduct program reviews every four years; samples are in the workroom.

In all of these reviews, to demonstrate that graduating students meet program outcomes, external reviewers examine data gathered through a variety of direct and indirect sources. Direct methods include assessment of student coursework and work in capstone project work such as MQPs. Indirect methods include student and alumni surveys. Self-study reports documenting the results are available in the workroom. Each of these reports is a resource for more general program evaluation, as well; for example, the Undergraduate Outcomes Assessment Committee reviews the reports to collect information on student achievement of WPI's undergraduate learning outcomes, as detailed in Standard Eight. Additionally, the feedback from these reviews is considered, incorporated, and reported upon in future evaluations. For example, Chemical Engineering redesigned its capstone design project to focus on chemical process safety following a 2014 ABET accreditation visit.

Other non-academic divisions and departments also conduct periodic internal and external reviews and regular benchmarking activities. For example, within the Division of Student Affairs, the Student Activities Department conducted a Council for the Advancement of Standards self-assessment in 2018 to assess student activities, leadership programs, campus center operations, and fraternity/sorority life programs. An external review of WPI's student conduct processes is planned for FY 2022.

Evaluation efforts are spread throughout the institution and, as a result, throughout the sections of this self-study. Planning and evaluation are a key part of financial planning presented in Standard Seven. The ongoing focus on student learning outcomes is discussed in more detail under Standard Eight.

PROJECTIONS AND ASPIRATIONS FOR THE FUTURE

- This fall, WPI will publicly launch its new strategic plan, *Lead with Purpose*, which will deliver on and reimagine WPI's mission and purposes related to student access and affordability, well-being, and outcomes, purpose-driven education and research, positive promotion of institutional identity, and continued efforts to attract, retain, and develop its faculty and professional staff. Evaluation will be a key aspect of the implementation of this plan, with defined and carefully tracked metrics.
- Diversity, equity, and inclusion remain important priorities. WPI's Sustainable Inclusive Excellence (SIE) Action Plan will advance goals around diversity, equity, inclusion, and racial justice at WPI and in STEM in the coming years.
- The sustainability plan remains an important priority over the next five years; the university will work to engage the community in implementing the newly minted plan.
- The current WPI financial planning philosophy is one of cautious optimism. Over the near and long terms, WPI will continue to create and adjust its financial plans in line with the strategic initiatives. The past year has clearly demonstrated that financially (and in many other ways), WPI has the ability to be nimble in response to unexpected circumstances. Fiscal years 2020 and 2021 were the first years during this review cycle where budget cuts were necessary. WPI looks forward to the opportunities that will be generated in response to the new strategic plan, WPI Forward initiatives, and the post-COVID-19 environment.
- WPI will continue to review the current campus infrastructure and plan maintenance, construction, and acquisition of space to accommodate the needs of its users, including the retirement and repurposing of space as more of WPI's workforce begins to work remotely.

DATA FIRST FORM

STANDARD 2: PLANNING AND EVALUATION

PLANNING		Year board approved	Effective Dates	Website location
Strategic Plans				
Immediately prior Strategic Plan		2015	2015-2018	wp.wpi.edu/strategicplan/
Current Strategic Plan		2021	2021-2026	In workroom, to be approved by Trustees 10/2021
Other institution-wide plans*		Year completed	Effective Dates	Website location
Master plan		2003	2004-present	In workroom
Academic plan		1970	1970-present	www.wpi.edu/project-based-learning/wpi-plan
Financial plan		2018	2018-2023	In workroom
Technology plan		2018	2018-2022	www.wpi.edu/about/enterprise-transformation
Sustainability Plan		2020	2020-2025	www.wpi.edu/offices/sustainability/plan
Business continuity plan		2019	2019-present	In workroom
Diversity, equity, and inclusion plan		2020	2020-present	hub.wpi.edu/spread/87/sustainable-inclusive-excellenceprereading
Enrollment plan (in financial plan)		2018	2018-2023	In workroom
Plans for major units (e.g., departments, library)				
Dining plan		2023	2019-2023	In workroom
Student Affairs strategic plan		2016	2016-2020	In workroom
Advancement campaign plan		2018	2018-2022	In workroom
Gordon Library capital plan		2020	2020-2025	In workroom
EVALUATION		Website location		
Academic program review (colleges/departments)				
Program review system. System updated: 2005		web.wpi.edu/Images/CMS/Outcomes/Assessment_Plan.pdf		
Program review schedule (e.g., every 5 years)		MQP peer review every 3 years		
		IQP external review every 3 years		
		School of Business every 5 years (AACSB)		
		Arts & Sciences programs external review every 4 years		
		Engineering programs every 6 years (ABET)		
Sample program review reports (name of unit or program)				
Biomedical Engineering ABET Self Study Report		In workroom		
AACSB Continuous Improvement Review Report		In workroom		
Industrial Engineering ABET Self Study Report		In workroom		
System to review other functions and units				
Program review schedule		Varies		
Sample program review reports (name of unit or program)				
IQP project review		In workroom		
MQP project review		In workroom		
Humanities and Arts Program review		In workroom		
Other significant institutional studies (name & web location)		Date		
Donahue Study: The Impact of the WPI Plan on Alumni		2012; In workroom		
Academic space study		2016; In workroom		
Please enter any explanatory notes in the box below				
IQP and MQP reviews have been delayed due to the Enterprise Transformation Project. The routine cycle will be reinstated at the conclusion of the ETP implementation.				

STANDARD THREE: ORGANIZATION AND GOVERNANCE

DESCRIPTION AND APPRAISAL

WPI operates under a charter, granted by the Commonwealth of Massachusetts in 1865, with full and unrestricted authority to carry out its educational mission and to award degrees at the bachelor's, master's, and doctoral levels.

The Governing Board

The Board of Trustees is WPI's legal policy-making body and holds the ultimate authority for governing the university. Composed of a minimum of 12 members, the Board currently has 31 trustees and 40 non-voting emeriti members. Of its current members, 24 are alumni. Thirteen are retired and 27 have careers in industry. In addition to the President, two other trustees have higher education experience. The President, who serves as the university's chief executive officer, is a Board member and is also charged with the operation of the institution.

New trustees are elected to membership by the current members through recommendation to the Board's Nominations and Governance Committee. Once that committee has vetted the candidates and approved their candidacy, the full Corporation votes on whether to invite them to join the Board. Trustee terms, except for that of the President, are five years. Any trustee may be re-elected for an immediately succeeding term subject to a limit of 15 consecutive years of service. Any trustee who has served for 15 consecutive years may be re-elected following a three-year absence. For the Board, itself, the Board maintains a "skills index" in which trustees self-rank their top five to seven industry strengths. The Nominations and Governance Committee references the skills index when researching and evaluating potential trustee candidates with the goal of maintaining balance and representation of the desired characteristics.

When trustees join the Board, they sign the Trustee Roles and Responsibilities form, which the Secretary of the Corporation reviews with the new trustees in detail during the onboarding process. This form lays out the responsibilities of trusteeship, opportunities for involvement, terms of office, and requirements of trusteeship. In 2018, the Secretary of the Corporation formalized the new trustee onboarding process, which includes the assignment of a current trustee mentor, a one-on-one session with the Secretary for each new trustee to review best practices, and a campus tour.

WPI's Bylaws provide the Board with the authority and responsibility for reviewing and approving such items as organizational mission and structure, institutional policymaking, new academic programs or changes to existing programs or structure, and major expenses and commitments. Regarding the mission, the Board began a review of the mission statement in 2018. The collaborative mission revision work continues, with the aim of creating a more inclusive mission statement adapted to modern educational delivery. To assure the institution periodically reviews its success in fulfilling its mission and serving its students, the Board's Academic Planning and Student Affairs committees regularly review the academic structure, student experiences, and student outcomes.

Academic policies are under the purview of the WPI faculty, whose roles and responsibilities are defined in the Faculty Constitution. Any proposed changes to the Faculty Constitution are approved by vote of the faculty and take effect after Board approval. For example, in May 2011, the Faculty Constitution was amended, following Board approval, to remove the limitation of time in service for non tenure-track faculty; in 2021 the Board approved the inclusion of teaching and research track faculty in faculty governance activities. The Board also reviews and approves the formation of degrees and programs. For example, in 2015, the Board approved the establishment of a PhD degree program in data science and in 2021 approved the establishment of independent departments for Robotics Engineering and Aerospace Engineering following endorsement by faculty governance. Additionally, in 2019, as part of a bylaws change, the trustees ratified the establishment of WPI's four academic schools: Arts and Sciences, Business, Engineering, and The Global School. Prior to this, only The Business School carried the "school" designation.

Regarding institutional policymaking, in March 2020, with the Board's support, the President, in collaboration with the administration, created the Administrative Policy Group (APG) to develop, approve, and publish institutional administrative (i.e., non-academic) policies. By having such a process, which did not previously exist at WPI, the university is aligned with policymaking best practice. The purpose of the APG is to "protect the integrity of WPI's mission, reputation, and operations; promote compliance with laws and regulations; and support the management of institutional risks." The APG is a cross-functional team composed of administrators and faculty members with responsibility for creating, revising, recommending, and publishing institutional administrative policies, governed by the [APG Process](#).

The APG Process has been challenged by faculty governance (see Faculty meeting minutes, May 7, 2020). As the APG does not define what constitutes an administrative policy, the main concern of faculty governance is that policies that affect the effectiveness of the teaching and research mission could bypass review by faculty governance committees, which the faculty feels could jeopardize WPI's ability to deliver on the institutional mission. The work to reach a mutually acceptable definition is ongoing.

The Board has organized itself into eleven standing committees. Those committees, which each hold their own charter, are Academic Planning; Advancement; Audit and Risk; Budget and Finance; Economic Impact; Executive; Leadership Development and Executive Compensation; Investment; Facilities and Campus Infrastructure; Nominations and Governance; and Student Affairs. Much of the Board's business is discussed and resolved by these committees and then brought to the Corporation for adoption or approval as necessary and appropriate. The Board's Executive Committee is composed of the chairs of each standing committee, the Chair and two Vice Chairs of the Corporation, and the President.

The WPI Board of Trustees meets at least three times annually, usually in October, February, and May (the annual meeting), and most board committees also follow this meeting schedule. The Executive Committee typically meets an additional three times each year. In 2018, the Board decided to create an all-day Board retreat, expanding upon the traditional two-hour September Executive Committee meeting. With this expansion, the full Board engages in an annual review of fiduciary duties. Additionally, as a member organization of the Association of Governing Boards (AGB), the Board regularly accesses guidance and best practices through the AGB portal. One example is the process through which the Board conducts a regular effectiveness review. Using AGB templates as a starting point, the Board, in spring 2019, developed and implemented a self-assessment tool to review the work of the committees. Each committee then reviewed the results of its assessment at its May meeting to inform its work the following year. This assessment resulted in a change to committee assignments. From 2010 to 2019, each trustee served on at least four committees, and each committee met three times per year for one hour and fifteen minutes. Through trustee feedback from 2015 to 2018, the trustees shared that they did not have adequate time for discussion or deeper engagement in their committee work. Therefore, in 2018-19, the Board opted to shift the committee structure by reducing the number of trustees on each committee and the number of committees on which trustees served. Since fall 2019, these smaller committees have met for at least two hours three times per year, and feedback has been largely positive concerning this shift.

The Board planned to develop another self-assessment tool and to review the Board in spring 2020, but that work was usurped by the pandemic. Self-assessment remains of import to the Board, which plans to resume such assessments in the years ahead, alternating between committee assessments and full Board assessments each year.

In AY 2020, average attendance at Corporation meetings was about 80% of the active members. Eight senior administrators and the Assistant Secretary to the Corporation also attend Corporation meetings and serve as staff liaisons to the various committees. Two representatives of the faculty (the Secretary of the Faculty and the chair of the Committee on Governance) attend Board meetings, as well. In addition, the Board selects 12 faculty appointees to serve on board committees or task forces. As full voting committee members, they provide an important faculty voice. The faculty appointees serve on the Academic Planning, Budget and Finance, Economic Impact, Facilities and Campus Infrastructure, and Student Affairs Committees, and on the Technology Task Force. The presidents of the undergraduate Student Government Association and the Graduate Student Government are also invited to attend meetings of the Corporation and the open committee meetings. They also regularly present topics of their choosing at meeting of the Student Affairs Committee.

While there has not been a recent formal external evaluation of the Board, the Board regularly seeks guidance from subject matter experts. For examples, through a partnership with CFAR Inc., the Board's Governance Working Group explored best practices in shared governance. Presentations at Board plenary sessions by meeting of higher education leadership governance experts is another example.

All trustees, officers, and key employees complete an annual [Conflict of Interest form](#), disclosing any potential conflicts, which can then be managed appropriately. No member of the Board, other than the President, receives compensation for their service. More than two-thirds of the trustees, including the chair, are free of any personal or immediate familial interest in the institution.

The Board formally monitors WPI's fiscal condition through its Budget and Finance Committee, whose chair is currently an experienced CFO. Fiscal expertise on the Board remains strong, with more than half the trustees having held senior leadership roles in major corporations. WPI's Bylaws require that the Treasurer deliver an annual written account of WPI's fiscal condition.

The Board approves major new initiatives, such as the 2019 designation of schools and the construction of a new \$80 million, 100,000-square-foot academic building. Another example of a major initiative undertaken by the Board was the presidential search and transition in 2014. While the Board had the authority to appoint members to the committee, the search committee was made up of trustees (8), alumni (1), faculty (3), staff (2) and students (1). In addition, at the request of the faculty for greater participation in the search process, an Advisory Committee to the Presidential Selection Committee was created. The Advisory Committee was comprised of four faculty members, one staff member, and one student. During the comprehensive search, the Presidential Search Committee held six meetings with faculty, staff, and students.

Most members of the Board (74%) are WPI alumni; one-third are women. There is currently only one underrepresented minority (URM) trustee serving on the Board. This is, in part, reflective of the alumni pool at WPI. But given the strides the Board has made in recruiting women trustees, it is actively seeking additional URM candidates. As part of the Bylaws and Governance Working Group initiatives (see below), the Board committed to increasing the number of members with academic experience by two and has added one such member to date (in 2020).

While the Board does not yet have specific goals for diversity within its membership, in July 2020 the Chair created a Diversity, Equity, and Inclusion (DEI) Task Force. With seven trustee members, including the President, the DEI Task Force is charged with helping guide WPI in creating a more inclusive, equitable, culturally competent environment that supports diverse perspectives, and one where the Board, students, faculty, and staff model behaviors that enrich WPI's community. The DEI Task Force pledged to first look inward at the Board's own depth of knowledge and experiences to become aware of individual and organizational biases, with the goal of then examining the organization in a methodological way to provide guidance and allow for the critical discussions essential to eliminate bias.

WPI's institutional governance structure has been a focus of the Board, the faculty, and the administration in recent years. Since the 2012 self-study, which detailed WPI's work on reviewing areas of governance, the university has continued to work in this realm to build trust and efficacy between the Board, the administration, and the faculty. In May 2018, the Board, working with an external consultant, convened the Governance Effectiveness Working Group to study existing governance protocols at WPI as well as best practices, and to develop and report on recommendations for improving governance at WPI. One outcome of the Governance Effectiveness Working Group was an update to the WPI bylaws, as the group found that roles, responsibilities, and decision-making authorities were unclear, leading to unacceptable risk. The Board passed an updated version of the bylaws in November 2018. The faculty challenged the Board action, and a new working group, the Bylaws and Governance Working Group (BGWG), was created. The [BGWG](#) was comprised of two trustees, two administrators (the President and the Provost), and four faculty members (three tenured/tenure-track and one teaching and research track). They developed a charter with the goal of recommending amendments to the November 2018 version of the bylaws and building more effective collaboration and trust between faculty, administration and trustees going forward.

After endorsement by the faculty and the Board in May 2019, the BGWG recommendations were integrated into the bylaws and approved by the Board. The BGWG also made recommendations for continued collaboration and trust-building opportunities, and the Joint Coordinating Council (JCC) was created. Now in its second year, the JCC is comprised of the President, the Provost, the Secretary of the Faculty, the chair of the faculty Committee on Governance, one trustee, and one teaching and research track faculty member.

Different perspectives that fuel debate and discussion among constituencies are part of every institution's growth, and WPI is no exception. It is important to note that the Board, administration, and faculty continue to identify mechanisms that will strengthen collaborations and increase mutual trust and confidence. WPI continues to demonstrate that its collective actions are guided by the best interests of the institution. WPI anticipates the JCC will continue to serve as a formal mechanism by which the faculty, administration, and trustees can increase their communication, collaboration, and coordination. It enables vital building of trust, provides a forum to raise and address critical issues, and serves as an advisory group to the President.

WPI Bylaws Article V(A) (2,3) tasks the Board of Trustees with "Appointing the President and setting appropriate terms of employment, including compensation; [and] Supporting the President and assessing the President's performance." The Board's Leadership Development and Executive Compensation Committee (LDECC) typically meets three times per year and conducts an annual review of the performance of the President (typically in May). The President's performance is evaluated based on established goals and objectives. Due to the COVID-19 crisis, the Committee voted to delay the review of the President's 2019-20 goals until early 2021. In addition, the Board's Leadership Development and Executive Compensation Committee began a formal succession planning process in January 2020 to ensure continuity in roles of high strategic value to the institution.

The Board delegates to the President the responsibility for all of the university's affairs. In 2019, the Trustees updated the Bylaws, in part to better define the roles and responsibilities of the Trustees and administrative leaders. Article V(B) of the Bylaws now includes the following line from the American Association of University Professors *Statement on Government of Colleges and Universities*: "It is the duty of the President to see to it that the standards and procedures in operational use within the University conform to the policy established by the Board and to the standards of sound academic practice." The intent of this inclusion is to formalize the President's key role as facilitator of collaboration and communication between the Board, the administration, and the faculty. The creation of the Joint Coordinating Council, detailed earlier, is a formal mechanism to foster such coordination.

The Board's Audit and Risk Committee regularly reviews the institution's systems of enterprise risk management, external audits, regulatory compliance, internal controls, and contingency management. At the Board's direction, WPI instituted a robust Enterprise Risk Management (ERM) system in 2015.

Since the creation of the Office of the General Counsel by the President in 2017, the President and General Counsel meet at least biweekly. Since 2019, they have regularly reviewed the WPI Risk Register. A formal document instituted by the General Council, the register lists risks raised from every division, their status, and potential mitigation approaches. Individual risks are reviewed in a deep dive format at the Management Council (see below) level, and Board's Audit and Risk Committee meets three times per year and regularly reviews the Risk Register.

Internal Governance

To effectively manage the institution, the President meets regularly with the institution's leadership. Once or twice per week, the President meets with her seven direct reports, the senior leadership team, which includes the Executive Vice President/CFO, Senior Vice President/Provost, Senior Vice President/General Counsel, Vice President of University Advancement, Vice President of Talent and Inclusion/Chief Diversity Officer, Vice President/Chief of Staff, and Vice President of Student Affairs. In addition, on a biweekly basis, the President meets one-on-one with each of these direct reports. On a weekly basis, she meets with the Management Council (MC), currently a group of 21 institutional leaders, including the senior leadership team listed above. Prior to 2018, the MC included only administrative unit leads, but it was expanded in 2018 to include seven deans: the deans of the not yet established schools (Engineering, Arts and Sciences, Global), along with the deans of The Business School, undergraduate studies, and graduate studies, and the assistant dean of undergraduate studies. The addition of the academic leaders was instituted to increase collaboration and better align strategy in support of WPI's shared mission. Other members of the MC include the Vice President of Information Technology/CIO, Vice President of Facilities and Campus Planning, Vice President of Marketing Communications, Director of Athletics, Vice Provost for Research, and Executive Director for the President's office and Board Operations.

Any MC member may add a topic to the agenda, and meetings are often both for information sharing and strategy development. Regular agenda items include risk deep dives, in which a risk owner provides an overview of an existing or potential risk to better educate—or receive guidance from—the other members; institutional budget reviews; preparation for and debriefs from board meetings; and strategic planning. Subject matter experts, both internal and external to WPI, occasionally attend MC meetings to present on their topics of expertise. For instance, WPI's Director of Diversity and Inclusive Excellence is a regular visitor as the university pursues its Sustainable Inclusive Excellence Action Plan. Overall, MC meetings help to ensure that matters of institutional administration are fully addressed, and that appropriate administrative and financial resources are provided.

Since 2018, MC members are also members of small Accountability Groups. Meeting monthly, these cross-functional teams of four to six members provide a place for support, check in, and accountability as leaders make change. Using the Clifton StrengthFinder assessment, Accountability Group assignments were created to pair diverse strengths. MC members find that the Accountability Groups have deepened relationships and broadened understandings of the complexity within each role.

Staff serve on numerous institution-wide advisory committees: for example, the Administrative Policy Group, the Human Resources Advisory Group, and a group for administrative assistants across the institution. These representatives help advocate for the interests of their staff colleagues in decision-making. To deepen engagement with staff, the Board held annual lunches in 2018, 2019, and 2020 to hear directly from staff (senior administrators are excluded) about their experiences at WPI. Even with these opportunities, there is a growing need and interest among staff to have a greater role in the governance of the institution.

Faculty Governance

The Faculty Constitution and Bylaws of the WPI Faculty were developed in parallel with the WPI Plan and adopted in 1970. The Constitution is the cornerstone of the Faculty Handbook; any changes require approval of both the Faculty and the Board of Trustees, as described in the Faculty Handbook. The Faculty Handbook also includes policies and procedures that apply to processes that directly affect the faculty or that involve and affect the faculty in substantive ways.

Faculty governance at WPI operates through a committee structure with committees bringing motions for approval to monthly faculty meetings chaired by the Secretary of the Faculty, who also serves as one of the faculty representatives to the Board of Trustees. The following are the standing elected committees of the faculty, with brief descriptions (as articulated in the Faculty Handbook) of their functions:

- **Committee on Governance (COG):** oversees faculty elections; formulates proposed changes to the Faculty Constitution; addresses questions of jurisdiction among other committees; addresses issues raised by members of the community that are not under the purview of another standing committee
- **Committee on Information Technology Policy (CITP):** a permanent subcommittee of COG that has purview over all information technology policies, procedures, and practices that affect WPI's academic and research missions; works with representatives from the Information Technology Services (ITS) division and other departments, as needed, on all matters related to computing at WPI
- **Committee on Academic Policy (CAP):** makes recommendations concerning policy for the undergraduate program, especially in the areas of new academic programs, degree requirements, admissions and financial aid, and assessment of the quality of the academic program
- **Undergraduate Outcomes Assessment Committee (UOAC):** a permanent subcommittee of CAP (which makes recommendations to CAP) responsible for: proposing policies that affect undergraduate learning outcomes; identifying and facilitating procedures for assessing those outcomes; coordinating and communicating outcomes assessment activities and results; formulating academic policy recommendations based on its assessment activities
- **Committee on Academic Operations (CAO):** monitors procedures for administering existing academic policies; recommends to the faculty changes in courses, projects, or programs; reviews proposals for experimental courses; and reviews petitions for exceptions to established rules
- **Committee on Graduate Studies and Research (CGSR):** oversees all policy and procedural activities related to research and graduate programs, including student recruitment, admissions, academic standards, teaching and research assistantships, scholarships, and fellowships; makes recommendations on new graduate programs and changes in programs and courses
- **Committee on Tenure and Academic Freedom (CTAF):** manages the process by which tenure recommendations are reached for tenure-track faculty; recommends which members of the faculty should be granted tenure or tenure with promotion, according to tenure and promotion policy and procedures; deals with questions relating to academic freedom and reviews concerns involving academic freedom raised by any faculty member
- **Committee on Appointments and Promotions (COAP):** makes recommendations to the Provost on academic promotions from Associate Professor to (full) Professor, on academic promotions of non-tenure track faculty members to the Associate Teaching and Research Professor and (full) Teaching and Research Professor levels, and on reappointments of professors of practice; makes recommendations for sabbaticals; participates in selection and review of department heads; in collaboration with COG, makes recommendations to the faculty for changes in promotion criteria
- **Committee on Advising and Student Life (CASL):** responsible for the continuing development of the student advisory and counseling programs; reviews the effectiveness of the programs; evaluates current practices in the areas of student environment, residential advising systems, and extracurricular activities as they affect the academic performance of the student body; recommends changes as appropriate
- **Committee on Administrative and Financial Policy (FAP):** informs the faculty on administrative and financial matters that affect the university; ascertains the interests and views of the faculty concerning such matters; works with administrators to make recommendations
- **Faculty Review Committee (FRC):** reviews, at a candidate's request, nonrenewal of probationary tenure-track appointments, nonrenewal or termination of secured non-tenure-track three- or five-year contracts, negative decisions on tenure of tenure-track faculty, or promotion of all faculty, with the power to require reconsideration; reviews student petitions for grade changes in courses and for projects

Committees meet at least weekly throughout the academic year, distribute minutes of each meeting to the community, and generate an annual report, available on the faculty governance website, summarizing their work during the year.

Key administrative personnel, such as the Provost, Vice Provost for Research, Chief Financial Officer, Dean of Undergraduate Studies, Dean of Graduate Studies, Dean of Students, Institutional Research personnel, Vice President of Information Technology and CIO, Director of Academic Advising, Dean of Graduate Admissions, and the Registrar are ex-officio members of faculty governance committees, as appropriate. Additionally, the faculty governance system continues to have student representation with full voting rights on several committees, including the Committee on Academic Policy, Committee on Academic Operations, Committee on Graduate Studies and Research, Undergraduate Outcomes Assessment Committee, and Committee on Advising and Student Life.

During the past several years, Faculty Governance has continued to carry out its roles and responsibilities as described in the Faculty Handbook. In addition to attending to regular operational duties, faculty governance has undertaken and completed several important initiatives that contribute to the continued growth of the institution:

- Endorsed the establishment of The Global School and its first academic department, the Department of Integrative and Global Studies
- Endorsed WPI's use of a test-blind admissions process
- Endorsed establishment of the Robotics Engineering Department and the Aerospace Engineering Department
- Endorsed establishment of several new graduate programs assuring contemporary growth and expansion of academic offerings in line with local, national, and global demands
- Regularly reviewed, revised, and updated undergraduate and graduate programs, courses, and degree requirements
- Revised criteria, process, and procedures for promotion from associate to full professor in response to the 2014 COACHE faculty satisfaction survey results
- Collaborated on development of and endorsed Faculty Conduct (2019), Research Misconduct (2019), and Sexual Misconduct (2018) policies
- Revised the Faculty Handbook to include new roles and responsibilities of academic deans in tenure and promotion reviews, evaluation of department heads, evaluation of application for sabbatical leaves, and the Faculty Conduct Policy
- Endorsed the Intellectual Property Policy
- Since March 2020, endorsed 14 COVID-19–related policies to temporarily modify policies for students and faculty: grading policies for undergraduate and graduate student courses and projects, adjusted timelines for junior faculty tenure reviews, extended faculty work-year past the end of the spring term at no cost to the institution, and a mechanism for faculty governance to function during the pandemic
- Adopted tenure track for teaching faculty; developed secured contracts for non-tenured teaching faculty; extended voting rights and academic freedom to all full-time faculty

Tenure Track for Teaching Faculty: WPI's two most recent NECHE accreditation reports have asked WPI to provide updates on its progress in improving the status of non-tenure track (NTT) faculty and its remaining challenges. The distinction between tenure/tenure-track (T/TT) and NTT faculty members, which was obvious to the voting faculty in 2012 when they defined the roles of these two groups, is much less apparent today. At that time, the Faculty Handbook was amended to underscore the T/TT faculty's "primary role in fulfilling the University's academic mission and in shaping and delivering WPI's academic programs." In the fall of 2018, the Secretary of the Faculty appointed a task force composed of T/TT and NTT faculty to evaluate the status of NTT faculty and to develop recommendations for structural changes. Interviews with department heads conducted by the Secretary of the Faculty's task force revealed that departments have become more inclusive of their NTT teaching faculty colleagues since 2017. Department heads reported extensive participation from NTT teaching faculty at the department level, with strong support for NTT faculty and a broad range of roles for them in each department. This was also corroborated through interviews with NTT teaching faculty members. Today, most of WPI's current NTT faculty contribute much more centrally to WPI's distinctive educational mission, both delivering and shaping academic programs.

In fall 2019, the task force delivered a preliminary report to the faculty centered around developing a tenure track for teaching faculty; the Committee on Governance (COG) took on primary responsibility for the remaining work. In spring 2021, after two additional years of campuswide collaborations between TTT faculty, NTT faculty, administrators, and the Board of Trustees, the following three improvements to the status of WPI's full-time teaching faculty were approved by the faculty:

- 1) In January 2021, faculty governance established a rigorous teaching track to tenure for teaching faculty, with the addition of the following new titles: Assistant, Associate, and (full) Professor of Teaching. The new track was accompanied by tenure criteria that acknowledge, support, and expect excellence in both teaching and professional growth. The Faculty Handbook further defined the following institutional goals that balance the different faculty populations: the full-time faculty should consist of 70 percent tenured and tenure-track (TTT) dual-mission teaching-research faculty (Assistant, Associate, and full Professors) and 30 percent teaching mission faculty (tenured and tenure-track Assistant, Associate, and full Professors of Teaching; non-tenure track Assistant, Associate, and full Teaching Professors, Professors of Practice, Instructors, and Senior Instructors) by August 2023, the full-time teaching faculty should be 40 percent tenured or tenure-track and 60 percent non-tenure-track.
- 2) In May 2021, faculty governance guaranteed secure longer-term contracts (with provisions explicitly specified) for the remaining full time NTT teaching faculty not placed on the tenure track.
- 3) In May 2021, faculty governance also extended full participation in faculty governance to all secured NTT teaching faculty members.

These measures represent significant change at WPI. All motions approved by the faculty were endorsed by the Board of Trustees in May 2021 and will be implemented during the 2021-22 academic year. Language reflecting these motions has been incorporated in the Faculty Handbook.

Student Government

The undergraduate Student Government Association (SGA), which defines itself as “the voice of the WPI undergraduate student body,” seeks to improve the academic and the social life of undergraduate students. It is led by its President, who is also head of the Executive Board and Cabinet (which is comprised of the Executive Board and standing committee chairs). The Executive Board includes the President, Vice President, Secretary, Treasurer, and Parliamentarian. The President, Vice President, Secretary and Treasurer are elected by the undergraduate student body; the Parliamentarian is appointed by the President and then confirmed by the Senate. The SGA, which makes its constitution and bylaws publicly available, is charged with managing the funds collected in student life fees to support more than 230 student-run clubs and organizations.

SGA selects undergraduates to serve on faculty governance committees and runs elections for student representatives to the Campus Hearing Board. SGA also invites visits from faculty and administration to discuss initiatives and issues at its weekly meetings. Recent accomplishments have included storage space for clubs, more study space, free menstruation hygiene products in restrooms, the impacts of COVID-19 and maintaining student culture while supporting students in need through the Emergency Assistance Fund, housing selection communications, and food service marketing opportunities.

The Graduate Student Government (GSG) was reformed in 2009, with a constitution and bylaws that are published digitally. The organization provides representatives to faculty governance committees (CGSR and CASL) and has been focused heavily on building community among the graduate student population at WPI. Areas of recent focus have included changes to student health insurance and other student fees.

Alumni Association

The mission of the WPI Alumni Association is to be an independent voice and effective advocate for the alumni body within the WPI community and to connect, engage, and involve alumni with WPI and with one another in support of WPI's mission and goals. The association has a board of directors that includes alumni, a representative from WPI's Advancement Division, and a current student representing the Student Alumni Society. The association has its own mission and bylaws, updated most recently in 2007.

PROJECTIONS AND ASPIRATIONS FOR THE FUTURE

- The Board of Trustees values its role in shared governance and remains committed to deepening trust and collaboration with the administration and faculty. Much work has been done in this area, and all governance bodies—the Board, the faculty, the administration, and the students—have committed to continued work.
- The Board continues to assess its performance to strengthen its effectiveness as institution leaders.
- The Board’s Nominations and Governance Committee is in the process of setting diversity goals for board membership as the Board strives to be a better representative of the current student body and ensure it has more members with higher education experience.
- Faculty Governance has prioritized the development of a diversity, equity, and inclusion plan that includes revision of the Faculty Handbook to include all full-time faculty in the formal definition of faculty; analysis of faculty compensation across titles, ranks, longevity, and diversity characteristics; and review and revision of student course evaluations to discourage implicit bias.
- Faculty Governance seeks to further define the roles and responsibilities of academic administrators; their interim appointments; their position descriptions when vacancies occur; and the search process used to fill any vacancies.
- Faculty Governance intends to develop recommendations for a faculty loading model across programs and disciplines to reduce ambiguities and to identify possible inequities and to support ongoing processes to maintain balance in faculty workloads at the departmental and campuswide levels.
- Faculty Governance seeks to continue monitoring administrative and instructional spending, which is central to institutional efficiency and reflective of institutional priorities.
- The university will continue to broaden opportunities for staff input and participation in university decision-making through the formation of a staff council and the addition of staff representatives to the Joint Coordinating Council.

DATA FIRST FORMS

STANDARD 3: ORGANIZATION AND GOVERNANCE

Board and Internal Governance

Please attach to this form:

- 1) A copy of the institution’s organization chart(s).
- 2) A copy of the by-laws, enabling legislation, and/or other appropriate documentation to establish the legal authority of the institution to award degrees in accordance with applicable requirements.

Governing Board

By-laws

Board members’ names and affiliations

Board committees

Executive Committee
Academic Planning Committee
Advancement Committee
Audit & Risk Committee
Budget & Finance Committee
Leadership Development & Executive Compensation Committee
Investment Committee
Facilities & Campus Infrastructure Committee
Nominations & Governance Committee
Student Affairs Committee
Economic Impact Committee

Website location
www.wpi.edu/about/leadership/trustees/bylaws-corporation
www.wpi.edu/offices/trustees/current.html

Website location for meeting minutes
In workroom, Standard 3
In workroom, Standard 3
In workroom, Standard 3
In workroom, Standard 3
In workroom, Standard 3
In workroom, Standard 3
In workroom, Standard 3
In workroom, Standard 3
In workroom, Standard 3
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Major institutional faculty committees or governance groups

Faculty Governance
Committee on Academic Operations
Committee on Academic Policy
Committee on Advising & Student Life
Committee on Appointments & Promotions
Committee on Financial & Administrative Policy
Committee on Governance
Committee on Graduate Studies & Research
Committee on Tenure & Academic Freedom
Undergraduate Outcomes Assessment Committee
Fringe Benefits Committee

Website location for meeting minutes
www.wpi.edu/offices/faculty-governance
www.wpi.edu/offices/faculty-governance/cao
www.wpi.edu/offices/faculty-governance/cap
www.wpi.edu/offices/faculty-governance/casl
www.wpi.edu/offices/faculty-governance/coap
www.wpi.edu/offices/faculty-governance/fap
www.wpi.edu/offices/faculty-governance/cog
www.wpi.edu/offices/faculty-governance/cgsr
www.wpi.edu/offices/faculty-governance/ctaf
www.wpi.edu/offices/faculty-governance/uoac
www.wpi.edu/offices/faculty-governance/fbc

Major institutional student committees or governance groups

WPI Student Government Association
WPI Graduate Student Government

Website location or document name for meeting minutes
wp.wpi.edu/sga/
wpi.campuslabs.com/engage/organization/graduate-student-government

Other major institutional committees/governance groups

WPI Alumni Association
Administrative Policy Group

Website location or document name for meeting minutes
www.wpi.edu/alumni/community/alumni-association
www.wpi.edu/about/policies/administrative-policy-group

Please enter any explanatory notes in the box below

STANDARD 3: ORGANIZATION AND GOVERNANCE

Locations and Modalities

Campuses, Branches and Locations Currently in Operation

	Location (City, State/ Country)	Date Initiated	Enrollment*		
			2 years prior	1 year prior	Current year
			(FY 18)	(FY 19)	(FY 20)
			AY 2017-18	AY 2018-19	AY 2019-20
Main campus	Worcester, MA, USA	05/10/1865	7,338	7,505	7,654
Other principal campuses					
Branch campuses (US)					
Other instructional locations (US)					
Branch campuses (overseas)					
Other instructional locations (overseas)					

Educational modalities

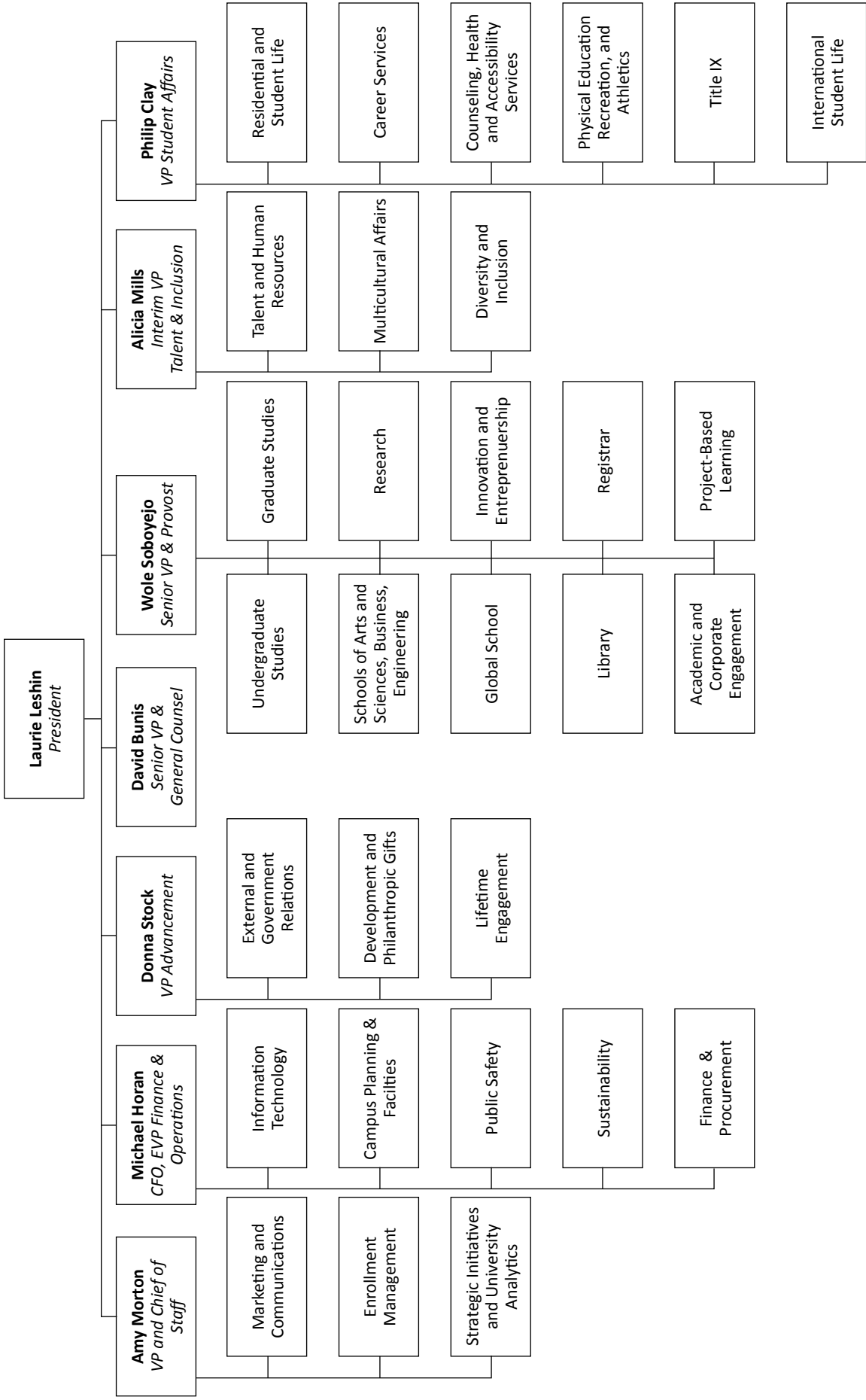
	Number of programs	Date First Initiated	Enrollment*		
			2 years prior	1 year prior	Current year
			(FY 18)	(FY 19)	(FY 20)
			AY 2017-18	AY 2018-19	AY 2019-20
Distance Learning Programs					
Programs 50-99% online	2	2010	3	12	21
Programs 100% online	14	2010	369	365	437
Correspondence Education					
Low-Residency Programs					
Competency-based Programs					
Dual Enrollment Programs					
Contractual Arrangements involving the award of credit	1	1990	5	8	20

*Annual unduplicated headcount for each of the years specified below.

Please enter any explanatory notes in the box below

Enrollment is 12-month headcount from IPEDS 2020.

ORGANIZATIONAL CHART



*More detailed organizational charts are in the virtual workbook



Commonwealth of Massachusetts.

IN THE YEAR ONE THOUSAND EIGHT HUNDRED AND SIXTY-five.

AN ACT

to incorporate the Worcester County Free Institute of Industrial Science.

Be it enacted by the Senate and House of Representatives, in General Court assembled, and by the authority of the same, as follows:

Section 1. George F. Hoar, Seth Sweetser, their associates and successors, are hereby made a body corporate, by the name of the Worcester County Free Institute of Industrial Science, for the purpose of establishing and maintaining in the city of Worcester, an institution to aid in the advancement, development and practical application of science, in connection with arts, agriculture, manufactures, mercantile business and such other kindred branches of practical education as said corporation shall determine; with all the powers and privileges, and subject to all the duties and

liabilities set forth in all laws which now are or may hereafter be in force and applicable to such corporations. The mayor of the city of Worcester, for the time being, shall ex officio, be a member of said corporation, and one member shall be appointed by the board of education, from time to time, as a vacancy may occur; and said corporation shall not consist of more than twelve members at any one time.

Section 2. Said corporation shall have authority to accept and hold in fee simple, or any less estate, any real or personal estate to an amount not exceeding four hundred and fifty thousand dollars, to be devoted exclusively to the purposes aforesaid and in conformity with conditions made by any donor, not inconsistent with this act, expressed by him in writing and recorded in the records of said institution.

Section 3. Said corporation may establish separate departments of scientific instruction and pursuit whenever it can be done

without interfering with the unity of purpose of said institution or the government and management of the same, may designate and distinguish such departments by specific names, and accept any moneys for the special advancement of said departments; provided that no moneys shall be applied to any uses or purposes, not embraced within the general design of said institution as expressed in this act.

House of Representatives. May 6. 1865.

Passed to be enacted. Alex. H. Bullock. Speaker.

On Senate. May 9. 1865.

Passed to be enacted. J. E. Field. President.

May 9th 1865. Approved.

John A. Andrew.

Secretary's Department.

Boston. May 10. 1865.

A true copy:-

Oliver Standish.

Secretary of the
Commonwealth.

STANDARD FOUR: THE ACADEMIC PROGRAM

DESCRIPTION AND APPRAISAL

WPI has offered undergraduate programs in science and engineering since its founding in 1865 (see Standard One) and has offered graduate degrees since 1898. While the foundation of the educational program has always been “theory and practice” (a rough translation of the motto “Lehr und Kunst”), the undergraduate programs were completely redesigned in the 1960s with a core focus on project-based learning. Currently, the graduate programs are making the shift from a primary focus on part-time master’s programs for working professionals to a much broader range of graduate programs focused on full-time students, a research mission, and the PhD degree.

The WPI faculty is organized into 17 academic departments collected into four schools, which were officially formalized by the Board of Trustees as schools in 2019: the School of Arts and Sciences (seven departments), the School of Engineering (eight departments), The Business School (one department), and The Global School (one department). Three academic departments were created in the last two years: Aerospace Engineering and Robotics Engineering made the transition from programs to departments in 2020. The newly created Global School introduced the Department of Integrative and Global Studies to focus on support for the Great Problems Seminar, a first-year projects program defined by important problems, not academic disciplines.

At the heart of WPI’s mission is solving problems that cross disciplines; thus, interdisciplinary programs draw on the expertise of faculty from two or more departments. For example, the Interactive Media and Game Development program offers BA and BS programs delivered by faculty from the departments of Humanities and Arts and Computer Science. The Bioinformatics and Computational Biology program engages faculty from Computer Science, Mathematical Sciences, and Biology and Biotechnology. Each program has a faculty program director and, for larger programs, dedicated administrative support and operating budgets. Each faculty member retains a primary appointment in an academic department.

WPI currently offers 34 bachelor’s degree programs in engineering, the physical and life sciences, computer science, mathematical sciences, business, the humanities and arts, and the social sciences. Most of the majors are the responsibility of a single academic department. At the graduate level, WPI offers 77 graduate degree programs in engineering, the physical and life sciences, computer science, mathematical sciences, business, and the social sciences. There are 51 master’s degree programs and 26 programs leading to the doctor of philosophy degree. Corporate and Professional Education (CPE), housed within Graduate Studies since 2019, supports fully online programs in over 23 program areas, offering a combination of graduate certificates and master’s degrees in engineering, the physical and life sciences, computer science, business, and the social sciences.

Detailed information on admission, academic policies, financial aid, and academic advising, along with course descriptions, learning goals for undergraduate and graduate programs, and criteria for awarding credits, are published annually in the undergraduate and graduate catalogs. All catalogs are reviewed annually by the Provost’s Office, the faculty Committee on Academic Operations, department heads, and the Registrar’s Office. Significant changes and updates to the catalogs, including updates to the print catalogs and experimental courses, are made available in supplements to the online catalogs.

Undergraduate Programs

WPI’s 17 academic departments offer 31 Bachelor of Science and three Bachelor of Arts programs. About 90% of WPI students major in a science or engineering discipline. In 2020, more than 2,800 students (60% of all undergraduates) declared a major in an engineering discipline, with the three largest groups being Mechanical Engineering (791 students enrolled, 235 degrees awarded in 2020), Biomedical Engineering (474 students enrolled, 98 degrees awarded in 2020), and Robotics Engineering (355 students enrolled, 88 degrees awarded in 2020). More than 1,000 bachelor’s degrees were awarded in 2020. WPI’s undergraduate engineering programs are accredited by ABET (reviewed in 2020).

In 2020, nearly 1,300 students (about 28% of undergraduates) were majoring in one of the science disciplines, including Computer Science and Mathematical Sciences. Computer Science, which now ranks as the largest major at WPI, has seen the most significant growth in the last 10 years, increasing from 6% of undergraduate majors to over 17% of full-time students. The three largest science discipline majors in 2020 were Computer Science (819 students enrolled, 168 degrees awarded in 2020), Biology and Biotechnology (153 students enrolled, 38 degrees awarded in 2020), Biochemistry (90 students enrolled, 15 degrees awarded in 2020), and Mathematical Sciences (90 students enrolled, 13 degrees awarded in 2020).

More than 170 students are currently majoring in a discipline within The Business School. All business programs are accredited by the AACSB (with the Industrial Engineering program notable for also being accredited by ABET). Concentration options are also provided. In 2020, 67 students graduated with a BS from The Business School.

The smallest groups of majors at WPI are found in the Humanities and Arts and the Social Sciences. In 2020, WPI awarded seven degrees in Humanities and Arts or Professional Writing; six of those students listed these as secondary majors. Thirteen students completed a social science or policy studies degree in 2020, with only 50% of these students listing one of these majors as a single major.

While many students declare a major during the admissions process, students are not admitted to majors or schools, but rather to WPI. Academic advisors in the Office of Academic Advising help students identify courses and majors that align with their interests. In addition, the Career Development Center teaches a course called Discovering Majors and Careers that helps students identify possible majors. Historically, about 50% of undergraduate students change their major (at least once). The undergraduate program requirements are structured to make these changes easy.

Capstone Project Work

In 1970 the faculty completely redesigned the undergraduate program with the introduction of the WPI Plan. The Plan eliminated all required courses; replaced traditional grades with a system that records only courses completed (if a student does not pass the course, there is no record on any official transcript and GPA is not used as a measure of performance); replaced the traditional 14-week semesters with two 7-week terms; and made capstone project work the defining graduation requirement for all undergraduate majors. Three capstone projects define (and assess) the primary learning goals for all undergraduate programs. A 9-credit major capstone called the Major Qualifying Project is typically completed in the senior year; a 9-credit interdisciplinary capstone called the Interdisciplinary Qualifying Project is typically completed in the junior year; and a 3-credit capstone embedded in the Humanities and Arts requirement is typically completed in the sophomore or junior year. These projects allow students to research, provide open-ended inquiry, and develop original and creative designs to solve problems and make new discoveries. Combined, the projects encompass a minimum of 21 of the 135 credits required for a bachelor's degree.

Disciplinary Capstone: Major Qualifying Project (MQP): The MQP is a research-driven, professional-level project requiring a quarter of the senior year credits (9 credits), which establishes qualification in the student's major. Projects are carefully selected to complement the student's educational program. In many engineering disciplines, the MQP serves as the capstone design activity (as required by ABET). Between one-third and one-half of projects are performed with industrial or research organization sponsors. Many contribute to ongoing faculty interests, or students may propose their own project ideas. Approximately 400 MQPs are completed annually. Formal written MQP reports, completed by all students, are submitted through the WPI eProjects system, WPI's internal hub for project activity. WPI also dedicates one day each April for public presentations by MQP teams. Students are surveyed at the completion of the MQP and asked to report on their own development in the dimensions of the learning outcomes. Upon completion of an MQP, each faculty advisor is asked to complete a survey to assess each individual student's achievement of each learning outcome. Finally, MQP final reports are reviewed by departments and programs as an additional source of evidence of student achievement. The most recent reviews were completed by engineering programs as part of ABET self-studies.

Interdisciplinary Capstone: Interactive Qualifying Project (IQP): Involving about a quarter of a year (9 credits), this interdisciplinary project experience, unique to WPI, asks teams of students to address a problem at the interface of science or technology and human values or social concerns. Most of these projects are conducted through the Global Projects Program, which provides faculty-led project opportunities at residential project centers at more than 50 off-campus sites around the world. In 2019-20, 918 students completed off-campus IQPs. Off-campus and on-campus IQP opportunities are posted on eProjects. Some of the project ideas are based on faculty research interests; many more come from external organizations or build on previously completed projects. It is also possible for students to propose a project and meet with faculty to develop the idea into an acceptable IQP. Upon the completion of an IQP, the students complete a standard survey asking them to assess their own progress toward each of the learning outcomes. By completing a similar survey, the faculty advisor records each student's achievement (not progress) in each of the learning outcomes. These data are reviewed annually by the Undergraduate Outcomes Assessment Committee.

Humanities and Arts (HUA) Capstone: Inquiry Seminar or Practicum: This seminar or practicum is the culmination of each student's individual plan of study in the Humanities and Arts (HUA). All WPI undergraduate students complete the equivalent of a minor in HUA. As a capstone experience, the Inquiry Seminar is intended to help students take their knowledge of the humanities to a deeper level. The purpose of the seminar is to build on the understanding of that discipline acquired in prior courses, and to provide a structured forum in which students approach a specific humanities-related problem or theme at a deeper, more sustained level of intellectual engagement than would normally be possible within a traditional course. The Practicum shares the same goals and objectives as the Inquiry Seminar through a production/performance experience that emphasizes hands-on, practical application of skills and knowledge gained from a sequence of HUA courses. Examples of practicums in Music include composing, arranging, or performing a solo recital. Drama/Theatre students may act in, direct, or design a campus production.

Course Work and Credit

Several distinctive features of the undergraduate program support the three capstone projects described above. First, the emphasis on project work requires a high level of teamwork and collaboration in an environment that requires intellectual risk. As a result, the university has an alternative grading system designed to support this emphasis. The only grades assigned for classes and projects are A, B, C, or, if the work falls below a C and is thus not acceptable, NR. NR stands for “No Record” and it means that there is no record on the transcript that the student was enrolled in the course. WPI does not record “punitive” grades (Ds or Fs) and thus does not use grade point average as a measure of performance. The system was put in place primarily because faculty wished to create a culture where peer teaching and learning was supported to the fullest degree. This cooperative atmosphere is crucial in project work, where most projects involve teams of two to four students.

Second, WPI divides the academic year into four seven-week terms—two in the fall (A and B Terms) and two in the spring (C and D Terms); a standard course schedule is three courses in each term. With few exceptions, every undergraduate course carries 1/3 unit of credit, and the undergraduate catalog specifies that 1/3 unit should involve 15 to 17 hours of time on task per week, regardless of the time in lecture or conference or lab. The same expectation is defined for project work, where there are almost no traditional “contact hours” and certainly no lectures. Students must learn to take responsibility for their own learning, and WPI gives them that responsibility in every course. WPI undergraduate courses do not have traditional prerequisites, which might prevent students from taking a course. Ownership of academic planning and course selection resides with the student. The curriculum is designed to guide but not restrict intellectual curiosity and academic challenge.

The term system was established specifically to facilitate project work and off-campus project experiences. An IQP or MQP can be the full academic load for one term, enabling students to leave campus to complete these projects, from beginning to end, in one term of full-time immersion. The same option is available to students doing on-campus project work, although they choose this option infrequently. When a project extends over multiple terms, the standard schedule is two courses in addition to project work, so the project remains a significant focus for the students.

To communicate with the outside world for purposes of accreditation and transfer of credit, WPI translates its system of units into undergraduate credit hours: 1/3 WPI unit = 3 undergraduate credit-hours. The basic graduation requirement is 15 WPI units of undergraduate credit, of which a minimum of eight units must be completed while enrolled at WPI. One free unit (16 units would be a full four-year program), along with an additional unit of free electives within the 15-unit requirement, provides flexibility to the academic plan.

In the remainder of this document, credits for courses and projects will be expressed using the more traditional credit hour system. Almost all undergraduate courses are equivalent to 3 credits, while each qualifying project (IQP and MQP) equates to 9 credits. Of the 135 credits required for graduation, 9 are designated as free electives. Of the 126 remaining credits, 54 are specified within the major (this includes the 9-credit MQP). The remaining 72 credits fall into six categories:

- | | |
|-----------------------------------|--|
| 1) Interactive Qualifying Project | 9 credits |
| 2) Humanities and Arts | 18 credits |
| 3) Mathematics and Science | 18 credits |
| 4) Social Sciences | 6 credits |
| 5) Physical Education | 3 credits (in four 3/4-credit courses) |
| 6) Distribution Requirements | 18 credits specified by major |

The Interactive Qualifying Project (IQP) can be considered the heart of general education at WPI. IQPs are advised by faculty from all departments and disciplines, and the projects are regularly assessed to assure that the degree requirement supports the institutional learning outcomes for all students.

The Humanities and Arts (HUA) requirement expects 18 credits of work. Course selection is divided into thematically related areas, where students complete at least 9 credits of related work (called depth) that leads to an Inquiry Seminar or Practicum in that discipline. To ensure a measure of breadth, students complete at least one course in a different area than their depth area. There is one exception to the structure defined above. Students may satisfy the HUA requirement with a six-course sequence of study in a foreign language, such as Arabic, Chinese, German, or Spanish.

Most programs require more than 18 credits in science and math. Even though WPI rarely uses the term “general education” in internal discussions, as many as 54 of the credits described in the graduation requirements above (all except the 18 credits prescribed in distribution requirements by the major) meet the defining quality of general education.

The learning outcomes for each of the three capstone experiences, for the major program, and for general education requirements and evidence of achievement are articulated in Standard Eight.

The First Year Experience: Great Problems Seminar (GPS)

In addition to the three required capstone experiences, WPI also offers a fourth experience in which more than 25% of first-year students participate. More than 10 years ago, the faculty recognized an opportunity for project work in the first-year program to further support the WPI Plan. Students were coming to WPI because of the projects and found themselves in a traditional sequence of first-year courses. NSSE data showed that in contrast to WPI's highly engaged fourth-year students, first-year students reported less academic challenge, less class participation, less teamwork, less progress in communication and critical thinking, and less tendency to work hard than first-year students did at other doctoral-intensive institutions. As a result, the Great Problems Seminar (GPS) was created.

Each GPS course has at its center a significant global problem (for example, food, health care, sustainable development, or climate change) selected, in part, because of its interdisciplinary nature. The selected global problems have societal and technical components, and the courses are always team-taught, usually with one faculty member from a science or engineering discipline and one from a business, humanities, or social science discipline. Each GPS is 6 credits, spans two terms, and is led by faculty from two departments. Students receive credit in appropriate disciplines. For example, students in the “Feed the World” seminar receive credit for one course in Chemistry and one course in Humanities and Arts. In the first term, students typically explore the theme from many angles and focus on learning equitable and effective teamwork and developing communication and information literacy and presentation skills. For most of the second term, teams of three to five students, with faculty guidance, perform an in-depth analysis of some aspect of the great problem and try to frame a partial solution based on their investigations. Seminars culminate in a joint Project Presentation Day in which all groups present posters describing their projects. Each team produces a substantive written project report. Successful project teams demonstrate fluency in analyzing a technical component, as well as awareness and assessment of the socio-political circumstances and economic impact of the problem.

To support the steady demand for GPS courses, six faculty members have been hired since 2013 to teach them. With the recent creation of The Global School, faculty members who have on-going responsibility for the GPS have joined the Global Projects Program faculty to form a new academic department: Integrative and Global Studies. GPS faculty and administration meet during the summer to evaluate student learning data and feedback. This data is used to guide discussions about implementing change to ensure that the GPS delivery and student learning meet the stated learning outcomes.

The Global Projects Program

WPI has been able to send more engineering and science students abroad than any other U.S. university. Most students now complete their IQP at one of more than 50 WPI project centers located around the world. Over 17,000 students have completed off-campus projects since the program began over 45 years ago, including about 9,600 in the last 10 years.

In all of WPI's global programs, the focus is on project work, not on coursework. WPI faculty supervise the projects to ensure that the academic purpose remains the central purpose for the work, even when there is an industrial or government sponsor for the project. At IQP project centers, students complete interdisciplinary team projects for local government agencies, NGOs, and nonprofits. Student work at each project center is directed by WPI faculty members. The most common model (typical for IQPs) involves a cohort of 24 to 28 students, accompanied by two residential faculty advisors. Each team of three to four students tackles a different project for a different local sponsor. While the focus of the Global Projects Program has long been the IQP, there are also project centers that provide opportunities for students to complete either the MQP or the Humanities and Arts requirement abroad. At MQP project centers, students complete design or research projects in their major for the private sector and research laboratories. For example, project centers in Nancy, France, and Modesto, California, allow Chemical Engineering majors to complete projects related to wine making. At Humanities and Arts centers, students complete the final nine credits toward their Humanities and Arts requirement, generally via a combination of course work, independent study, and creative original work. For example, students can complete the HUA requirement through a language immersion program in Buenos Aires, Argentina.

Project centers usually have distinct research agendas. For example, the project center in Cape Town, South Africa, has been focused specifically on sustainable development in informal settlements where many people live in substandard housing with inadequate services. In Venice, Italy, the projects have addressed the health of the city, which is often overrun by tourists. Over 30 years, more than 120 projects have been completed in Venice on topics that have included flooding from sea level rise, the documentation of the city's public art, and the promotion of conservation. In addition to the project advisors, each project center has a faculty director who sets the center's research agenda, develops ongoing relationships with project sponsors, and works with WPI's Global Experience Office to attend to housing, transportation, health, safety, and logistics.

Increasing the number of project centers, and so the number of students who have access to a global project experience, was one of the primary goals of the most recent strategic plan. This was motivated by years of assessment data showing student work at off-campus project centers was significantly better than project work completed on campus, and that student achievement of the IQP learning outcomes was significantly higher. In addition, a study of WPI alumni showed that the impact of the global projects was both significant and long-lasting.

To prepare for their seven weeks at an off-campus IQP center, students complete a seven-week, 4.5 credit preparation course that guides them through the process of project formulation, background research, and proposal development. The course introduces social science research methods and field skills and focuses on the development of inclusive teamwork and communication skills. The course may also include some basic language skills and a study of the host culture.

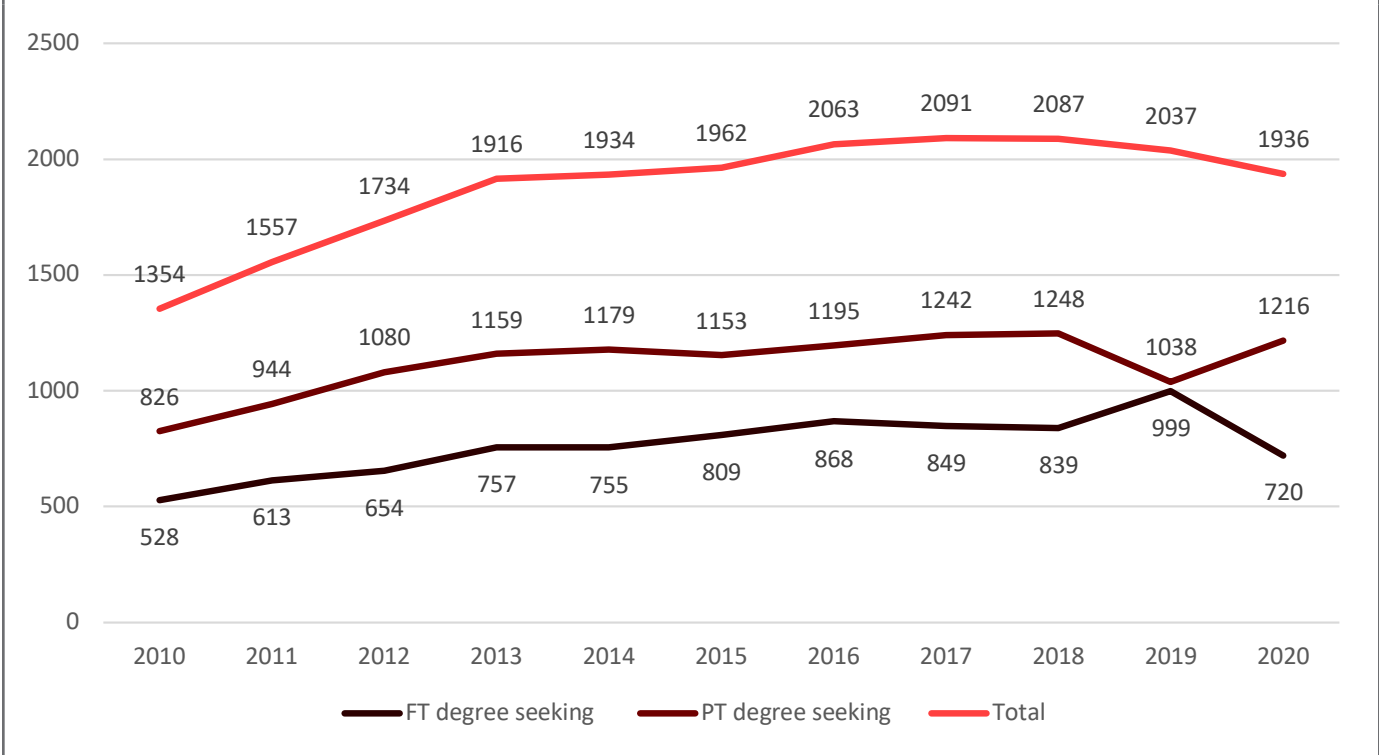
Global project opportunities are presented in the undergraduate catalog, on the Global Experience Office website, and through the eProjects website. Project centers run projects during specific terms, and students—with their advisors—use this information to build an academic plan that includes the specific project center and term. Typically, students apply in the fall terms of their sophomore year for project centers offered in the following academic year. They are not guaranteed a particular project center (demand at popular sites often exceeds the capacity of the site) but WPI has developed its own software tool that optimizes the assignment of students to their preferred sites.

Graduate Programs

WPI has offered graduate programs for more than 120 years. The large majority of courses have been taught over a 14-week semester, with a focus on required courses and, in some cases, research and a thesis. For much of that history the mission of the graduate programs was to serve working professionals. Most courses were evening courses, and most students were in master's degree programs. Over the last decade, WPI transitioned to a much more research-focused graduate program, supporting PhD students, and moving many graduate courses into a more traditional daytime schedule with teaching assistantships reserved for PhD students. As an illustration of this shift, in 2010 there were 1,079 admitted master's students and 212 PhD students; by 2020 there were 1,370 admitted master's students and 475 PhD students, increases of 27% and 124%, respectively.

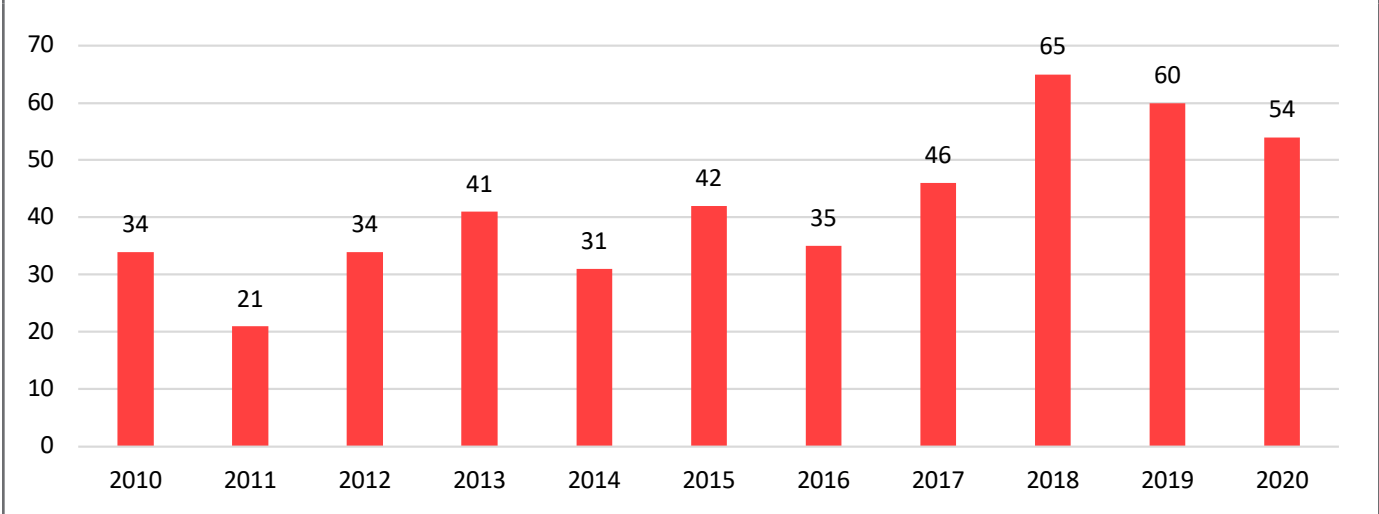
Together, WPI offers 77 different graduate program options. In fall 2020, of 1,936 degree-seeking graduate students, 720 (37.2%) were studying on a full-time basis and 1,216 (62.8%) were studying on a part-time basis. The total number of enrollees represents a 43% increase over the fall 2010 degree-seeking graduate student headcount (1,354). The following figure summarizes degree-seeking graduate student enrollment over the past 10 years. Of the 1,936 degree-seeking students in fall 2020, 902 were enrolled in engineering programs, 349 were studying one of the sciences, 435 were in an interdisciplinary program, and 250 were in business programs. Of the five largest graduate programs, Robotics Engineering (which transitioned from a program to an academic department in 2021) had the largest program, with 146 master's students and 39 PhD students; Data Science (created in 2013) enrolled 99 master's students and 50 PhD students. Mechanical Engineering, Electrical and Computer Engineering, and Computer Science are the other three high-enrollment programs.

Graduate Student Headcount



PhD completion has also been an important priority over the last decade. During the 2019-20 academic year, WPI awarded 728 graduate degrees, of which 54 were PhDs. The following figure shows the growth in PhD completions since 2010.

PhD Degree Completion by Year



WPI online graduate programs have grown in credit hours by 440% since 2010. This incredible growth is attributed to a combination of program development in response to market-demand, quality, and listening to students and corporate partners as they requested more flexible degree options.

WPI has several professional graduate degree programs, including the Professional Master of Science in Chemical Engineering, Financial Mathematics, and Industrial Mathematics, as well as graduate programs that are part of The Business School. These programs have been designed to prepare students, through sequential development of professional skills, for careers that involve the application and development of knowledge in the intended profession. The Master of Science in Information Technology provides an example of this career preparation, with students completing theory- and application-based coursework leading to an IT specialization, and then demonstrating mastery through capstone projects as well as recommended internship experiences. WPI was a founding member of the National Professional Science Master's Association.

For graduate programs, each department is responsible for developing and maintaining its own admissions standards appropriate to the discipline, which are the same for in-person, online, and corporate versions of the program. Admissions requirements are published in the Graduate Catalog as well as on individual program pages on the WPI website. Curricula, degree requirements, academic milestones (including specific details on thesis/dissertation requirements and their respective committees), and assessments for WPI graduate programs are detailed annually in the Graduate Catalog. These components of WPI graduate programs place the advancement of graduate students substantially beyond the educational accomplishments required for a WPI baccalaureate degree. Graduate students work with faculty in the programs to complete a plan of study to ensure timely degree completion.

All WPI master's degree programs require at least 30 credit hours of study, composed primarily of three-credit courses. Thirteen programs require between 31 and 36 credits, the MBA program requires 48 credits, and the MFA in Interactive Media and Game Design (in development) will require 51 credits. If a thesis is required by the program, it must include at least six credit hours of research directed toward the thesis. Each of the doctoral programs requires at least 90 credit hours beyond the bachelor's degree, or 60 credits beyond the master's degree, with at least 30 of these credits devoted to dissertation research.

Undergraduate students can apply for a BS/MS degree in their junior year, allowing them to graduate with both degrees within four to five years. This pathway, for undergraduate students with strong academic performance, allows for the GRE/GMAT to be waived in the application process and for up to 40% of classes to be double counted to shorten the length of time required to achieve a BS and an MS degree. As part of the 2015 strategic plan, WPI worked to help increase the visibility of these pathways.

In recent years, to offer graduate students the kind of project-based experience articulated in the undergraduate-focused WPI Plan, 17 graduate programs have added capstone projects, called Graduate Qualifying Projects (GQPs), for non-thesis master's programs. For example, the Data Science GQP entails a team-based project sponsored by an industry partner and culminating in a team presentation evaluated by faculty and industry professionals. The Data Science GQP is a capstone course that most Data Science master's students complete in the last semester of their master's program. Working in teams of at least three students each to complete the capstone experience, students leverage the skills they have learned and apply them to a real-world situation through collaborative research with companies. The GQP curriculum not only prepares students to use their skills in real-world situations, but it also connects them with possible future employers and professionals. By the end of the semester, students develop an expert mindset and hone their professional presentation and publication skills.

With the 2018 approval of administrative policies and course registration codes for master's and PhD internships, graduate internships have become a formalized experience for graduate students at WPI. All graduate students, including PhD students, are permitted to complete up to three semesters, inclusive of summer, of internship experiences for up to three academic credits. The internship experiences are evaluated by a WPI faculty member, typically the graduate coordinator for a given graduate program, and a description of the experience and grade assigned appear on the student's transcript. A few master's programs, such as Fire Protection Engineering and Robotics Engineering, have added graduate internship experiences as a required component in their degree requirements.

Graduate programs detail their degree requirements in the Graduate Catalog; these descriptions are generally comprehensive and explicit. In some cases, graduate programs may provide additional details on degree milestones, such as qualifying and comprehensive exams. Graduate Studies has been working with the Registrar to develop course codes for these degree milestones, and several graduate programs have implemented their use. Graduate Studies continues to work with graduate programs in this area.

The Registrar's Office conducts a degree audit to ensure that graduate students have satisfied the necessary requirements needed for degree completion. While graduate degree audits have been a manual and labor-intensive process for many years, the process will be improving in the coming year as WPI migrates to Workday. During the integration, graduate degree audits were built into the system to automate the process. This development will be enormously impactful.

Learning Outcomes and Program Assessment

The academic and research demands of WPI graduate programs are significantly greater than those expected at the undergraduate level. WPI offers distinct coursework and curricula for its graduate programs beyond the curricula offered for its undergraduate students. The Business School provides a good example of cohesiveness in its graduate programs, with its program learning goals posted on its accreditation website and its structured sequence of courses for each program noted in the Graduate Catalog—along with admissions and degree requirements, and program- and course-level instructional methods and delivery formats. However, WPI does not routinely assess the relationship and interdependence of its undergraduate and graduate programs; this an area for future focus.

PhD students must demonstrate high academic attainment and the ability to carry on original independent research, as evidenced by publications, conference presentations, and the successful development and defense of a PhD dissertation approved by a committee consisting of at least two faculty members in their department and at least one external committee member. Each graduate program also has some form of qualifying examination (with oral and written components) wherein students demonstrate an integrated understanding of their academic discipline.

WPI has continued to place significant value on making visible graduate project work and research to the larger WPI community and to industry partners through its annual Graduate Research and Innovation Exchange (GRIE). Graduate students engaged in research can present their work, typically in poster format, to the WPI community, alumni, and external visitors, including faculty and industry judges. In 2018 WPI also implemented its own Three Minute Thesis (3MT®) competition, in which PhD students present their dissertation research in three minutes or less. The competition has a panel of judges that selects a winner and a runner-up, with the winner advancing for an opportunity to compete regionally in the Northeastern Association of Graduate Schools (NAGS) 3MT competition. These research showcases are used by graduate faculty to gauge depth of knowledge, research communication skills, and data analysis capability, among other qualities. For example, the Data Science program utilizes the GRIE event as a means of assessing data science GQP projects.

The School of Engineering, The Business School, and the School of Arts and Sciences maintain advisory boards that meet at least once annually to review academic programs, evidence of student success, and program effectiveness. Data such as job placement rates, internships, academic performance, project work, research metrics, and student satisfaction are considered. These advisory boards incorporate external perspectives, including faculty from peer institutes and industry professionals and alumni. Faculty have a substantial role in the advisory board meetings.

Graduate Program Administration

In 2019, the Office of Graduate Admissions and Enrollment and the Office of Corporate and Professional Education were moved within the Office of Graduate Studies, aligning administrative oversight and support for all populations of graduate students. The Graduate Studies Dean and Assistant Dean act as advocates for graduate student affairs, administer internal fellowships, and adjudicate academic matters that do not require the attention of the Committee on Graduate Study and Research. The Assistant Dean also organizes a full curriculum of professional development programming for all graduate students and postdoctoral researchers and provides student success support to all doctoral students.

Graduate Studies has been instrumental in recent years in developing more centralized policies and practices. Examples include developing and formalizing graduate student internship policies and practices, parental leave policies and processes, and remote working policies for funded graduate students during the pandemic. Graduate Studies will continue to take a leadership role institutionally in identifying and developing needed administrative policies and practices. Graduate Studies has also been key in bolstering the graduate student experience at WPI over the past several years. Resources and opportunities provided by Graduate Studies will resume post-pandemic. These include awarding graduate student conference travel awards and PhD global research awards for research experiences abroad and organizing community building events for graduate students from underrepresented groups, female graduate students, and graduate students who have received fellowships.

Critical to establishing and maintaining competitive research and professional programs is ensuring access to essential core and interdisciplinary research information and discovery tools. The Gordon Library's strong interdisciplinary collections of research information resources support WPI's agility and initiative in establishing and growing graduate programs. The library also provides consultations, workshops, and course-integrated support to graduate students, another major element of graduate support. All CPE online students are given full access to resources such as the Gordon Library and other research materials, including online journals, serials, business periodicals, and student and faculty research. Likewise, CPE online students can visit the campus at any time and have full access to the Gordon Library and all other learning resources available on campus, including face-to-face visits with faculty.

Assuring Academic Quality

New programs, graduate and undergraduate, begin as initiatives of the faculty. A group of faculty members develop the academic structure of the program, work with department heads and deans and the Provost to identify resource needs, and work through the faculty governance system. When a department votes to create a new program, add a course, delete a course, or make changes to an existing degree program, the proposal is sent to the faculty Committee on Academic Policy (CAP), for undergraduate programs, or to the Committee on Graduate Studies and Research (CGSR), for graduate programs. The relevant committee discusses issues such as impact on other programs, adherence to university-wide policies, adequacy of the course description, and the impact on resource allocation. If the committee approves the proposal, it is then forwarded to the full faculty for review.

The departments advancing the proposals are expected to demonstrate the merits of the curricular change, discuss the impacts on other programs, and identify the resources needed to deliver the new course or program. When the faculty approves a change to an existing program, the WPI practice is to make the change binding on the first set of students that enters under the new description in the next published catalog. When courses are eliminated, the department provides an independent study for the deleted course or identifies an equivalent course. The Office of Academic Advising and the Registrar's Office work with the faculty to ensure that all course and programmatic changes are reflected in academic advising materials, such as program tracking sheets and the electronic degree audit.

Examples of new programs introduced over the last few years are master's programs in Business Analytics, Supply Chain Management, Innovation with User Experience, Applied Physics, Neuroscience, Aerospace, Science, and Technology for Innovation in Global Development; a Professional Master of Science in Chemical Engineering; and doctoral programs in Applied Physics, Aerospace Engineering, and Computational Media. When there is a substantive change, such as with the anticipated addition of the Master of Fine Arts in Interactive Media and Game Design, review and approval from NECHE is sought.

Graduate programs are eliminated or absorbed when enrollments or academic fields evolve. Any program elimination or change to program requirements is reviewed by CAP or CGSR and requires a vote of the full faculty. Appropriate arrangements are made for any impacted students, including a path to degree completion. For example, the interdisciplinary master's programs in Impact Engineering and Manufacturing Engineering Management were phased out in 2017. The evaluation process to determine potential for success in enrollment and career outcomes before a new program is created, evaluation of existing programs, and the processes in place for sunseting obsolete programs are areas of future focus. At the graduate level, Graduate Studies will be working with the Committee on Graduate Study and Research and the deans of each school to develop a more systematic approach to this process, with established timelines for regular review and assessment of graduate programs.

Applicants whose native language is not English, or who do not have two continuous years of full-time study in a country whose official language is English, are required to submit a valid TOEFL or IELTS test score. The COVID-19 pandemic has made it impossible for some student to access TOEFL or IELTS test centers or online tests. If a student is a strong applicant and cannot provide a test score, WPI has arranged for a SPEAK test to be administered by WPI's International Student Life Office.

Transfer Credit

At the undergraduate level, WPI will grant appropriate transfer credit from any accredited two-year or four-year institution. The policy and processes for transfer credit are articulated in the undergraduate and graduate catalogs and on the transfer website. Requests for transfer credit are processed by the Admissions Office; final decisions regarding transfer credit are made by faculty in the appropriate academic department. Generally, college-level courses with a grade of B or better in chemistry, calculus, calculus-based physics and engineering science, humanities and arts, and the social sciences will transfer. Examples of courses that will not transfer are pre-calculus or non-calculus-based physics or engineering science. WPI has articulation agreements with Quinsigamond Community College and Cape Cod Community College in Massachusetts. All transfer students are expected to meet the institution, project, and department-specific learning outcomes. Graduate students may transfer up to one third of the credit requirements of a graduate degree at their department's discretion.

Integrity in the Award of Academic Credit

Credit awards are consistent with Commission policy and the course content of all academic programs is appropriate and relevant to the field of study. These credits are reflected on the official transcript issued by the Registrar. Grading systems are outlined in the undergraduate and graduate catalogs. WPI maintains oversight for all academic elements of a degree program regardless of contractual obligations with third parties, dual enrollment, or joint degrees. Course content, institutional credit, admission, registration, evaluation, and awarding and recording of credit: all these elements are maintained within the academic and administrative departments responsible for individual programs or for program enrollment and registration; all are consistent with Commission policies.

WPI does not use the standard credit hour or seat time as a measure of student learning. The following is the standard expectation stated in the Undergraduate Catalog for courses and projects: *“Course Credit: Unless otherwise indicated, WPI courses usually carry credit of 1/3 unit. This level of activity suggests at least 15-17 hours of work per week, including work outside the classroom, as well as scheduled class and laboratory time. The usual workload per term is 1 unit.”* The standard definition of a credit hour translates to the following statement: being a full-time student is a full-time job. A student enrolled in five 3-credit courses in a traditional semester system is expected to spend 15 hours in class and 30 hours outside of class, for a total of 45 hours per week. At WPI, students are expected to average 12 hours in class and 36 outside of class for a total of 48 hours per week.

WPI's graduate programs use the standard semester schedule and the standard measure for credit. A 3-credit graduate course meets three hours each week and expects an average of six hours per week outside of class.

At the time of the 2011 self-study, the only source of data regarding student time-on-task was a single question on the standard student course report, which about 1/3 of students interpreted to mean only time outside of scheduled class/lab/conference meetings, and so the data obtained underestimated the actual time spent on classwork. Starting in 2013, the survey split the question regarding time-on task. The first question asked for a report of time spent in lecture, conference, and lab. The second question asked specifically about time spent outside of scheduled meetings. In 2019, when WPI transitioned to online course evaluations, the question about time *outside* of class was returned, but rewritten to emphasize that the question refers to time outside of scheduled class periods. Time spent in class can be determined based on course schedules. These data are collected at the end of each course and the results summarized and shared with the instructor, department head, and dean of the school. Each department sees how their data compare with other departments and each department head sees how each of their faculty compare on this question. When the average time-on-task is unusually low (or high) for a particular course or instructor, the department head is asked to meet with the faculty member to discuss the implications and recommend changes in the course if appropriate. In addition, when an experimental course is evaluated, CAO reviews the reported time-on-task before approving adding the course to the catalog.

There are patterns in the data that require further analysis. First, there is a stable pattern of decreased reported time-on task in B-term and D-term over the past three years. (The average response is highest for A-term, decreased in B-term, increases again for C-term, and then decreases to its lowest value in D-term.) There is a similar pattern in student satisfaction across the four terms each year. This pattern could be an indicator of student fatigue. The data also show that students spend, on average, less time outside of class for introductory courses while reported time increases as the students move through the curriculum into more advanced courses in their major. There is a similar question on the surveys completed by students at the completion of the IQP and the MQP and that data has shown that students spend, on average, 20 hours per week on project work on multi-term projects and more than 40 hours per week on single-term projects. Both indicate that student time-on-task exceeds the minimum associated with the standard definition of semester credits.

WPI also uses data from national surveys regarding time-on-task. For example, all engineering programs at WPI use the Engineering Exit Survey (administered by EBI/Skyfactor). The data show that WPI students consistently spend significantly more time on their studies outside of class each week than students at our AITU peer institutions. For example, in the most recent survey, 54% of WPI students reported studying at least 21 hours per week outside of class while only 31% of students at peer institutions reported working that many hours. WPI also participates in the National Survey of Student Engagement (NSSE) and our 2016 NSSE data shows the same favorable comparison between WPI and peers: 51% of WPI students reported spending at least 21 hours in academic work outside of class, compared with 24% for our comparison group, the New England Private Colleges.

Academic standing requirements and appeal processes are detailed in the undergraduate and graduate catalogs. Full-time undergraduate students must earn credit for at least four of their six courses each semester to remain in good academic standing. Students failing to complete the requisite courses are placed on academic warning and have one semester to improve. If a student does not successfully earn credit in four of six credits in the following semester, the student is placed on academic probation. A student who again does not complete the requisite courses will then be suspended for a minimum of one semester. This decision may be appealed through a formal appeals process managed by CAO. Graduate students must maintain a 3.0 GPA to be in good academic standing, a process administered centrally by the WPI Registrar. Students falling below a 3.0 GPA are placed on academic warning and have one semester to improve above a 3.0 GPA or they will be placed on academic probation. Failure to improve a GPA after one semester while on academic probation leads to academic dismissal, which may be appealed through an appeals process managed by CGSR. Additionally, if a graduate student fails to meet specified degree milestones, they may be dismissed by the departmental graduate committee.

Continuing its work over the last decade, Corporate and Professional Education (CPE), now housed within academic affairs, led the university's efforts to develop and deliver online programs with exceptional quality equivalent to the in-person experience, including the creation of a faculty development program for online teaching and the development of best practices for online courses. WPI online programs mirror WPI's campus-based coursework in quality, in depth and breadth, in scholarship, in teaching quality (with WPI faculty as course instructors), and in offering a project-based, team-learning environment.

Student identity is confirmed through a unique username and password assigned to each individual student and through an additional layer of multi-factor authentication. Additionally, courses delivered online that offer live exams use online proctoring services to authenticate student identity.

Matters involving academic integrity are administered through the Dean of Students Office, which manages academic honesty policies and resolution processes, provides training, and advises faculty and students. This includes workshops during both undergraduate and graduate student orientations and New Faculty Orientation, and an annual report posted for public consumption. These workshops discuss the associated process for resolution, as well as the implications for responsible findings. WPI faculty take academic integrity seriously; faculty members are encouraged to articulate their expectation for what type of collaborative work is permitted in their course on their syllabi. As an example of faculty focus on this issue, of 111 suspected academic dishonesty cases during the 2019-20 academic year, 87 students were found to be responsible for cheating, plagiarism, fabrication, or facilitation through the resolution processes.

PROJECTIONS AND ASPIRATIONS FOR THE FUTURE

As part of WPI's ongoing efforts to double down on the distinctive project-based undergraduate program and its growing emphasis on the graduate experience, WPI will focus on the following efforts:

- Building on initiatives from the last strategic plan, WPI continues its focus on initiatives that enable WPI students to elevate their impact on society with emphasis on refining its project-based approach to ensure its distinctive advantage and alignment with the needs of learners.
- WPI will continue to prioritize institutional resource allocation to expand global project opportunities for undergraduate students with the goal of enhancing its efforts to meet global needs at the intersection of technology and society.
- As WPI strives to nimbly meet the demands of a rapidly evolving world filled with interdisciplinary problems, it will further refine its approach to the formulation, creation, review, and sunset of programs.
- WPI will further define or refine graduate level department or program specific learning outcomes.
- As part of the WPI 2015 strategic plan's commitment to improve the graduate student experience, there remains ongoing emphasis on creating more research and professional development opportunities for graduate students.
- One of the key lessons WPI learned during the pandemic was that it has the capability to deliver more educational offerings using online and hybrid formats. As outlined in WPI's strategic plan, WPI will seek to focus on new opportunities for responsive graduate offerings at WPI both in the form of new competitive degree programs and new offerings that are more responsive to just-in-time education needs, such as badges and micro-credentials.
- The pandemic also led faculty to consider different approaches to assess student learning, and some of these approaches may become more common in WPI courses going forward.

DATA FIRST FORMS

STANDARD 4: THE ACADEMIC PROGRAM

Summary - Degree-Seeking Enrollment and Degrees

Fall Enrollment* by location and modality, as of Census Date

*Fall 2020 Data

Degree Level/ Location & Modality	Associate's	Bachelor's	Master's	Clinical doctorates	Professional doctorates	M.D., J.D., DDS	Ph.D.	Total Degree-Seeking
Main Campus FT		4,661	373				333	5,367
Main Campus PT		143	625				137	905
Other Principal Campus FT								0
Other Principal Campus PT								0
Branch campuses FT								0
Branch campuses PT								0
Other Locations FT								0
Other Locations PT								0
Overseas Locations FT								0
Overseas Locations PT								0
Distance education FT		0	11				0	11
Distance education PT		0	361				5	366
Correspondence FT								0
Correspondence PT								0
Low-Residency FT								0
Low-Residency PT								0
Unduplicated Headcount Total	0	4,804	1,370	0	0	0	475	6,649
Total FTE		4,717	761				387	5,865
Enter FTE definition:		IPEDS UG FTE=FT+(0.392 857)*PT	IPEDS GR FTE=FT+(0.382 059)*PT				IPEDS GR FTE=FT+(0.382 059)*PT	
Degrees Awarded, Most Recent Year		1,043	674				54	1,771

Please enter any explanatory notes in the box below

Total = Fall 2020 snapshot total (Bachelor's, Master's, PhD). Distance education totals reported separately.

STANDARD 4: THE ACADEMIC PROGRAM

Summary - Non-degree seeking Enrollment and Awards

Fall Enrollment* by location and modality, as of Census Date

Degree Level/ Location & Modality	Title IV-Eligible Certificates: Students Seeking Certificates	Non-Matriculated Students	Visiting Students	Total Non-Degree-Seeking	Total degree-seeking (from previous page)	Grand total
Main Campus FT		51		51	5,367	5,418
Main Campus PT		220		220	905	1,125
Other Principal Campus FT				0		0
Other Principal Campus PT				0		0
Branch campuses FT				0		0
Branch campuses PT				0		0
Other Locations FT				0		0
Other Locations PT				0		0
Overseas Locations FT				0		0
Overseas Locations FT				0		0
Distance education FT				0	11	11
Distance education PT				0	366	366
Correspondence FT				0		0
Correspondence PT				0		0
Low-Residency FT				0		0
Low-Residency PT				0		0
Unduplicated Headcount Total	0	271	0	271	6,649	6,920
Total FTE		136		136	5,865	6,001
Enter FTE definition:						
Certificates Awarded, Most Recent Year						

Please enter any explanatory notes in the box below

Fall 2020 census data: Non-degree (180: 48 - FT, 132 - PT) + Certificate (91: 3 - FT, 88 - PT) = 271

STANDARD 4: THE ACADEMIC PROGRAM

Headcount by UNDERGRADUATE Major

For Fall Term, as of Census Date

	Number of credits*	3 Years Prior (Fall 2017)	2 Years Prior (Fall 2018)	1 Year Prior (Fall 2019)	Current Year (Fall 2020)	Next Year Forward (goal) (Fall 2021)
Baccalaureate						
Actuarial Mathematics	135	41	39	50	44	44
Aerospace Engineering	135	241	254	262	303	303
Applied Physics	135	4	6	8	16	16
Architectural Engineering	135	63	61	68	80	80
Biochemistry	135	64	71	80	94	94
Bioinformatics & Computational Bio	135	21	26	27	34	34
Biology and Biotechnology	135	140	156	154	155	155
Biomedical Engineering	135	410	440	483	481	481
Business	135	27	26	23	30	30
Chemical Engineering	135	335	324	300	275	275
Chemistry	135	30	29	38	32	32
Civil Engineering	135	173	169	174	159	159
Computer Science	135	643	699	801	849	849
Data Science	135				51	51
Economic Science	135	4	3	3	5	5
Electrical & Computer Eng.	135	337	348	339	326	326
Environ & Sustain Studies	135	3	4	7	11	11
Environmental Engineering	135	67	63	46	65	65
Humanities and Arts	135	3	1		1	1
Industrial Engineering	135	99	94	92	81	81
Interactive Media & Game Dev	135	104	106	98	100	100
Interdisciplinary	135			2	4	4
International & Global Studies	135				1	1
Liberal Arts & Engineering	135	4	4	1	1	1
Management Engineering	135	67	69	68	49	49
Management Information Systems	135	17	19	23	16	16
Mathematical Sciences	135	68	83	87	96	96
Mechanical Engineering	135	817	858	828	814	814
Physics	135	60	64	66	66	66
Professional Writing	135		2	3	3	3
Psychological Science	135	4	13	10	13	13
Robotics Engineering	135	347	363	374	371	371
Society, Technology & Policy	135	3	4	4	9	9
Undeclared		141	173	136	169	169
Total		4,337	4,571	4,655	4,804	4,804
Total Undergraduate		4,337	4,571	4,655	4,804	4,804

Please enter any explanatory notes in the box below

WPI does not directly admit students to specific undergraduate programs, so the number of students enrolled in any specific major may vary from year to year. The fall 2021 goal is reflective of enrollments in fall 2020.

STANDARD 4: THE ACADEMIC PROGRAM

Headcount by GRADUATE Major

For Fall Term, as of Census Date

Master's	Number of credits*	3 Years Prior (Fall 2017)	2 Years Prior (Fall 2018)	1 Year Prior (Fall 2019)	Current Year (Fall 2020)	Next Year Forward (goal) (Fall 2021)
	Aerospace Engineering	30	26	26	28	23
Applied Mathematics	30	6	8	5	3	4
Applied Statistics	30	28	13	19	21	20
Architectural Engineering	30		1			
Biochemistry	30	1	3	3	3	3
Bioinformatics & Computational Bio	33	6	7	6	6	6
Biology and Biotechnology	30	6	4	4	5	5
Biomedical Engineering	MS 30 ME 33	20	26	27	23	25
Bioscience (Admin) Management	30	11	27	27	61	61
Biotechnology	30	19	40	48	44	46
Business Analytics	33				11	11
Chemical Engineering	30	9	16	13	16	15
Chemistry	30	2	4	3	1	2
Civil Engineering	30	17	17	9	11	10
Computer Science	33	96	80	83	83	83
Construction Project Mgmt.	30	5	10	12	7	10
Data Science	33	105	111	129	99	114
Electrical & Computer Eng.	30	125	114	127	110	119
Environmental Engineering	30	24	24	16	18	17
Financial Mathematics	30	29	14	12	9	11
Fire Protection Engineering	30	85	67	48	48	48
Industrial Mathematics	30	2	2			
Information Technology	33	97	76	57	29	29
Innovation with UX	36			12	12	12
Interactive Media & Game Dev.	30	16	25	32	22	27
Interdisciplinary	at least 30		1	3	1	2
Learning Sciences & Tech	33	2	1	2	5	4
Management	30	26	14	13	33	23
Manufacturing Eng Mgmt.	30	1				
Manufacturing Engineering	30	27	26	16	15	16
Marketing and Innovation	36	56	42	22	8	6
Master of Business Admin.	48	141	130	119	95	90
Master of Mathematics for Educ.	30	19	25	28	25	27
Materials Process Eng	30	5	7	7	8	8
Materials Science and Eng	30	39	38	37	28	33
Mathematics for Educators	30	1		2	2	2
Mechanical Engineering	30	131	153	125	123	124
Neuroscience	31				3	3
Operations Analytics & Mgt.	36	60	49	25	18	20
Physics	30	5	4	5	3	4
Physics for Educators	30	2	3	2	2	2
Power Systems Engineering	30	40	42	55	60	58

Power Systems Management	30	16	8	21	17	19
Robotics Engineering	30	137	150	142	146	144
Sci & Tech for Global Dev	30				3	3
Supply Chain Management	36	1	8	12	7	10
System Dynamics	30	2	2	4	1	1
System Dynamics/Innovation Mgmt.	33	2			1	1
Systems Engineering	30	147	133	95	94	95
Systems Engineering Leadership	30				7	7
Total		1,595	1,551	1,455	1,370	1,401

Doctorate

Aerospace Engineering	60 / 90	9	9	8	9	9
Biochemistry	60 / 90	9	7	8	5	7
Bioinformatics & Computational Bio	60 / 90	7	8	9	8	9
Biology and Biotechnology	60 / 90	16	19	17	17	17
Biomedical Engineering	60 / 90	24	23	26	28	27
Business Administration	60 / 90	13	19	20	23	22
Chemical Engineering	60 / 90	17	18	21	23	22
Chemistry	60 / 90	13	14	11	14	13
Civil Engineering	60 / 90	12	13	17	16	17
Computational Media	60 / 90				3	3
Computer Science	60 / 90	39	39	52	50	51
Data Science	60 / 90	30	36	46	50	48
Electrical & Computer Eng.	60 / 90	43	40	39	39	39
Fire Protection Engineering	60 / 90	12	5	7	8	8
Interdisciplinary	60 / 90	4	6	4	4	4
Learning Sciences & Tech	60 / 90	14	9	10	5	8
Manufacturing Engineering	60 / 90	9	7	7	5	6
Materials Science and Eng.	60 / 90	37	40	38	40	39
Mathematical Sciences	60 / 90	26	28	26	18	22
Mechanical Engineering	60 / 90	30	27	32	28	30
Physics	60 / 90	18	20	19	20	20
Robotics Engineering	60 / 90	31	36	40	39	40
Social Science	60 / 90	1	2	5	4	5
Statistics	60 / 90			3	9	9
System Dynamics	60 / 90	1	1	2	1	2
Systems Engineering	60 / 90	4	7	6	8	7
UMMS/WPI Joint PhD	90		1	1	1	1
Total		419	434	474	475	479

Post-Bachelor's Certificate

Civil Engineering	12	2	1			
Computer Science	12-15	4	14	10	5	8
Construction Project Mgmt.	12	13	7	3	3	3
Customized Certificate	at least 12		2			
Data Science	12	5		2	1	2
Electrical & Computer Eng.	12	2			4	4
Financial Technology	12				1	1
Fire Protection Engineering	12	5	4	4	5	5
Information Technology	12	1	1	2	2	2
Life Science Management	12			11	3	7
Management/Business	12	5	8	10	10	10

Management of Technology	12	2				
Manufacturing Engineering	12	5	18	10	1	6
Mech Eng for Tech Leaders	18	4	1		1	1
Power Systems Engineering	12	3	11	9	11	10
Power Systems Management	18	19	8	15	12	14
Robotics Engineering	15		1	9	24	17
Robotics Engineering Mgmt.	12		1			
Supply Chain Essentials	12				1	1
System Dynamics	15	3	1	3	4	4
Systems Engineering	18	2	21	19	2	11
Systems Thinking	12	2	3	1	1	1
Total		77	102	108	91	103
Total Graduate		2,091	2,087	2,037	1,936	1,983

Please enter any explanatory notes in the box below

Goals reflect enrollment trends across programs.

STANDARD FIVE: STUDENTS

DESCRIPTION AND APPRAISAL

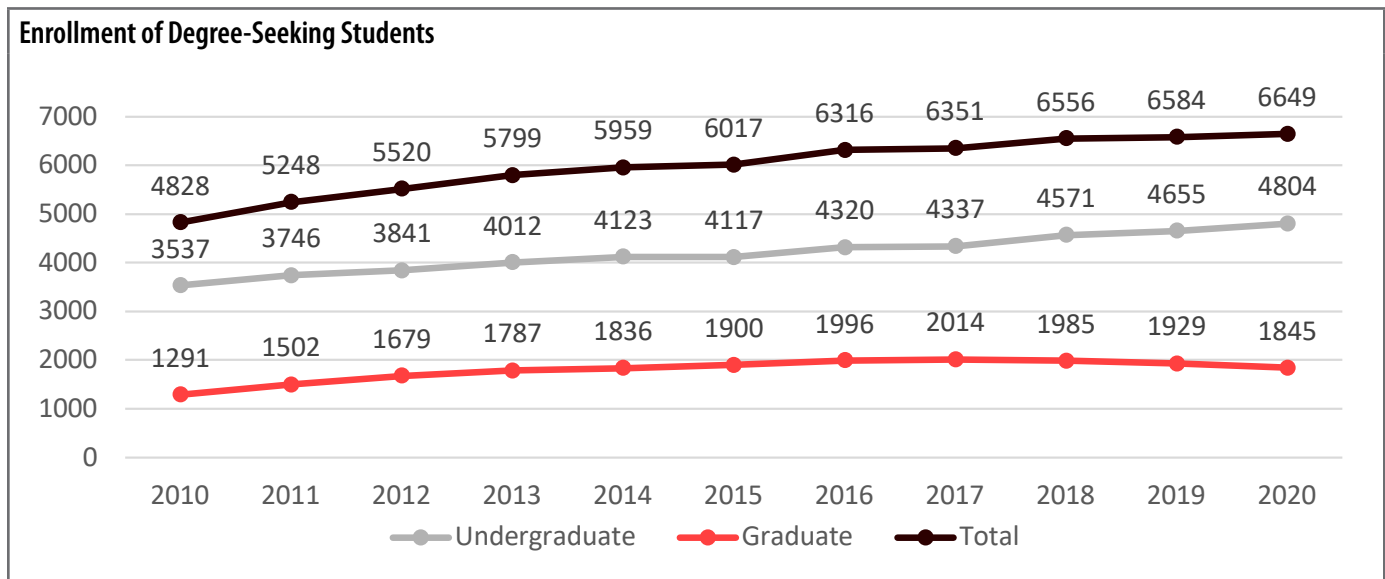
WPI is a selective STEM institution offering a hands-on, project-based curriculum. WPI offers bachelor's, master's, and PhD programs, with a total enrollment of 6,649 degree-seeking students in fall 2020. The undergraduate experience is aligned with the WPI Plan, an innovative curriculum of project requirements, no failing grades, and quarterly seven-week academic terms (see Standard Four).

The responsibility for student matriculation falls under different divisions at WPI; undergraduate admissions, recruitment, and enrollment falls under Undergraduate Enrollment, while graduate admissions, recruitment, and enrollment falls within the division of Academic Affairs.

Admissions

The undergraduate student body is approximately 40% women, 13% underrepresented minority students, and 8% international students, with these students hailing from 46 states and 57 countries. The most popular majors are Computer Science and Mechanical Engineering. Domestic applicants come from across the U.S., with a higher fraction coming from the Northeast; the top sending countries are China, India, and Vietnam. WPI students are high achievers, having selected challenging courses in high school. The average high school GPA was 3.8 and more than half of enrolling students were ranked in the top decile of their graduating class (if the high school reported class rank).

Total enrollment at WPI has stabilized after a period of steady growth. Enrollment of degree-seeking students has grown 38% since 2010 with most of that growth occurring between 2010 and 2015. Enrollment has grown 6% since 2016. To better enable appropriate infrastructural supports to accommodate growth, including housing and support services, planned enrollment growth is 25-40 students per year in the undergraduate first-year class. As shown in the Data First Forms, WPI has exceeded this goal in all years since 2016. This growth is important as it supports WPI's larger goals of diversifying the student population and planned expansion of campus resources and reputation, and it solidifies WPI as a mid-size institution.



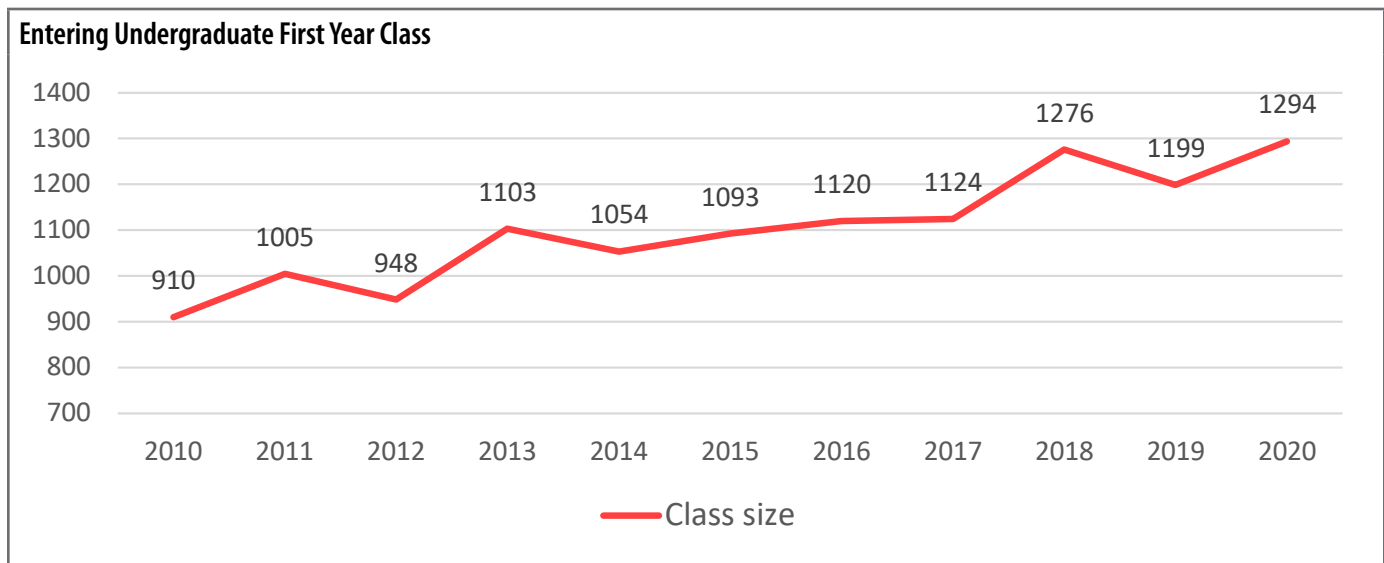
WPI experienced a rise in undergraduate applications (69%) over the past decade, which allowed for increased selectivity and enrollment growth while maintaining the quality of the pool. A recent decline in yield on admission offers in the last two years (the 2020 yield was 20% compared to 23% in 2019) has necessitated WPI examining its pricing in detail to arrive at a net price that makes WPI more accessible while supporting institutional enrollment and revenue goals. One change to offset declining yield was to offer a binding Early Decision (ED) enrollment option starting with the class of 2025. Complementing the existing Early Action and Regular Decision options, the ED option was successful, with 12% of the class of 2025 students matriculating in this manner. As at other institutions, melt at WPI has slowly grown over the last decade; WPI plans for an annual melt of between 7.5% and 9%.

Master's and PhD Graduate Admissions Applications

	Applications	Accepted	Acceptance Rate	Confirmed	Yield Rate
2020-21	3573	2094	58.6%	573	27.4%
2019-20	3676	2095	57.0%	656	31.3%
2018-19	4043	2141	53.0%	650	30.4%
2017-18	4283	2112	49.3%	701	33.2%

WPI graduate enrollment has experienced a decline since 2015, though applications to PhD programs have increased 22.5% since 2017-18. This shift in enrollment is primarily due to declining international student enrollments in the United States. However, to ensure that WPI remains well insulated from these potential declines it is exploring differentiated pricing strategies and alumni incentive programs (both of which were piloted with early positive results); adjustments to existing programs to make them more accessible; creation of new, market-supported academic programs; and partnerships with online program management companies to ensure a strong applicant pool. As WPI continues to expand and grow its research activities, it is expected that interest in WPI PhD programs will continue to increase. Graduate Admissions and Corporate and Professional Education have been working closely with graduate programs to identify their graduate recruitment goals and developing and implementing recruitment strategies to work towards meeting these goals.

Undergraduate first-year class size has varied, reflecting growing price sensitivity, increased competition in the marketplace, and (in 2020) WPI's institutional response to the coronavirus. Growth of the first-year class over the 10-year period was 42%, with an average growth each year of 4.7%. In fall 2018, WPI experienced an increase in first-year enrollment because of augmented merit awards, which caused a surge in yield on offers—from 22% to 29%. The following year (fall 2019) WPI returned to previous merit awarding levels only to find that level of discount was not competitive in the swiftly changing market, which led to yield on offers returning to 22%. The fall 2020 first-year headcount increase was the result of several hundred additional admission offers beyond what was planned, as the COVID-19 pandemic arrived just before Admissions released the final round of Admissions decisions. In this way, growth was intentional; tuition revenue from a larger class offset an anticipated budget shortfall due to loss of room and board revenue in D-term as the university closed campus operations.



In March 2021 nearby Becker College announced it would close. WPI offered pathways from Becker's Interactive Media and Game programs to WPI's BA in Interactive Media and Game Development program. Students with a 3.0 were eligible for direct admission and students outside this pathway could apply through transfer admission, resulting in the enrollment of a few dozen Becker students.

Increased price sensitivity is evident in the Admitted Student Questionnaire (ASQ), which has been administered to admitted (both enrolling and non-enrolling) students annually since 2016. The ASQ results indicate that WPI is a high-cost option when compared to other schools to which the student applied. For families that prioritize cost in their decision, WPI can be out of reach. For families that consider the higher-touch, private university experience over cost, WPI continues to be a top destination. Still, WPI is watching the competitive landscape carefully: data from the National Student Clearinghouse shows that in 2020 half of WPI's non-enrolling accepted students enrolled in a private competitor and half enrolled in a lower cost public university; in 2010 only a third enrolled in a public institution. Among WPI's efforts to remove financial barriers is a new program called the Global Stipend. Starting with the Class of 2022, WPI has provided up to \$5,000 in support of a signature program, the IQP (See Standard 4). Data collected from students suggested that they were choosing project sites based on cost rather than based on academic and experiential criteria. This program removed this financial barrier for students, allowing them to more fully participate in the Global Projects Program.

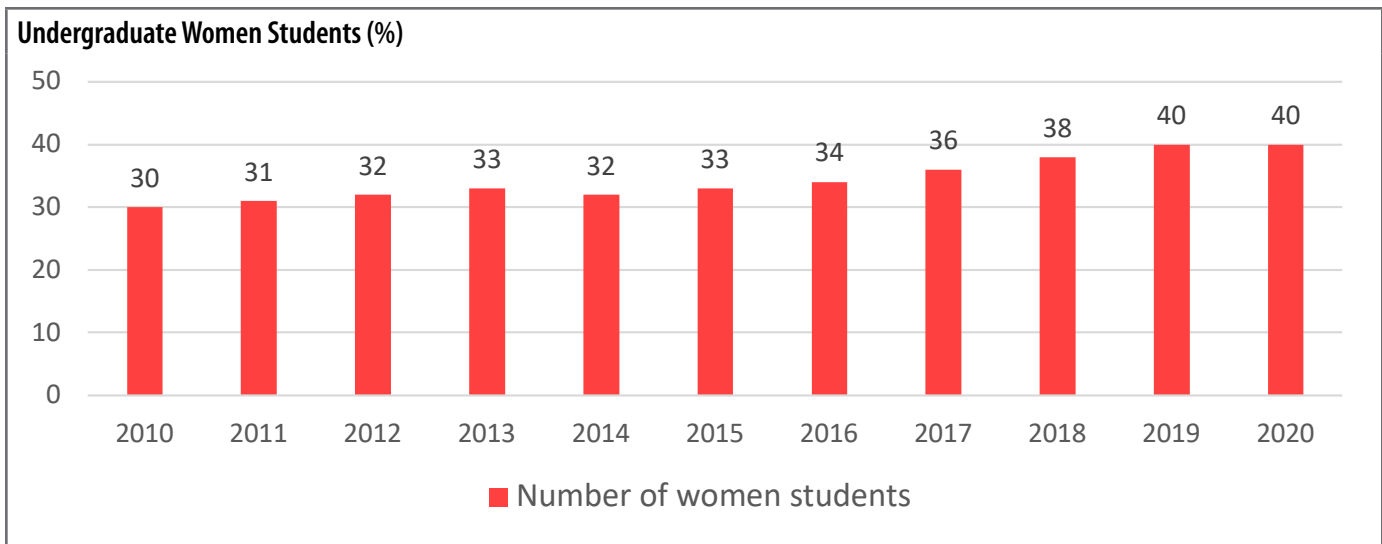
WPI was the first STEM-focused, top-100 national university to eliminate the SAT or ACT as a requirement for admission and has continued to be a leader in the test-optional movement. In 2017, to broaden access, WPI removed the requirement of an alternate submission (Flex Path), and in 2018 the university removed test scores from consideration for merit scholarships. As anticipated, WPI saw increased enrollments among women and students of color. In 2007 women comprised 25.9% of undergraduate enrollment; in 2020, that figure was 40%. In 2007 underrepresented minority students comprised 7.6% of undergraduate enrollment, compared to 13% in 2020. In 2016 the pilot test-optional policy became permanent, as the faculty reviewed data that showed no statistically significant difference in the six-year graduation rate (87% for submitters versus 85% for non-submitters). In March 2021, the faculty supported a motion for WPI to become test-blind in the review of undergraduate admissions applications. This change will be monitored in an eight-year pilot, starting with the class entering in fall 2022. This decision further supports equity and access in the admissions process.

The undergraduate recruitment pipeline begins with a partnership with the Pre-Collegiate Outreach Programs (POP). Created in 2016 within the Undergraduate Enrollment Division, POP strategically aligns all WPI's pre-collegiate outreach efforts with the mission of increasing interest of young people, particularly women, in STEM. POP partners with a variety of local and national organizations, including Project Lead the Way (PLTW), Girls Who Code (GWC), and the Girl Scouts of Central and Western Massachusetts, to strengthen the STEM pipeline, with a focus on traditionally excluded identities (girls and students of color). In addition, WPI's Robotics Resource Center (RRC) supports programming to engage youth in STEM activities through robotics tournaments and expositions. Last, WPI's STEM Education Center supports teachers and administrators with training and professional development, directly establishing dedicated resources that reinforce WPI's commitment to STEM education.

Investments in pipeline programs within POP have resulted in increased enrollments in these summer programs, including Frontiers, a summer pre-college program, Women's Research and Mentorship Program (WRAMP), Girls Who Code chapter, and the Massachusetts Life Sciences Center Apprenticeship Program. The Engineering Ambassadors program is a unique partnership between higher education and top companies that taps undergraduates to promote STEM to elementary and middle school audiences. Since 2012, TouchTomorrow, a family-friendly festival, has brought STEM to life for thousands of visitors to the WPI campus each June. This ecosystem of outreach builds an awareness of and an affinity for STEM, which translates into increased interest in WPI.

Diversity in pipeline programs has increased through strategies to better support underserved students. One strategy has been to offer pipeline program scholarships to underserved youth. WPI has invested \$477,000 in scholarships to youth since 2017, resulting in a significant increase in summer program diversity. Only 8% of attendees identified as students of color in 2016, compared with 17% in 2019.

Growth in enrollment of women students has continued. Women represent 39.7% of the undergraduate population, up from 33.7% in 2016. To increase the number of women students, the Undergraduate Admissions team has employed many strategies including overnight programs and special events for women students as well as targeted communications and programs geared to all-girls high schools. Perhaps the most impactful change has been to WPI's awarding strategy, which has provided incentivized merit awards and a higher percentage of need met for women applicants.



The gains in enrolling underrepresented minority students (URM) have been more modest. The number of underrepresented minority students has grown 82% since 2010, and the percentage of URM in the undergraduate population has grown from 5% (2010) to 13% (2020). Overall URM retention from first to second year (98% in 2020-21) and the four-year graduation rate of URM students (75%) remain steady or improving over the last four years.

In 2016 WPI joined the American Talent Initiative (ATI), a coordinated, national effort to increase the number of low-SES students graduating from leading colleges and universities. WPI committed resources to support first-generation students, including the Innovations residential community where first-generation students live together and engage with faculty and staff Innovation Fellows. A related effort was the formulation of the Great Minds Scholarship for the class entering in fall 2019. As part of WPI's commitment to the Worcester community, this scholarship program met the full demonstrated need for 10 first-generation Pell-eligible students from the Worcester Public Schools. This program was strengthened in fall 2020 with the CoPASS grant, which provided a housing stipend to retain these students under the residential umbrella, broadening the support network and resources.

Diversity, equity, and inclusion is a cornerstone of recruitment and admissions and is an important priority as expressed in the current strategic plan priority focused on increasing student access. In 2020 the Undergraduate Admissions Race and Equity working group was formed to coordinate efforts to broaden access for underserved populations by providing training to staff and tour guides, facilitating a monthly departmental read-watch-listen forum, advocating for the elimination of the application fee, establishing an enrollment fee waiver for Pell-eligible students, and expanding merit scholarships for community college transfer students. Presidential Fellowships, administered by Graduate Studies, are awarded to admitted PhD students from underrepresented groups.

Undergraduate recruitment planning is shared between the Undergraduate Admissions office and the Marketing Communications office. Recruitment plans are developed annually, with targeted messaging by identity—campaigns for women students, URM students, and international students reflect institutional priorities. WPI partners with third-party platforms to increase visibility. Graduate Admissions recruitment for all in-person and online graduate students is centralized in the Graduate Studies Office; staff in Graduate Studies exhibit at regional, national, and international college fairs and conferences to connect with high-achieving STEM undergraduates and adult learners. For corporate graduate programs, the Graduate Studies team works with the Academic and Corporate Engagement team to recruit individual students through corporate sponsored employee programs. Recently, Graduate Admissions has partnered with two online program management companies and has increased digital advertising. Students who are not attending WPI in person are paired with a student success manager upon admission to ensure they have a direct point of contact for support.

WPI has made investments in marketing tools, including Salesforce Marketing Cloud, which allows for audience-based digital campaigns. This approach was matched by creative, unique print pieces that include augmented reality elements to engage the reader. A point of pride was winning the CASE Gold Admissions Excellence Award for Admissions Packages in January 2018.

Search name purchases have expanded as WPI looks to identify prospective students in emerging markets. WPI is fortunate to have a robust applicant pool (both in size and quality) and has a growing domestic footprint in areas that are projected to see declining numbers of high school graduates. Research suggests that demand for highly ranked universities and STEM institutions will insulate WPI from decreases in university enrollment.

Consistent with a national trend, WPI experienced a 44% decline in undergraduate first-year international applications, from 2,137 in 2018 to 1,186 in 2021, largely due to the pandemic. Despite the decline in the number of applicants, the number of enrollees in 2021 (80 students) remained consistent with 2018 (85 students). WPI's partnership with the Davis Foundation in 2017 provided additional funds to students attending United World College high school campuses across the globe. Upon becoming a partner institution, WPI more than tripled applications through the UWC international network of secondary schools (from 11 in 2016, to 50 in 2021). As overall undergraduate applications have increased steadily since our last self-study, international applications are making up a smaller percentage of the overall applicant pool. As a result, WPI remains well positioned to weather international undergraduate enrollment fluctuations.

WPI's Undergraduate Admissions Office engages in a holistic evaluation of applicants. Admissions professionals conduct a thorough review of application credentials, considering all facets of the application, including academic rigor of coursework in high school, grade performance, observations of school counselor and teachers regarding the student's readiness for a rigorous college program, and self-identified passions and interests within the context of a student's unique lived experiences. To guide the review of future applications, admissions evaluators consult with faculty and staff to learn about and affirm the characteristics of WPI students who are thriving in and out of the classroom.

Student readiness and success is a cornerstone of the undergraduate admissions committee discussions when evaluating applicants. To assist with the smooth integration into WPI, the Admissions staff works with the Office of Accessibility Services, Academy Advising, and Student Affairs to review individual cases of enrolling students who have unique social, emotional, or physical circumstances.

Graduate Admissions decision-making is mostly decentralized and is the responsibility of the individual academic departments, with admission criteria determined by each department. The Graduate Admissions staff manages all operational aspects of application review and admission communication, with decision letters and funding letters going out with the signature of the executive director.

Student Services and Co-Curricular Experiences

The Division of Student Affairs is guided by the core values of advocacy, citizenship, empowerment, inclusion, respect, and support. Student services staff across the university focus on creating and leveraging partnerships with students, parents, faculty, and staff, all of which are designed to enhance the comprehensive student experience. As such, staff have appropriate credentials (Bachelor's/Master's/PhD/EdD) and experience in their functional areas.

Over the last decade, as its student population has grown, WPI has invested in staffing as warranted to meet direct student needs. Areas where staff counts have grown include Physical Education and Athletics, Student Activities, Health Services, Counseling, Career Development, Academic Advising, Accessibility Services, and Multicultural Affairs. Staff roles (permanent and contract) continue to be added when data or workload situations warrant.

Between 2015 and 2020, the work of Student Affairs was guided by a division-wide strategic plan that emphasized six priorities: health and safety, increases in diversity education and programming, more welcoming environments for students of diverse backgrounds, increases in student resilience, student reflection, and an enhanced graduate student experience. Each department set goals annually in relation to these priorities and reported on success through an annual end-of-year report.

WPI uses the Enrolled Student Survey (ESS), administered most recently in 2019, to assess the student experience. These data were shared with academic departments, functional areas within Student Affairs, and the Student Government Association; each was encouraged to create a plan to address areas of concern. The most recent survey data indicates that students are satisfied, with 88% of students (also consistent for URM and international students) saying they are generally satisfied or very satisfied with their WPI experience. Consistent with past Noel Levitz student satisfaction surveys, administered bi-annually beginning in 2006, first-year students are more satisfied (93% generally or very satisfied) than seniors (81% generally or very satisfied). The Division of Student Affairs assessment committee plans to build and administer a survey for graduate students in the coming year. Several departments have also conducted Council for the Advancement of Standards (CAS) self-assessments over the last decade and an external review is planned for student conduct in fall 2021.

The Student Code of Conduct, which applies to all students, centers on the core constructs of WPI's campus identity: integrity, respect and civility, mature interpersonal relationships, positive interactions, and respect for the law and institutional policies. These constructs guide the WPI Code of Conduct, which is reviewed and updated annually, posted on the WPI website, and sent to all students via email each year. Hearing officers serve within the Residential Services Office, Student Activities Office, and the Dean of Students Office. Policies that govern students, including the academic integrity policy and records disclosure, are outlined in the Code of Conduct and on the policies page on the WPI website.

Over the past several years, a close partnership between the Director of Graduate Admissions and the Dean and Assistant Dean of Graduate Studies has provided comprehensive support for the graduate student population by working closely with the Graduate Student Government (GSG) to support and enhance the graduate student voice and involvement in on-campus committees (such as the selection of the student health insurance plan). While these efforts bolster confidence that graduate students are satisfied with their WPI experience, there is more work to be done involving graduate housing, the inclusion of graduate students in decision making, and student connections with faculty advisors.

Orientation Programs

WPI offers a comprehensive four-day New Student Orientation (NSO) program for undergraduates and transfer students. NSO is followed by the Insight program in which a faculty member, an upper-class student leader, and a residential advisor partner to support a group of 25 or so first-semester students. Graduate students have a less formalized orientation program, one that focuses on integration with student support services and each student's academic department. Orientation programs for both levels of students focus extensively on academic success services and other campus services that support student integration and satisfaction with their college experience.

Academic Advising and Accessibility

Over the past 10 years, the university has worked to build more robust student support services, including academic support and advising services. These services are integrated with Student Affairs through bi-weekly Academic and Student Affairs Partnership (ASAP) meetings, which discuss cross-divisional concerns affecting both Academic Affairs and Student Affairs.

Each undergraduate student is assigned a professional academic advisor in the Office of Academic Advising and a faculty advisor in their major. Faculty advisors assist students with course selection, academic planning, developing research and career interests, and graduate school preparation. Staff advisors serve as generalists in supporting students with course selection, identifying and choosing a major, transition to college, academic planning, and coaching. The university offers many academic support services that are extensively used and designed to directly support academic success. These include MASH (Math and Science Help), academic tutoring, and academic coaching. Over the past decade, the department has added four new positions, for a total of eight full-time professional staff.

Online and corporate education graduate students are each assigned a student success manager who serves as their primary contact to help them navigate WPI. The success managers assist online graduate learners with understanding registration and fees, financial aid applications, plans of study, and applying for graduation. In-person, online, and corporate education graduate students also work with an assigned faculty advisor.

The Office of Accessibility Services (OAS) helps students receive support that enhances their academic success and social experiences. Staff review documentation, implement appropriate and reasonable accommodations, and help students develop self-advocacy skills and build strategies for success regarding time-management and organizational skills. Also important, OAS collaborates with faculty and staff to promote awareness and provide guidance on accommodation-related matters. OAS has experienced significant student usage over the past five years, with the number of students registering with the office growing by 29%, proctored exams by 28%, parent inquiries by 26%, and requests for note takers due to student injury by 60%. In response to this growth, the department has added a Test Proctoring Manager and an Assistant Director.

As part of a multi-part grant from the Davis Foundation, WPI in 2019 created the SWEET (Supporting WPI through Effective and Equitable Teamwork) Center to directly support students as they endeavor to have effective team experiences and develop the skills needed to collaborate effectively in teams throughout their careers. This center has provided valuable support for students as they navigate the challenges of team dynamics and working together within WPI's project-based curriculum.

Residential and Dining Services

Residential Services annually houses approximately 2,300 students in 12 residential locations, though this number has increased in 2021-22 in order to house a large first-year class and because not all spaces have been re-densified following the pandemic. The staff also focuses on student growth through community building and social opportunities. The Resident Advisors (RAs) and the professional Community Directors (CDs) build self-advocacy and resiliency through one-on-one conversations and educationally focused conduct meetings. These interactions center on students' well-being and success, direct them to resources, and provide them opportunities to be heard. As WPI's student residential population has grown, the number of live-in professional CDs has increased only slightly. As a result, each CD is responsible for several residence halls and about 800 students, on average. While this ratio makes us lean, WPI is fortunate to have an excellent student RA staff who serve as the frontline support for students; each RA oversees approximately 60 students. Typical occupancy rate is approximately 96%.

WPI's student population growth has been coordinated with the addition of two residence halls (Faraday Hall in 2013 and Messenger Hall in 2018). As the undergraduate population has increased by 35% over the last 10 years, on-campus housing has grown by approximately the same amount. As a result, the undergraduate student population living in WPI-owned and fraternity and sorority-owned housing has remained relatively constant at 62%. As the student population continues to grow, WPI will need to enhance the residential housing infrastructure to support the undergraduate and graduate student on-campus living experience. WPI's graduate housing choices continues to be an issue of capacity, as WPI is limited in the number of properties that meet graduate students' price point.

Dining Services provides numerous dining options for WPI community members in Morgan Commons, the Campus Center, the Innovation Studio Café, the Library Cafe, the Goat's Head, the Innovation Kitchen, and Dunkin Donuts. These include options that support WPI's international students, vegan and vegetarian diners, those with allergies, and students seeking halal options. Residential students choose from a variety of meal plans, and students in spaces that do not require a meal plan often purchase a voluntary meal plan. Altogether, approximately 2,800 students purchase meal plans. Students may also meet with a dietician who can help them navigate their dietary needs through nutritional consultation. As part of a five-year dining renovation plan, WPI is investing in numerous facility and technological improvements.

Multicultural Affairs

The Office of Multicultural Affairs (OMA) serves as a home base for women-identified students, underrepresented minority students, students of all faith traditions, and members of the LGBTQIAP+ community. Signature programs include Connections, which helps acclimate approximately 60 students annually from traditionally underrepresented backgrounds to campus and academic life; the Louis Stokes Alliance for Minority Participation (LSAMP) scholars program, which prepares about 30 underrepresented students in the STEM field for graduate school; and the Great Minds/CoMPASS (GMC) scholars program, which focuses on Pell-eligible first-generation students from the Worcester public school system. The OASIS house and Collegiate Religious Center provide spaces for OMA-supported programs. To best support these growing populations, WPI has invested in two additional full-time staff roles since 2012 and added faculty fellows who receive a stipend to mentor and support students.

OMA closely tracks the retention of women and underrepresented groups, which has held steady or increased over the last decade. The retention rate for women students has been about 96% over the last decade, even as the first-year women student population has grown from 304 (2009) to 480 (2019). The retention rate for traditionally underrepresented student rose from 92% in 2009 to 98% in 2019. WPI has tracked first-generation students since the fall of 2016; their retention rate has risen from 91% to 98%. Graduation rates (six-year) for women and underrepresented students are 92% and 80%, respectively.

In 2017, WPI received a three-year grant from the Davis Educational Foundation to help students identify and address bias and engage in group work in ways that promote equity, skills that will prepare them for an increasingly diverse workforce. The grant work is designed to help students flourish in STEM organizations, where women and students of color are often underrepresented and where traditional stereotypes may still exist. This is the same grant that supported the aforementioned SWEET Center.

International Student Life

The Office of International Student Life provides on-going programs and essential services to support international students in their transition to U.S. society and academic culture. To help ensure student and institutional compliance with federal regulations, the office advises students on immigration and employment issues, while promoting their academic and professional growth. Dependent on the world or economic situation, the international student population has fluctuated over the past few years. Like many institutions, WPI is currently experiencing a decrease in both undergraduate and graduate international student enrollment. Over the past five years, undergraduate enrollment has ranged from 491 in 2015 to 392 in 2019; graduate enrollment has ranged from 819 in 2015 to 767 in 2019. WPI views this as cyclic and anticipate these numbers will stabilize upward over the next decade. Due to the increase in federal regulations and expectations for monitoring and tracking WPI students on campus and while on practical training, another full-time International Student Advisor joined the staff.

Student Health, Wellness, and Counseling

The CARE Team meets weekly to assist students who are exhibiting distressed or disruptive behaviors and to develop action/outreach plans to assist these students. The number of students on the CARE Team's radar has increased by 45% over the past five years. The teams' portfolio is expected to continue to increase as referrals arrive from faculty, staff, fellow students, parents, and friends through phone calls or the "I'm Concerned about a Student" portal.

Student usage of the services of the Student Development and Counseling Center has increased by at least 25% over the past five years. While many campuses struggle to meet student mental health needs, the SDCC has been able to meet the increasing demand for clinical services through day-of appointments, triage sessions, and hiring of contract staff. The Student Support Network Training program is a core support system established as a best practice and shared with and adopted by campuses throughout the United States. Other programs coordinated by the SDCC include virtual pre-orientation training for all students, encompassing alcohol and drug education, bystander intervention training, and Title IX and sexual assault intervention training. For support and adjudication surrounding sexual misconduct incidents, the university hired its first dedicated Title IX staff member in 2017. This staff member is responsible for all educational, prevention, and intervention efforts. To understand students' needs, the SDCC conducts the Healthy Minds Study (administered most recently in spring 2021) to monitor and benchmark the overall well-being of the student body. Overall student wellness remains an important priority, as articulated in the 2021 Strategic Plan.

Through telehealth appointments and daily in-person care at two on-campus clinic sites, the Health Services Team provides students with accessible, cost-effective, and quality healthcare for a wide range of medical issues. Health Services appointments have varied over the past five academic years, from 4,493 appointments in 2017 to 3,659 appointments in 2020. Most of these patients are seen by Nurse Practitioners (75%), followed by Registered Nurses or Licensed Practical Nurses (13%), and a Medical Doctor (12%). When experiencing high patient volume, WPI employs supplementary contract staff.

As a response to the COVID-19 pandemic, Health Services set up two distinct physical clinics: a respiratory clinic to see ill students and the well clinic to see non-COVID-19-related health concerns. Two new clinical staff members were hired to manage the increased case load of COVID-19 needs and provide weekend coverage and daily check-ins for students in isolation. Additionally, WPI created a public health team, with three new staff members, to manage faculty, staff, and student testing, positive cases, contact tracing, and isolation and quarantine operations.

Student Activities/Leadership Programs/Community Service/Fraternity and Sorority Life

The Student Activities Office (SAO) supports more than 230 student organizations on campus, including a vibrant fraternity and sorority community that comprises approximately 31% of the student population. Staff provide a wide range of campuswide programs and resources, including an extensive leadership development series featuring sequenced programs, luncheons, and lectures, and a broad community service program that generates approximately 31,000 hours of service to the Worcester community. SAO is instrumental in planning and leading Family Weekend, the Homecoming Cup Competition, New Student Orientation, and a trips program throughout the local (Massachusetts) area.

WPI offers a dynamic breath of organizations, all funded through the Undergraduate and Graduate Student Government Associations. Approximately 61% of all students (undergraduate and graduate) are involved in one or more student organizations. Some of WPI's newest organizations include academic focused groups (American Statistical Association, Optical Society of America, Women in Cyber Security); general interest groups (International Game Developers Association, Lego Club, Special Olympics College Club, First Gen Student Association); and sports-focused groups (Campus Recreation Advisory Council, Men's/Women's Club Basketball).

The presidents of the Undergraduate Student Government (SGA) and Graduate Student Government (GSG) meet and report to the Board of Trustees several times per year and are actively involved in institutional decision making through involvement on most university committees. Students also provide feedback regarding their student experience through regularly held office hours with President Leshin.

Career Development Center

The Career Development Center (CDC) offers extensive career services to undergraduate students, graduate students, and alumni to help them identify and achieve their career goals. This is one of the reasons The Princeton Review in 2019 ranked the office No. 5 nationally for “Best Career Services.” To help students secure full- and part-time employment, summer internship, and co-op positions, the CDC works closely with employers, over 400 of whom recruit on campus each year. Students also receive direct assistance with choosing a major, exploring career options, resume writing, and interview preparation. Services include an on-line search and recruiting platform (Handshake), course offerings like Discovering Majors and Careers, individual career advising, educational workshops, and career fairs. Alumni are encouraged to use CDC services as they navigate their career; accordingly, the CDC has intentionally realigned and grown to nine full-time staff members. Data from 2020 demonstrates that 90% of WPI bachelor’s degree recipients enter employment, graduate school, or the military within six months of graduation, earning average salaries of \$72,072. Master’s degree recipients (\$84,957 average salary) and PhD recipients (\$101,769 average salary) also have excellent results.

Physical Education, Recreation, and Athletics

The Physical Education, Recreation, and Athletic (PERA) Department supports academic and co-curricular life through undergraduate student involvement in required physical education (PE) courses, as well as recreational activities and varsity athletics. Students may choose from over 40 PE courses and over 50 recreational activities to explore wellness and sport. These opportunities include club sports (which have grown from 30 to 42 sports programs during the past decade and now involve more than 2,000 student participants) and intramural sports (with more than 1,400 student participants).

The highly successful WPI varsity athletics program competes at the NCAA Division III level, where the focus is on the student-athlete who succeeds in competition and in the classroom and the community. Demonstrating WPI’s commitment to academics, varsity student-athletes graduate at a higher rate than the general student population while maintaining higher overall academic performance.

Student Aid and Financial Literacy

Affordability is an important part of WPI’s institutional recruitment and retention strategy. The Office of Student Aid and Financial Literacy (OSA&FL) facilitates the student-centered awarding of approximately \$21 million in federal and institutional loans and approximately \$104 million in institutional grant dollars. Federal Work Study is also a part of student aid packages, in the amount of approximately \$335,000. These dollars have helped WPI manage the amount of debt our graduates have upon their departure, which is an important focus of the 2021-2026 strategic plan. For the class entering in fall 2019, the OSA&FL redesigned the financial aid award for clarity. The award letter now provides additional relevant information on retention and return on investment, including WPI’s federal loan default rate, its six-year graduation rate (89% versus 55% national average), and the percentage of first-year students returning for the sophomore year (95% versus 75% national average). The OSA&FL website has resources in English and Spanish to assist families in applying for and deciphering their aid. The office also offers a financial literacy program, called *Gomponomics*, which covers loan borrowing, student debt, personal finance, and fiscal management. The program includes such topics as budgeting, credit and credit cards, investments, managing finances, and loans and repayments. Each graduating student participates in exit counseling for federal and institutional loans. WPI’s loan default rates are very low (federal loan default rate is less than 1%, compared to the national average of 9.7%).

In 2020, Student Affairs partnered with Advancement to create the Emergency Assistance Fund (EAF) and has been successful in establishing several endowed funds over the last 10 years that directly support students. They focus on meeting basic needs (such as food insecurity), unexpected financial issues, and innovative student-focused initiatives. The Undergraduate and Graduate Student Governments have provided significant financial contributions to the EAF. Since its founding, the EAF has awarded 114 grants totaling over \$102,000.

PROJECTIONS AND ASPIRATIONS FOR THE FUTURE

As WPI continues the daily work to support and enhance the student experience, it acknowledges the challenges below and will adjust its efforts and staffing accordingly to support the growth and development of its student population:

- WPI will continue to evaluate its undergraduate discount rate to ensure its pricing model and net cost are competitive with its peer group.
- Diversity, equity, and inclusion will play a larger role as WPI refines recruitment and enrollment strategies, including a focus on DEI initiatives in admissions marketing and communications to underscore the importance of this initiative. Ongoing plans include deepened implicit bias training for admissions readers, development of a Pre-Calculus summer bridge experience, developing additional articulation agreements with community colleges to broaden the transfer admission pathway, and implementing an eight-year test-blind admissions policy starting with the Class of 2026 (fall 2022 entrance).
- A particular focus will be placed on recruitment of domestic PhD students; in particular, students from underrepresented groups will be a high priority area for WPI over the next several years with attention toward the number of first-generation students and those from groups that are underrepresented at WPI.
- WPI will continue to grow both MS and PhD programs in-person and online program formats.
- Lower cost public institutions with strong academic programs in STEM will become stronger competitors, and international applications may continue to decrease, requiring WPI to be creative in decreasing out-of-pocket costs. WPI will leverage virtual recruitment platforms to reach new markets (rural students, international students) in a post-COVID world.
- Residential Services will continue to advocate for the construction of new on-campus residential communities and infrastructure that meet the housing needs of WPI's growing undergraduate and graduate student population.
- The Office of Accessibility Services will continue to experience an increase in students seeking accommodations, requiring that WPI enhance college-level developmental services that directly and intentionally support students in their first year of college.
- A deep and continuing focus on DEI initiatives will continue for faculty, staff, and students. Multicultural Affairs will focus on increasing connections with student organizations, raising the visibility of the department, and actively support DEI initiatives and activating strategies that increase retention and graduation rates and enhance each student's sense of belonging and engagement.
- Student wellness will remain an important priority for the division of Student Affairs. In alignment with the WPI strategic plan, the university will work to enhance student wellbeing and a stronger culture of overall wellness. The establishment of a Wellness Center will enhance these efforts.
- Student Affairs and Graduate Studies will continue to strengthen support for graduate students through intentional programming, inclusion in meetings, and involvement in the comprehensive campus experience.
- WPI will continue to regularly assess the student experience through the Enrolled Student Survey. It will intentionally include graduate students as a cohort for this survey while continuing to strengthen its responsiveness to their identified needs.

DATA FIRST FORMS

STANDARD 5: STUDENTS

Admissions, Fall Term

Credit Seeking Students Only - Including Continuing Education

3 Years Prior	2 Years Prior	1 Year Prior	Current Year	Goal (as of 07/21)
(FY 18)	(FY 19)	(FY 20)	(FY 21)	(FY 22)
Fall 2017	Fall 2018	Fall 2019	Fall 2020	Fall 2021

Freshmen - Undergraduate

Completed Applications	10,331	10,584	10,645	11,269	11,092
Applications Accepted	5,009	4,402	5,255	6,654	6,679
Applicants Enrolled	1,124	1,276	1,199	1,294	1,442
% Accepted of Applied	48.5%	41.6%	49.4%	59.0%	60.2%
% Enrolled of Accepted	22.4%	29.0%	22.8%	19.4%	21.6%
Percent Change Year over Year					
Completed Applications		2.4%	0.6%	5.9%	-1.6%
Applications Accepted		-12.1%	19.4%	26.6%	0.4%
Applicants Enrolled		13.5%	-6.0%	7.9%	11.4%

Average of statistical indicator of aptitude of enrollees: (define below)

HS GPA	3.86	3.89	3.9	3.85	3.88
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Transfers - Undergraduate

Completed Applications	213	244	171	177	218
Applications Accepted	85	91	71	102	145
Applications Enrolled	41	38	36	35	88
% Accepted of Applied	39.9%	37.3%	41.5%	57.6%	66.5%
% Enrolled of Accepted	48.2%	41.8%	50.7%	34.3%	60.7%

Master's Degree

Completed Applications	3,689	3,397	2,982	2,845	2,081
Applications Accepted	1,850	1,887	1,823	1,796	1,413
Applications Enrolled	599	566	540	495	533
% Accepted of Applied	50.1%	55.5%	61.1%	63.1%	67.9%
% Enrolled of Accepted	32.4%	30.0%	29.6%	27.6%	37.7%

Doctoral Degree

Completed Applications	594	646	694	728	996
Applications Accepted	262	254	272	298	265
Applications Enrolled	102	84	116	78	119
% Accepted of Applied	44.1%	39.3%	39.2%	40.9%	26.6%
% Enrolled of Accepted	38.9%	33.1%	42.6%	26.2%	44.9%

Please enter any explanatory notes in the box below

Enrollment figures are from October census date. Goals for FY 22 are based on a July 2021 snapshot. Master's degree and doctoral degree applications are reviewed on a rolling basis.

STANDARD 5: STUDENTS

Enrollment, Fall Term

Credit-Seeking Students Only - Including Continuing Education

		3 Years Prior (FY 18) Fall 2017	2 Years Prior (FY 19) Fall 2018	1 Year Prior (FY 20) Fall 2019	Current Year (FY 21) Fall 2020	Goal (as of 07/21) (FY 22) Fall 2021
UNDERGRADUATE						
First Year	Full-Time Headcount	1,124	1,276	1,199	1,294	1,335
	Part-Time Headcount	0	0	0	0	0
	Total Headcount	1,124	1,276	1,199	1,294	1,335
	Total FTE	1,124	1,276	1,199	1,294	1,335
Second Year	Full-Time Headcount	1,061	1,069	1,217	1,135	1,228
	Part-Time Headcount	2	5	0	7	6
	Total Headcount	1,063	1,074	1,217	1,142	1,234
	Total FTE	1,062	1,071	1,217	1,138	1,230
Third Year	Full-Time Headcount	983	1,020	1,019	1,133	1,086
	Part-Time Headcount	19	18	12	52	22
	Total Headcount	1,002	1,038	1,031	1,185	1,108
	Total FTE	990	1,027	1,024	1,153	1,095
Fourth Year	Full-Time Headcount	966	991	1,033	1,008	1,175
	Part-Time Headcount	51	74	56	76	75
	Total Headcount	1,017	1,065	1,089	1,084	1,250
	Total FTE	986	1,020	1,055	1,038	1,204
Unclassified	Full-Time Headcount	110	110	110	91	105
	Part-Time Headcount	21	8	9	8	12
	Total Headcount	131	118	119	99	117
	Total FTE	118	113	114	94	110
Total Undergraduate Students						
	Full-Time Headcount	4,244	4,466	4,578	4,661	4,929
	Part-Time Headcount	93	105	77	143	115
	Total Headcount	4,337	4,571	4,655	4,804	5,044
	Total FTE	4,281	4,507	4,608	4,717	4,974
	% Change FTE Undergraduate		5.3%	2.2%	2.4%	5.4%
GRADUATE						
	Full-Time Headcount	849	839	999	720	852
	Part-Time Headcount	1,242	1,248	1,038	1,216	1,186
	Total Headcount	2,091	2,087	2,037	1,936	2,038
	Total FTE	1,324	1,316	1,396	1,185	1,305
	% Change FTE Graduate		-0.6%	6.1%	-15.1%	10.2%
GRAND TOTAL						
	Grand Total Headcount	6,428	6,658	6,692	6,740	7,082
	Grand Total FTE	5,604	5,823	6,004	5,902	6,279
	% Change Grand Total FTE		3.9%	3.1%	-1.7%	6.4%

Please enter any explanatory notes in the box below

Official census data, reported by cohort; Fourth year cohort includes fourth year and beyond; For FY 22, the first-year goal is stated. Other years reflect expected enrollment based on average year-to-year retention and average percentage of students who are full-time and part-time. Graduate enrollment projections for FY 22 are based on prior year average enrollment. IPEDS calculation of Undergraduate FTE = FT + (0.392857)*PT and for Graduate FTE = FT + (0.382059)*PT.

STANDARD 5: STUDENTS

Financial Aid, Debt, Developmental Courses

Where does the institution describe the students it seeks to serve?

www.wpi.edu/about

	(FY 2014)	(FY 2015)	(FY 2016)	(FY 2017)
Three-year Cohort Default Rate	1.10%	1.10%	1.10%	0.70%
Three-year Loan repayment rate (from College Scorecard)	98.90%	98.90%	98.90%	99.30%

3 Years Prior	2 Years Prior	Recently Completed Year	Current Year	Goal (specify year)
(FY 17)	(FY 18)	(FY 19)	(FY 20)	(FY 21)
AY 2016-17	AY 2017-18	AY 2018-19	AY 2019-20	AY 2020-21

Student Financial Aid (in 000s)

Total Federal Aid	\$22,548	\$21,791	\$21,053	\$21,949	\$21,304
Grants	\$2,783	\$2,850	\$3,083	\$2,772	\$2,747
Loans	\$19,237	\$18,459	\$17,466	\$18,557	\$18,222
Work Study	\$528	\$482	\$504	\$620	\$335
Total State Aid	\$1,319	\$1,190	\$1,232	\$1,221	\$1,007
Total Institutional Aid	\$79,080	\$80,194	\$92,838	\$100,863	\$108,394
Grants	\$77,715	\$78,871	\$90,330	\$98,300	\$104,844
Loans	\$1,365	\$1,323	\$2,508	\$2,563	\$3,550
Total Private Aid	\$24,101	\$26,259	\$29,271	\$32,338	\$28,869
Grants	\$9,186	\$10,455	\$11,260	\$11,168	\$9,934
Loans	\$14,915	\$15,804	\$18,011	\$21,170	\$18,935

Student Debt

Percent of students graduating with debt (based on *total debt*)

Undergraduates	65.9%	64.3%	64.4%	64.2%	59.6%
Graduates	11.9%	10.4%	8.1%	10.7%	10.0%

For students with debt:

Average amount of *total debt* for students leaving the institution with a degree

Undergraduates	\$42,737	\$43,170	\$45,266	\$45,694	\$48,056
Graduates	\$32,984	\$29,392	\$30,545	\$29,752	\$34,248

Average amount of *federal loan debt* for students leaving the institution with a degree

Undergraduates	\$27,023	\$26,626	\$26,630	\$25,096	\$24,753
Graduates	\$32,335	\$29,625	\$30,160	\$30,703	\$33,440

Average amount of *federal loan debt* for students leaving the institution without a degree

Undergraduates	\$14,573	\$16,344	\$13,371	\$12,695	\$12,821
Graduate Students	\$20,492	\$21,673	\$23,466	\$25,325	Est. \$25,000

Percent of First-year Students in Developmental Courses (courses for which no credit toward a degree is granted)

WPI does not offer courses for which credit is not granted.

Please enter any explanatory notes in the box below

All years of data for this report from 2016-17 through 2019-20 have been validated. There were some small changes to 2018-19 data points previously reported based on clarified information. 2020-21 is estimated for graduate data for non-completers.

Dollar amounts for Student Financial Aid are expressed in thousands (000).

“Student Financial Aid” section includes undergraduate and graduate student data.

- a. Federal Loans include the Unsubsidized and Graduate PLUS Loans for graduate students.
- b. Private Loans include MEFA and other private loans.
- c. Parent PLUS Loan data is omitted as those are loans borrowed by the parent, not by student. This is consistent with reporting to other outside surveys.

Regarding “Student Debt” section:

In prior self-studies, WPI has reported federal student loan debt only. Over the last decade reporting and tracking mechanisms have become more robust. As a result, WPI is able to better capture student loan debt for students who have graduated. This work continues; it is a priority as we enact our 2021-2026 strategic plan. For the purpose of this report, WPI has reported both federal loan debt and also total student debt for graduated students. This allows WPI to better include debt levels from students who have historically been excluded from using federal loans, such as international students. Total debt measures are in development for students who depart WPI without a degree. In future reports, WPI will report total student debt for students attaining degrees and students not attaining degrees. Debt numbers do not include parent loans (e.g., PLUS) but do include private loans where borrower (student vs parent) is unknown.

Regarding graduate data, when a student earns their bachelors at WPI and then pursues a graduate degree at WPI, the debt reported includes some of the debt for other degrees earned, thus the debt reported here may be higher than actual graduate debt. As part of our ongoing and deeper analysis, WPI will be further differentiating these data. As in prior years, graduate debt in the federal loans section only includes the federal Unsubsidized Loan and Grad PLUS Loans.

In the “Student Debt” section for undergraduate students who graduated, these figures differ slightly from the Common Data Set (CDS) as the accreditation population is broad, while the CDS is a narrower subset, defined as all undergraduate students excluding part-time or transfer students.

STANDARD 5: STUDENTS

Student Diversity

Information on student admissions and enrollment below as of FY 21 (AY 2020-2021) census data.

Undergraduate Admissions Information	Completed Applications	Applicants Accepted	Applicants Enrolled
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Category of Students

Female	3,166	2,137	455
Underrepresented Minority	1,712	970	164
International	1,646	705	66
First Generation	2,102	876	165
Pell	N/A	758	133

Graduate Admissions Information	Completed Applications	Applicants Accepted	Applicants Enrolled
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Category of Students

Female	1,081	668	196
Underrepresented Minority	173	122	85
International	2,553	1,287	116

Undergraduate Enrollment Information	Full-time Students	Part-time Students	Total Headcount	FTE	Headcount Goal (Fall 2021)
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Category of Students

Female	1,873	34	1,907	1,886	1,950
Underrepresented Minority	627	19	646	634	650
International	346	14	360	351	375
Pell	458	10	468	462	470

Graduate Enrollment Information	Full-time Students	Part-time Students	Total Headcount	FTE	Headcount Goal (Fall 2021)
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Category of Students

Female	237	355	592	373	600
Underrepresented Minority	51	148	199	108	200
International	411	225	636	497	640

Please enter any explanatory notes in the box below

The headcount goal for undergraduate programs is the expected enrollment snapshot as of the October census. At the undergraduate level, WPI seeks to enroll more women, more URM students, and to provide support for Pell-eligible students. Graduate programs do not have specific numerical goals. The broader goal is to increase domestic URM population and women graduate students while also diversifying the enrollment of international students.

STANDARD SIX: TEACHING, LEARNING, AND SCHOLARSHIP

DESCRIPTION AND APPRAISAL

Approximately 388 full-time faculty members (tenured, tenure-track, and non-tenure-track, a group that includes full-time research and teaching faculty) deliver academic programs at WPI at a student-faculty ratio of 13:1.

Distinctive undergraduate programs, with significant emphasis on project-based and global learning, place special demands on the faculty as well as the professional staff who support the institution's mission. Counting classes in a teaching load fails to assign value to the full range of faculty contributions. Indeed, approximately one quarter of the academic credits delivered for undergraduates in their third and fourth years are projects (the IQP and the MQP) and not traditional courses at all. The Global Projects Program relies on the regular participation of faculty from all academic departments. Advising at a global project center requires faculty members, from all departments and programs, to pack their bags and depart to one of WPI's more than 50 global project sites for the seven-week academic term.

Faculty contributions to the graduate programs have grown commensurate with the evolution of these programs and an expansion of the research portfolio. WPI's graduate programs are not new, but they are making the transition from what were predominantly part-time master's degree programs to full-time programs more strongly tied to faculty research, with greater emphasis on the PhD.

WPI faculty strive to maintain a balance between teaching and scholarship, where scholarship serves as a platform for high-quality learning. WPI faculty pride themselves on providing a high-contact, highly collaborative teaching environment, with many implementing the latest pedagogical strategies. When the Wall Street Journal/Times Higher Education College Ranking devised a new ratings system in 2016, WPI was rated *first* in the category of *The Top Faculties; Schools that Do the Best in Combining Scholarly Research with Classroom Instruction* [Douglas Belkin, "Where Great Research Meets Great Teaching," *Wall Street Journal* (9/27/2016)].

Faculty and Academic Staff

The WPI faculty has primary authority and responsibility for the delivery of the academic programs. All courses and programs and academic policies originate in the faculty governance system.

Faculty Appointments and Searches

All faculty members hold appointments in at least one of 16 academic departments (a 17th academic department, Physical Education, delivers academic credit, but none of the staff hold faculty appointments). Department heads, who serve five-year terms, with review by the governance Committee on Appointments and Promotions, have responsibility for identifying teaching and scholarship needs. Requests for new faculty lines are presented to the dean of the school. The school deans, in turn, collect, prioritize, and present their requests to the Provost during the Annual Planning and Budgeting Process (APBP).

Faculty searches, once approved, are managed by departmental search committees. The Division of Talent and Inclusion, working with the Provost's Office, has prepared a [Faculty Search Resource Guide](#) to assist deans, department heads, and search committees in the search process. Several years ago, the search committees were restructured to require a diversity advocate who was trained and held primary responsibility for ensuring an open and inclusive search. As the student body has grown, the ranks of the tenured/tenure-track and non-tenure-track faculty have also increased. Project Inclusion and the Diversity Advocate Program have led to a greater number of women and members of underrepresented populations among the new hires. Diversity in expertise has also been achieved as the research enterprise has matured.

Faculty Race/Ethnicity

Race/Ethnicity	Full-time	Part-time	Total
American Indian or Alaska Native	1		1
Asian	63	10	73
Black or African American	7	5	12
Hispanic or Latino	21	7	28
Native Hawaiian or Other Pacific Islander	2		2
Two or more	1		1
Unknown	26	8	34
White	281	107	388

The percentage of women on the faculty has slowly increased to the current level of just over 30%. WPI monitors faculty salaries by gender to ensure parity. Approximately once every three years, the Committee on Financial and Administrative Policy presents a report benchmarking faculty salaries against those at a peer institutions. The following data are excerpted from the 2016-17 report.

Benchmark Salaries 2016-17

Rank	Men				Women			
	Count	Aggregate Salary	Market Median - MM		Count	Aggregate Salary	Market Median - MM	
			Market \$	WPI as % of MM			Market \$	WPI as % of MM
Assistant Professor	34	\$3,382,049	\$3,291,375	102.75%	18	\$1,873,975	\$1,889,304	99.19%
Associate Professor	57	\$6,109,844	\$5,946,278	102.75%	28	\$2,994,419	\$3,008,282	99.54%
Professor	83	\$12,407,796	\$12,159,438	102.04%	16	\$2,435,804	\$2,554,984	95.34%
Total	174	\$21,899,689	\$21,397,091	102.35%	62	\$7,304,198	\$7,452,570	98.01%

While the data suggest that WPI's salaries are comparable to the market median at all ranks, there is evidence of some gender disparity in comparison with benchmark. (Note: at the individual level, the average WPI salary for women is higher than the average for men in the Assistant Professor and Professor ranks.)

WPI relies on a faculty that includes those on a traditional tenure track, full-time faculty with non-tenure-track appointments, and part-time and adjunct faculty hired to meet specific, short-term needs. The majority of faculty are tenured or tenure-track, but the institution has a growing number of full-time non-tenure-track faculty who focus on supporting the university's teaching mission (the evolution in recognition of and roles for full-time, non-tenure-track faculty is discussed further on in this chapter).

Conditions for appointment, titles, and criteria for review and promotion (for tenure-track and full-time non-tenure-track faculty) are detailed in the [Faculty Handbook](#). Most faculty members hold the terminal degree in their discipline. Exceptions include Professors of Practice, who are non-tenure-track faculty whose professional experience adds significant value to the academic programs.

The appointments of all probationary tenure-track faculty and non-tenure-track faculty are reviewed annually at the department level to ensure that ongoing activity (teaching, scholarship, service, professional development) is appropriate to support continuation or renewal of appointment. The Faculty Handbook also requires a review for post-tenure faculty on a six-year cycle, but this schedule of reviews has not been maintained in all departments.

The faculty Committee on Tenure and Academic Freedom (CTAF) has primary responsibility for the ultimate review of faculty who are up for tenure (there is not a separate tenure decision made in the departments or schools). The criteria for tenure are high-quality teaching and high-quality scholarship; both are necessary, and neither is sufficient on its own. This structure requires an interdisciplinary review of each tenure case, where the decision for or against tenure is made by a committee with three representatives from the candidate’s home department and five faculty from outside their home departments. Many believe this structure values interdisciplinary teaching and research and has helped keep barriers between departments and schools low.

Pre-tenure faculty are reviewed annually by their department tenure committees. This review is guided by the tenure criteria and may lead to a terminal appointment in unusual cases. In general, the pre-tenure review helps to begin building the candidate’s dossier well before the final review by CTAF.

The Committee on Appointments and Promotions (COAP) is the faculty governance committee charged with reviewing applications for promotion of tenured Associate Professors to full Professors. The committee also reviews nominations for promotion in rank for non-tenure-track teaching professors. As with the tenure committee, COAP is an interdisciplinary committee, though the committee’s processes are different. COAP has been at the center of some of the most significant work to update the criteria and improve mentoring for tenured associate professors seeing promotion in rank.

While faculty have long expressed concerns with the promotion criteria and the promotion process, it was data from the COACHE (Collaborative on Academic Careers in Higher Education) Job Satisfaction Survey that sparked change. Responses to a 2014 survey showed that satisfaction with the promotion process at WPI was significantly below that of both select peers and that of the general COACHE population. The fact that 0% of women associate professors were satisfied with the mentoring provided in their departments was impossible to ignore.

COACHE 2014: Satisfaction with Promotion and Tenure				
Question	% satisfied + % very satisfied			
	WPI Men	WPI Women	Select Peers Women	All COACHE Women
Mentoring of tenured associate professors in department	11%	0%	24%	20%
Clarity of whether or not I will achieve tenure	76%	40%	54%	56%
Clarity of tenure regarding my performance as an advisor to students	76%	60%	43%	47%

A task force composed of representatives of COAP met with faculty to better understand the reasons for the dissatisfaction and developed significant changes to both the committee’s processes and the promotion criteria. These changes were approved by the faculty and added to the Faculty Handbook in 2018. The most significant change in the promotion criteria was a broader definition of high-quality scholarship, with formal recognition of the five dimensions of scholarship: 1) Discovery, 2) Integration, 3) Application and Practice, 4) Teaching and Learning, and 5) Engagement. The new criteria were put in effect in 2019; since then, approximately half of the promotions to full professor have been for women.

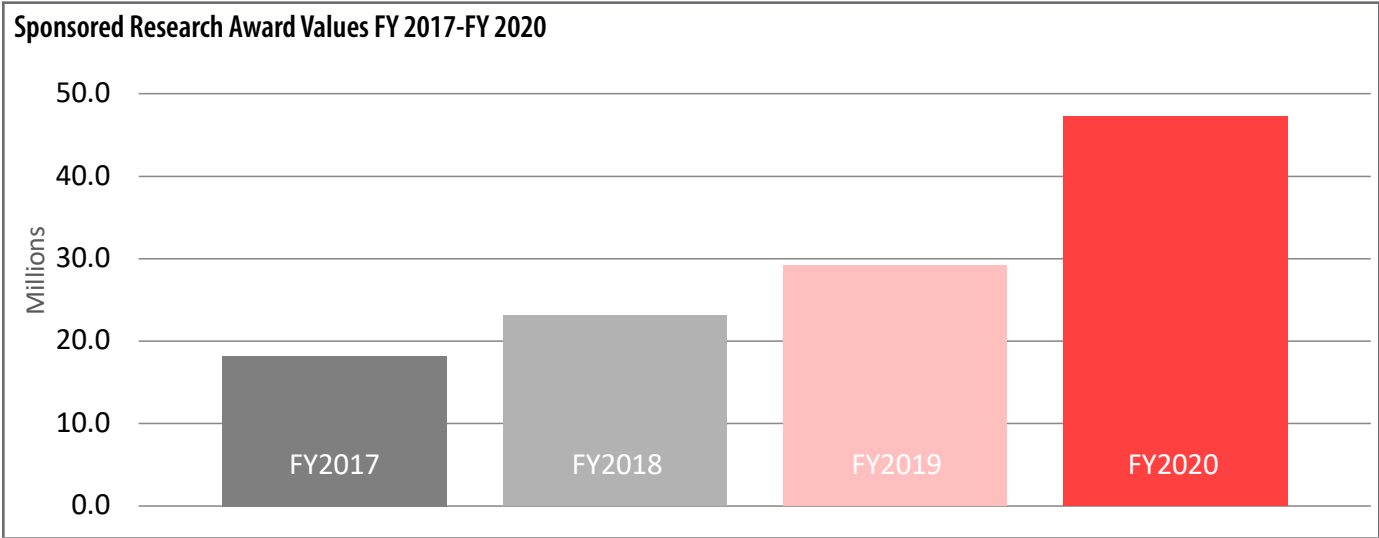
In 2018, the faculty also approved a plan to establish a mentoring system for mid-career faculty. At the same time, a team of WPI faculty obtained an NSF Advance grant to support promotion of female faculty; they are now working closely with the Morgan Teaching and Learning Center to support the creation of three-person mentoring teams for all Associate Professors. The grant has enabled program support, training resources, and modest stipends for the initial groups of participating faculty members. It also provided partial support to enable WPI to participate in the COACHE Faculty Job Satisfaction Survey for a third time. An early review shows that results are overwhelmingly positive, with 20 areas of strength and zero areas of concern.

Support for Scholarship

As articulated in Standard Two, an important priority in the 2015 strategic plan, *Elevate Impact*, was the simultaneous growth of the research enterprise and support for graduate programs. The Vice Provost for Research (VPR), a position created in 2014, is responsible for the overall operations and non-financial services that support the research enterprise at WPI, including the Office of Sponsored Programs, the Office of Technology Transfer, the Life Sciences and Bioengineering Center, and the Research Solutions Institute (RSI).

The Office of Sponsored Programs assists faculty in research proposal development and reviews and submits funding applications. The office negotiates and accepts awards, issues subawards, and provides guidance and interprets applicable regulatory requirements to ensure that research conducted follows federal regulations. The RSI was created to provide support for team science pre-proposals and to provide support for large, complex, multi-institution proposals.

WPI has enjoyed a healthy growth in external funding for research over the past four years.



*The value for FY 2020 is only through March of the fiscal year.

In 2019 the VPR introduced Transformative Research and Innovation, Accelerating Discovery (TRIAD), an interdisciplinary seed grants program operated in collaboration with the University of Massachusetts-Lowell. Approximately \$111,000 was awarded to six collaborative interdisciplinary teams made up of faculty from various WPI departments. The grants support inter/cross/trans-disciplinary projects for one year, encouraging the teams to explore new and innovative research directions together. Joint seed funding for innovative medical discovery or device pilot projects is also available through the VPR's office, in coordination with the UMass Center for Clinical and Translational Science (UMCCTS).

Some faculty have expressed concerns that WPI's own system for internally funding faculty research and travel is unclear, variably applied (both across and within departments), and inconsistent with institutional expectations for scholarly achievement. In 2019, an ad hoc committee of Humanities and Arts faculty members found that WPI supported research in their disciplines at a level well below all 15 of the benchmark institutions (who reported such data).

Teaching, Learning, and Assessment Resources

The faculty have primary responsibility and authority for delivering the teaching and research mission. Highly qualified professionals from across campus, including in the Gordon Library, the Office of Academic Advising, the Academic Technology Center, the STEM Education Center, and the Morgan Teaching and Learning Center, are full partners in much of this work.

The **Gordon Library** has a staff of 18, eight of whom are in the Academic Strategies Department. Among those eight staff members are three Research and Instruction Librarians who provide individual and group consultation for in-class instruction and student project work. Students preparing for a global IQP usually meet with a research librarian in the term before they travel. Students in the Great Problems Seminar usually meet with a research librarian as they begin background research for their projects.

In 2020, with only two additional staff positions and the loss of two full-time Research and Instruction Librarians, the library served 51% more students than in 2009. It has also been challenged by regular increases in the costs of journal subscriptions, with a budget that has not grown as rapidly.

Staff in the library are regular partners in academic program development. They often serve as co-advisors for student project work and as academic advisors for first-year students. The library's most recent contribution was the development of the [Digital WPI](#) website. This site provides a searchable database for all completed student project work. To help students connect their education to a purpose beyond WPI degree requirements, the library staff has organized the project work in several dimensions and provided a way to categorize and search project work based on an expanded version of the United Nations Sustainable Development Goals.

The **Office of Academic Advising** provides a wide range of services to undergraduate students and faculty. Note that the Faculty Handbook defines academic advising as one of the teaching responsibilities of faculty and this work is included in reviews for promotion and tenure, but faculty and students receive significant additional support from a staff of eight professional advisors in this office.

The undergraduate academic advising model is described as a “supplemental” model, where each student is assigned a faculty advisor in their discipline (two if they have declared a double major) as well as a professional staff advisor. This supplemental advising model delivers on student needs for guidance in program specific information (through the faculty advisor) as well as holistic student support needs (through the staff advisor).

First-year students are supported by a different (more intrusive) academic advising model during their first two terms. Advising cohorts are created by residence hall, with a group of 25 students led by a faculty or staff advisor and two peer advisors (the Resident Advisor and the Community Advisor). This group is formed during New Student Orientation and then brought together for structured activities that extend through the fall terms. This extended orientation approach was established in recognition of the fact that many of the sessions formerly packed into the New Student Orientation schedule had much more impact when delivered when the students were ready to listen. For example, the session on managing test anxiety was moved to the week before the first major physics exam.

Graduate student advising has long been the responsibility of the academic departments with no central advising resources for graduate students. With the growth of the full-time graduate programs, there has been a parallel growth in advising support provided by the office of the Dean of Graduate Studies. The number of professional advisors increased from four in 2012 to the current eight.

There has been an upward trend in undergraduate use of both professional advising and tutoring services offered through the Academic Advising Office over the past four years as shown in the table.

Student Support Provided by Academic Advising					
	Fall 2015	Fall 2016	Fall 2017	Fall 2018	Fall 2019
Advising Meetings	1688	2045	2430	3438	2652
Tutoring Appointments	2607	2726	2305	3114	2605

This translates to an increase from about 96 advising meetings per week in fall 2015 to an average of almost 190 meetings per week in fall 2019. Note that WPI has seen similar growth in demand for services in the Student Development and Counseling Center; the university has successfully normalized help-seeking. Students report satisfaction with the ways academic support services meet their needs. Satisfaction scores on the Noel Levitz Student Satisfaction survey regarding “academic support services adequately meet the needs of students” increased from 5.18 out of 7 in 2008 to 5.72 out of 7 in 2016. As a result, WPI boasts strong first- to second-year retention rates holding steady at 95% and competitive four- and six-year completion rates, discussed in greater detail in Standard Eight.

Academic Advising works closely with the Office of Accessibility Services. Accessibility Services, which is situated in the Division of Student Affairs, works with students and the faculty to ensure that every WPI student is afforded accommodations appropriate to their documented need. The most visible service is an Exam Proctoring Center that supports students with extended time for testing.

The office has also developed several special programs to identify and support students who struggle. For example, Academic Advising staff reach out to faculty members to help identify, as early as the third week of each term, students who struggle. The office reviews student grades each term and provides focused outreach to students (and parents of students) who struggle. The office is currently working with Student Affairs to develop a special orientation program for returning sophomores whose first-year orientation was disrupted by COVID-19.

Academic advising is periodically assessed by the faculty governance Committee on Advising and Student Life (CASL). This committee includes the Assistant Dean/Director of Academic Advising and the Dean of Students, along with faculty and student representatives. Most recently, in 2017, CASL created a Taskforce on Improving Academic Advising, which presented several recommendations to the Provost that included 1) incorporating advising load into teaching credit; 2) offering department-led events where students can develop baseline knowledge of the major and advice on how to best prepare for meeting with an advisor; and 3) developing electronic resources to assist faculty advisors.

With the ongoing discussion related to faculty activity and the COVID-19 pandemic, a number of the recommendations have not yet been fully realized, though some departments have taken steps to incorporate these recommendations. For example, Biomedical Engineering has developed an in-house evaluation of load that incorporates advising load; several departments (Biomedical Engineering and Mechanical Engineering, for example) are now offering special sessions on Academic Advising Day (one day each February); and a Canvas site (WPI's LMS) will be developed for faculty advisors in the coming year.

The **Academic Technology Center** (ATC) provides immediate help to faculty using new technologies in courses and projects and group and individual training to help faculty design and test new approaches to technology enabled teaching. Instructional design support, located in ATC, is provided by two full-time designers who help faculty use teaching and learning frameworks to improve their online, face-to-face, and blended courses. This resource for faculty development is a recent addition to WPI. Initially, one instructional designer served as a resource for faculty teaching in the online Corporate and Professional Education programs.

The instructional designers were instrumental in helping WPI faculty make the emergency transition to online delivery during the pandemic. They supported the first transition in March 2020 and then delivered Online Pedagogy Workshops to nearly 200 faculty members during the summer of 2020. This effort was a partnership between ATC, the Morgan Teaching and Learning Center, and Undergraduate Studies. To understand the scale of the effort, WPI tripled its summer course schedule and paid faculty to teach a summer course with additional support for those (the majority, in fact) who participated in the Online Pedagogy Workshops. New technologies—such as lightboards and lecture capture tools—were added to classrooms to support pedagogical innovation through technology. Today, all classrooms are set up for lecture capture.

The **Morgan Teaching and Learning Center** has primary responsibility for faculty development in dimensions of teaching and learning. The faculty-led center offers programs, services, and resources in the areas of training, development, and funding to faculty and graduate students to support innovation in the curriculum and teaching practice. Its programs, including regular "Food for Thought" lunches, foster campuswide dialogue on teaching and student learning. Faculty job satisfaction survey data from COACHE (2017) indicated that "support for improving teaching" is a WPI strength compared to that of our peers. The center promotes reflective practice and dialogue on the art, science, and practice of college teaching. Its principal objectives are to

- 1) build the teaching knowledge and skills of all instructors to promote continual individual growth in teaching effectiveness and enhancement of student learning;
- 2) support teaching and learning innovations in areas aligned with WPI's goals;
- 3) continue developing a culture of student learning assessment to guide improvements in teaching practice and curricular change; and
- 4) recognize teaching achievements.

The Morgan Center is responsible for New Faculty Orientation (a week-long series of workshops and seminars on teaching, research, service, and resources at WPI with continued programming throughout the academic year) and the Mentoring Program (a one-on-one program in which new faculty are matched with more senior colleagues who are committed to meeting regularly during the first year, serving as an important initial node of an on-campus network of mentors) for new faculty. All new faculty members, including both tenure-track and faculty hired for teaching or research position, are invited to participate in these programs. The director of the Morgan Center recruits mentors who fit objectives identified by the mentee (after seeking input and preferences of the relevant department head). Participation is voluntary, but between 80% and 100% of new faculty have participated each year since the program was inaugurated in 2007.

The Morgan Center provides a multitude of resources for all faculty, at all career stages, to maintain and strengthen instructional effectiveness and provide support for curricular and teaching innovation. These programs include components of assessment on both an individual and university-wide level, such as collecting mid-term feedback from students, interpreting student course reports, consulting with faculty on individual teaching needs, and providing resources for teaching with technology.

In general, graduate students do not serve as instructors of record but do provide critical support in conferences and teaching laboratories across the curriculum. The Morgan Center holds training seminars for teaching assistants each August and January; WPI policy requires participation by all first-time graduate teaching assistants, regardless of prior teaching experience.

WPI invites and encourages its faculty members to develop and integrate whatever methods of instruction they find useful and appropriate to the combination of subject matter and skills areas involved in their courses and project advising responsibilities.

Since 2017, the Morgan Center, the Educational Development Council (EDC), ATC, and the division of Undergraduate Studies have worked together to administer annual grants (up to \$75,000 per year) that are aimed at supporting innovation in undergraduate and graduate education. For example, in 2019, 14 faculty members received funding to advance four independent projects with five additional projects collectively pursued as a "Faculty Learning Community on Open Educational Resources." Another pool of up to \$50,000 is available each year for Summer Sandbox grants, which support faculty members who will design and test new approaches to teaching and advising in a summer course or project. This is intended to encourage even greater faculty experimentation, allowing them to use the summer as a teaching and learning laboratory.

Partnering with the Center for Project-Based Learning and the STEM Education Center, the Morgan Center supports and participates in a research agenda dedicated to the scholarship of teaching and learning. This has become more important with the recent expansion of the promotion criteria for traditional tenured faculty as well as the introduction in 2021 of a teaching track to tenure.

Collaborative strategic planning exercises specific to faculty development in 2019-20 revealed the following needs: 1) more leadership training and development opportunities, for all faculty but specifically for department heads; 2) professional learning about assessment, both for teaching and for the scholarship of teaching and learning; 3) attention to equitable distribution of professional development funds, by department and for non-tenure-track faculty.

Academic Affairs is working on a five-year plan to transform the Morgan Teaching and Learning Center to a faculty development center with a broader mission that would also include professional development for multiple forms of scholarship and leadership. A community of practice for department heads is being considered as an outgrowth of department head training being done under the NSF ADVANCE grant.

Innovation and entrepreneurship are important emphases across the curriculum. WPI's **Innovation and Entrepreneurship Center** works to cultivate entrepreneurial and innovative thinking and action through skill-based workshops, "solvathons," guidance and mentorship from experienced entrepreneurs, competitions, networking opportunities, hands-on projects, and access to the makerspace. Students often access the Innovation and Entrepreneurship Center to support projects that they may be completing in their courses and for passion projects on their own. Working with the Office of Technology Commercialization, 38 patent disclosures were submitted, 15 patents were issued (with six of the 15 issued to women inventors), and eight patent licenses were signed in 2020.

One of the outcomes of WPI's previous strategic plan was the expansion of WPI's **Institutional Research** function. WPI hired its first full-time director of institutional research in the fall of 2016. In 2019 the office added additional staff and hired an Assistant Vice President of Institutional Research and Strategic Decision Support. A significant contribution to program assessment was the implementation of a major alumni study designed to mirror the survey component of the 2012 Donahue Study of the Impact of Project-Based Learning. To better align assessment efforts with overall university strategic priorities, the institutional research staff moved under a new Office for Strategic Initiatives. Under the direct overview of the President's Office, this new office provides senior leadership with cross-functional strategies that can be used to shape institutional planning, policy formation, and decision-making in support of university goals. The office serves as a resource for WPI's academic and administrative decision-makers as they seek to enhance the quality of the university's programs, services, operations, and processes. It is also tasked with developing and implementing tools to track and assess institutional effectiveness.

The **Dean of Undergraduate Studies and the Dean of Graduate Studies** (the so-called "cross-cutting deans") work across schools and departments to support assessment of academic programs. In addition, the Morgan Teaching and Learning Center provides resources, services, data on student learning and educational effectiveness, and, since 2016, an institutional research function. In 2019, the Office of Undergraduate Studies added the position of Associate Dean of Undergraduate Studies with a specific focus on promoting undergraduate research at WPI. The core undergraduate project requirements (the MQP and the IQP) are fundamentally research experiences, but are not usually described that way—partly because the IQP does not have a disciplinary research focus. Another reason is that the MQP, especially in engineering, has a strong emphasis on design. The

Associate Dean position was created to shine a light on the range of undergraduate research embedded in project work, but also to provide new opportunities, especially for first- and second-year students, through summer research opportunities. The new position has enabled greater university-wide coordination of research and cultivation of funding partnerships with companies, foundations, and federal agencies.

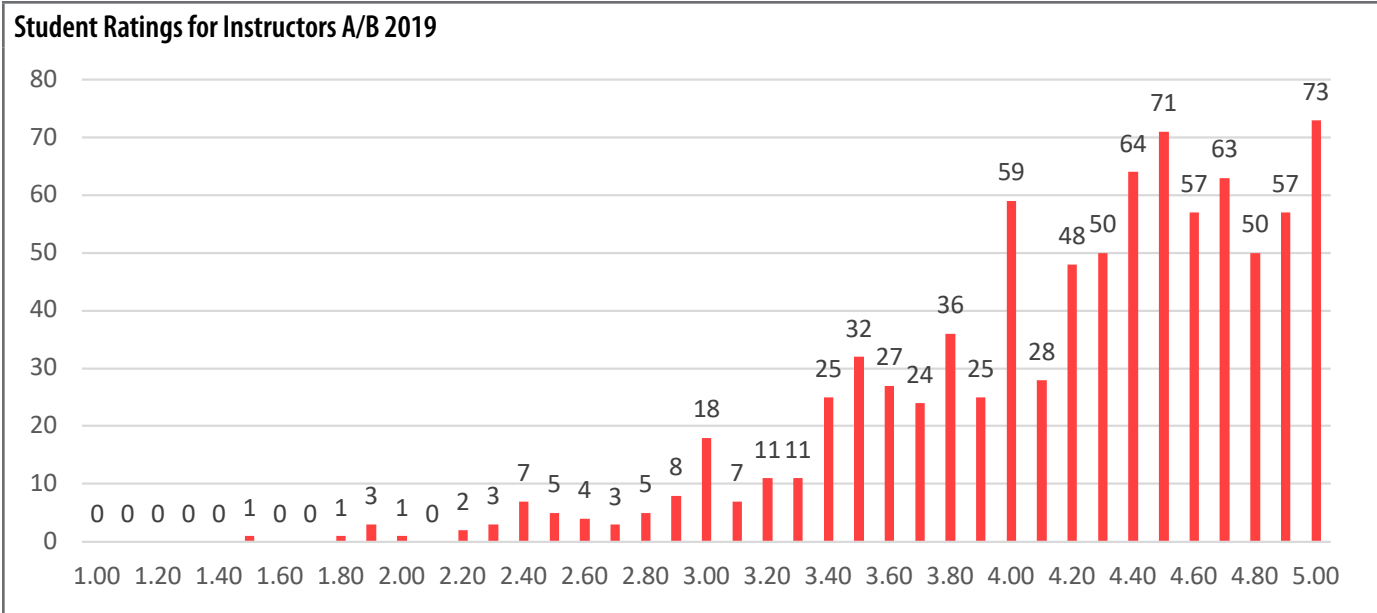
Student Feedback Regarding Courses and Projects

WPI faculty enjoy autonomy in their adoption of instructional methods. Teaching in a project-based environment often requires ingenuity and a readiness to experiment with new tools and approaches. This freedom to design and implement effective learning activities often puts WPI faculty in a position to go far beyond academic and professional standards to become influential innovators in instructional methods. For example, the creative pedagogies developed and practiced over the past decade by faculty members in WPI's Great Problems Seminar program for first-year students have yielded a valuable set of examples and illuminating commentaries that are now widely available. [Wobbe and Stoddard, eds. *Project-Based Learning in the First Year: Beyond All Expectations*. Stylus Publishing, 2019.]

Individual faculty members have freedom at WPI to teach any course they are assigned however they wish, constrained only by the course's catalog description. There is typically coordination between instructors in multi-section courses, with common textbooks and common examinations. For other departments, especially those in which a sequence of skill-building is associated with successful course completion, coordination among section instructors ensures consistency of content, assignment types, and assessment instruments.

Feedback from students is collected in a digital standard course report form at the end of every course. The results, including student comments, are collected and shared with the faculty after grades are submitted. The aggregated results for quantitative questions are compiled for every faculty member and are viewable by all campus constituencies, including students, on OSCAR (the online student course reports web information system).

The Provost's Office, the deans, the department heads, and promotion and tenure committees review these data in making decisions about merit pay increases, promotion and tenure, and re-appointment of non-tenure-track faculty. All involved are aware that while these surveys provide information regarding student satisfaction, other variables influence the ratings. The data provide information in the extremes and are used to start discussions, not end them.



The policy adopted by the faculty does specify questions for use in administrative review. One question asks the students to provide an overall rating of the instructor on a scale from 1 (very poor) to 5 (excellent). The graph above shows the distribution of course averages for all academic courses delivered in the fall of 2019. The distribution is typical: most courses received an average rating above 4.00 on the 5-point scale (Average in fall 2019 was 4.05).

For the roughly 10% of courses rated at/below 3.30 (0.75 points below the university mean for this semester), the Dean of Undergraduate Studies is required to confer with the instructor's department head, requesting that the department head meet with the instructor to understand the circumstances and develop an improvement plan, if needed.

Projects are assessed in the same way, with one significant difference; there is a set of questions that assess student satisfaction with the advisor, but there is a second set of questions drawn directly from the learning outcomes for the IQP and the MQP (discussed in detail under Standard 8) that ask students to assess their progress (or growth) for each of the project learning outcomes. A separate survey completed by advisors asks for an assessment of student achievement for each of the learning outcomes.

Continuing Work: Recognizing the Role of Teaching and Research Faculty

The Faculty Handbook is updated frequently (there have been more than 25 changes and additions since the last comprehensive review), and all changes require a vote of the full faculty and approval by the Board of Trustees.

Recognition for the contributions of the non-tenure-track (NTT) faculty has evolved significantly over the past 10 years. One significant change occurred in 2012 with the introduction of new titles (Assistant, Associate, and full Teaching Professors) along with criteria and process for promotion in rank for full-time NTT faculty.

At the time when these new titles were recognized, full-time, NTT faculty did not have the right to vote at faculty meetings or participate in faculty governance. As defined in the Faculty Handbook, these rights and responsibilities were assumed to apply only to the tenured and tenure-track faculty. In addition, the faculty assumed that academic freedom did not apply to NTT faculty. More recently, the term non-tenure-track faculty has been replaced by *teaching and research track* (TRT), a designation that focuses on what these faculty members do, rather than what they are not. The TRT faculty formed the TRT Council to provide a forum for discussion and representation within the university. The university also committed to budgeting all TRT faculty lines, creating additions to the operating budget.

The most recent—and most significant—changes to the Faculty Handbook were approved in May 2021. The faculty and trustees approved a more inclusive definition of “the faculty” with the introduction of voting rights for full-time TRT faculty. This step was included as part of a larger plan to provide increased job security for TRT faculty and to create a new “teaching track to tenure.” Work is currently under way to identify faculty who wish to make the transition to this new tenure track beginning in summer 2021.

In FY 2020, there were 539 tenured, tenure-track, and non-tenure-track faculty. Of these, 271 were tenured or tenure-track. Of the non-tenure-track faculty, 139 were full-time and the remainder held part-time appointments.

The data in the table are part of an annual report provided by the Provost to Faculty Governance in response to concerns that tenure-track faculty should deliver “the majority of academic credits” in each academic year. The reporting began with the introduction of recognized categories of non-tenure-track faculty in 2012. Given the introduction of the new tenure pathway created for teaching and research faculty and the new distribution of faculty among traditional tenure-track, teaching-track-to-tenure, full-time non-tenure-track-, and part-time (adjunct) faculty, the Committee on Governance did not request the report for AY 2020-21.

Credit Delivery Report					
	2015-16	2016-17	2017-18	2018-19	2019-20
Total Credits	173,66	177,616	181,459	185,080	192,237
Credits/Tenure-Track	344	357	340	353	338
Credits/(FTE) NTT	543	505	541	516	573

Faculty Activity Models (Formerly Known as Workload)

The faculty and the administration are currently working to develop a rational, fair, and transparent model to capture and value the range of contributions the faculty make to the WPI mission. As noted earlier, counting courses does not capture faculty contributions to project advising or participation in the Global Projects Program.

Department heads are responsible for annual performance reviews as well as teaching and committee assignments in their departments. They must allocate the available faculty resources to meet instructional needs while also balancing teaching and advising and service needs among their faculty. For several years, department heads and faculty were guided by an “eight-block model” that could be interpreted as dividing each faculty member’s contributions into “blocks,” each of which was equivalent to the effort of one course. (In other words, if a faculty member was not involved in research or service, a teaching load of eight courses per year would be standard.) When it came to be used in a prescriptive way, the model became unusable. For example, a class with 49 students would count as one block while a class with 50 students would count as 1.25 blocks. Different departments assigned different values to service work on department and university-wide committees.

The Provost recently charged three working groups, each led by an academic dean, to analyze WPI’s academic portfolio. The groups have focused on 1) improving the academic budget model; 2) assessing and recognizing faculty contributions/activity; and 3) analyzing program performance. That work has just begun, and some faculty have expressed concern that faculty governance committees were not engaged in the project’s initial stages. Some argued the Faculty Handbook assigned this work to faculty governance, while others argued such operational decisions are the responsibility of the administration.

PROJECTIONS AND ASPIRATIONS FOR THE FUTURE

- Work to redefine the criteria for promotion in rank for tenured associate professors has already had significant positive impacts on faculty culture, but significant work remains. WPI will receive data from its third participation in the COACHE Faculty Job Satisfaction survey in July 2021 and has formed a task force to begin an exploration of the results.
- While there has been significant progress in fully integrating the non-tenure-track faculty into faculty governance and into the Faculty Handbook, there is still a great deal of work to be done.
- The university is still processing some of the lessons learned during the year of remote working during the COVID-19 pandemic. It will continue to support faculty innovation in classroom teaching and project advising and hopes to see some of the experiments made in the past year continue.
- Detailed studies of faculty activity models will continue to inform resource allocation. This work will inform decisions to balance investment in the core programs with plans to grow new graduate programs in areas new to WPI.

DATA FIRST FORMS

STANDARD 6: TEACHING, LEARNING, AND SCHOLARSHIP

Faculty by Category and Rank; Academic Staff by Category, Fall Term

	3 Years Prior (FY 2018)	2 Years Prior (FY 2019)	1 Year Prior (FY 2020)	Current Year (FY 2021)
Number of Faculty by category				
Full-time	381	381	392	381
Part-time	20	5	12	17
Adjunct	111	124	102	107
Clinical				
Research	5	1	15	6
Visiting	6	11	11	6
Other; specify below:	7	10	7	1
Total	530	532	539	518

Percentage of courses taught by full-time faculty

88%	85%	81%	82%
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Number of Faculty by rank, if applicable

T/TT Professor	110	100	111	120
T/TT Associate	101	99	93	86
T/TT Assistant	54	57	67	72
Instructor	26	20	20	20
TRT Professor	25	25	34	23
TRT Associate Professor	32	29	36	34
TRT Assistant Professor	64	68	69	55
Adjunct	111	124	102	107
Other	7	10	7	1
Total	530	532	539	518

Number of Academic Staff by category

Librarians	19	21	21	17
Advisors	12	13	13	13
Instructional Designers	2	2	2	2
Other; specify below:				
Total	33	36	36	32

Please enter any explanatory notes in the box below

Other includes Emeritus. Part-time includes administrative appointments such as the Associate Dean of Undergraduate Studies, or faculty on phased retirement. The vast majority of the adjunct faculty are hired on a course-by-course basis.

STANDARD 6: TEACHING, LEARNING, AND SCHOLARSHIP

Highest Degrees, Fall Term

		3 Years Prior	2 Years Prior	1 Year Prior	Current Year
		(FY 2018)	(FY 2019)	(FY 2020)	(FY 2021)
Highest Degree Earned: Doctorate					
Faculty	Professor	109	99	110	120
	Associate	100	98	91	85
	Assistant	53	55	64	70
	Instructor	144	161	161	157
	No rank				7
	Total	406	413	426	439
Academic Staff	Librarians				
	Advisors				
	Inst. Designers				
Highest Degree Earned: Master's					
Faculty	Professor	1			
	Associate	1	1	1	1
	Assistant	1	2	2	1
	Instructor	81	63	57	37
	No rank				17
	Total	84	66	60	56
Academic Staff	Librarians	17	20	20	17
	Advisors	10	10	10	10
	Inst. Designers	1	2	2	2
Highest Degree Earned: Bachelor's					
Faculty	Professor		1	1	1
	Associate				
	Assistant				
	Instructor	21	19	18	13
	No rank				9
	Total	21	20	19	23
Academic Staff	Librarians	2	1	1	
	Advisors	2	3	3	3
	Inst. Designers				
Highest Degree Earned: Professional License					
Faculty	Professor				
	Associate			1	
	Assistant			1	
	Instructor	19	33	32	
	No rank				
	Total	19	33	34	0
Academic Staff	Librarians				
	Advisors				
	Inst. Designers				

STANDARD 6: TEACHING, LEARNING, AND SCHOLARSHIP

Appointments, Tenure, Departures, Retirements, Teaching Load Full Academic Year

		3 Years Prior (FY 2018)		2 Years Prior (FY 2019)		1 Year Prior (FY 2020)		Current Year (FY 2021)	
		FT	PT	FT	PT	FT	PT	FT	PT
Number of Faculty Appointed									
	Professor	4		1					
	Associate								
	Assistant	12		5	2	4		21	
	Instructor								
	Other							3	
	Total	16	0	6	2	4	0	24	0
Number of Faculty in Tenured Positions									
	Professor	93		98	2	106	1	112	1
	Associate	90		94	1	85	1	76	1
	Assistant								
	Instructor								
	Other								
	Total	183	0	192	3	191	2	188	2
Number of Faculty Departing									
	Professor	3		6		1		4	
	Associate	2		4		1			
	Assistant	1		4		4		1	
	Instructor		4		24		1	2	
	Other								
	Total	6	4	14	24	6	1	7	0
Number of Faculty Retiring									
	Professor	2		4		3			
	Associate			2					
	Assistant								
	Instructor				1		3	2	
	Other								
	Total	2	0	6	1	3	3	2	0
Fall Teaching Load, in credit hours									
	Professor	Maximum	884.50	306.00					
		Median	162.00	31.50					
	Associate	Maximum	571.00	837.00					
		Median	177.00	54.25					
	Assistant	Maximum	693.00	277.75					
		Median	186.00	277.75					
	Instructor	Maximum	711.00	430.13					
		Median	294.00	34.88					
	Adjunct	Maximum	1288.50	711.00					
		Median	262.50	73.50					

Explanation of teaching load if not measured in credit hours

Explanation of teaching load: The standard teaching load for a tenure-track faculty member is four 3-credit courses per year plus a variable number of credits for project advising (IQP, MQP, and graduate). The numbers reported here are the actual numbers of credits delivered, so they include both classroom teaching and project advising. With the transition to Workday from Banner, data are not yet available for 2018-19, 2019-20, and 2020-21. We estimate the 2017-18 data to be representative of a typical academic year.

STANDARD 6: TEACHING, LEARNING, AND SCHOLARSHIP

Number of Faculty by Department or Comparable Unit, Fall Term

3 Years Prior		2 Years Prior		1 Year Prior		Current Year	
(FY 2018)		(FY 2019)		(FY 2020)		(FY 2021)	
FT	PT	FT	PT	FT	PT	FT	PT

Number of Faculty by Department (or comparable academic unit)

Aerospace Engineering Department							10	
Biology and Biotechnology Department	19	1	18		17	2	18	3
Biomedical Engineering Department	14		15	1	16	2	13	4
Career Development Center		6						
Chemical Engineering Department	15	2	16	1	17	4	14	3
Chemistry and Biochemistry Department	18	2	19	5	19	8	18	3
Civil Engineering Department	14	8	15	5	16	5	15	5
Computer Science Department	43	16	45	13	45	12	38	11
Electrical and Computer Engineering Department	29	13	27	12	26	6	22	14
Fire Protection Engineering Department	6		5	1	6		6	2
School of Business	33	11	29	12	26	8	23	13
Humanities and Arts Department	54	16	57	16	59	21	61	9
Interdisciplinary and Global Studies Division	14	3	14	5	19	7		
Department of Integrative and Global Studies							17	10
Mathematical Sciences Department	41	7	41	6	46	6	47	2
Mechanical Engineering Department	46	7	51	4	49	10	33	10
Physical Education and Athletics Department		27		25		22		23
Physics Department	19	2	19	1	19	3	17	3
Robotics Engineering Program	1	1		1	1	1		
Robotics Engineering Department							17	6
Social Science and Policy Studies Department	15	14	15	8	15	5	13	4
Undergraduate Studies Department	7	1	7	6	6	6	6	1
Other		5		17		9		4
Total	388	142	393	139	402	137	388	130

Please enter any explanatory notes in the box below

STANDARD 6: TEACHING, LEARNING, AND SCHOLARSHIP

(Faculty and Academic Staff Diversity)

Uses current year data.

Faculty	Full-time	Part-time	Total Headcount
<i>Race/Ethnicity</i>			
American Indian or Alaska Native	1		1
Asian	63	10	73
Black or African American	7	5	12
Hispanic or Latino	21	7	28
Native Hawaiian or Other Pacific Islander	2		2
Two or more	1		1
Unknown	26	8	34
White	281	107	388
<i>Gender</i>			
Female	121	49	170
Male	280	87	367
Not Declared	1	1	2
Academic Staff	Full-time	Part-time	Total Headcount
<i>Race/Ethnicity</i>			
American Indian or Alaska Native			
Asian	3		3
Black or African American	1		1
Hispanic or Latino			
Native Hawaiian or Other Pacific Islander			
Two or more	1		1
Unknown	1		1
White	24	2	26
<i>Gender</i>			
Female	23	2	25
Male	7		7
Not Declared			

Please enter any explanatory notes in the box below

STANDARD SEVEN: INSTITUTIONAL RESOURCES

DESCRIPTION AND APPRAISAL

Whether it be through responsible budget management, the hiring of staff who help advance WPI's mission, or responsible stewardship of physical and technology assets, management of institutional resources is key to WPI's strategy for long-term planning and strategic goal achievement.

Human Resources

In 2017, to better reflect WPI's strategic realignment and intentional best-practice approaches to learning and development, diversity, equity, and inclusion (DEI), and talent management, the human resource function at WPI was reorganized as the Division of Talent and Inclusion. The change included the hiring of a Vice President of Talent and Inclusion, who also serves as the Chief Diversity Officer. To ensure the institution employs sufficient and qualified personnel to fulfill its mission, position requirements and salaries are regularly benchmarked against peers. WPI's esteemed scholars and researchers, and the administrators and staff who work alongside them, are experienced, agile, and resilient professionals whose dedication to the university's mission and its students are part of what makes WPI truly distinctive.

In fall of 2020, WPI had a diverse workforce of 1,283 full-time and part-time employees. WPI has increased the number of faculty lines from 279 full-time faculty in 2011 to 381 in 2021, a 36.5% increase over the last 10 years. In the staff arena, prior to 2016, the full- and part-time staff headcount grew from 540 in 2012 to 734 in 2014, representing 37.7% growth, commensurate with the increased need for resources to support high student enrollment growth between 2010 and 2015. Since that time, staff headcount growth has stabilized. There were 815 staff in 2015 compared to 744 staff in 2020. This decline reflects efforts as part of the WPI Forward initiative to analyze all organization structures and to explore ways to increase manager efficiency and to reduce any possible staffing redundancies. The implementation of an Early Retirement Incentive Program during the COVID-19 pandemic allowed WPI to better allocate staffing and increase efficiencies in services provided.

Recruitment, Compensation, and Retention of Employees

All members of the WPI community are guided by integrity and ethical behavior, as articulated in the [Faculty Handbook](#) and the [Employee Benefits and Policies Manual](#). WPI works to maintain a working environment that enables each employee to conduct business in accordance with ethical standards and in compliance with the law. Employees have access to all human resources policies, including those related to benefits, online in the Employee Benefits and Policies Manual, which is revised annually (the most recent revision was in May 2021). Policies for faculty are outlined in the Faculty Handbook (discussed in Standard 6). About 8% of university employees are covered by one of two collective bargaining units: 84 members of the Facilities team (in the areas of grounds, and in trades and custodial work—both full-time) and 12 campus police officers. Both agreements define the terms and conditions of employment, including grievance procedures.

The Administrative Policy Group (APG), a cross-functional team of administrators and faculty members created in 2020, provides an organized and efficient way to develop and approve institutional administrative policies (i.e., non-academic policies). A critical part of the administrative policy-making process is posting policy proposals for a 30-day comment period following their presentation to the APG, which allows all members of the WPI community to provide input, feedback, and comments.

Grievance processes are articulated in the [Faculty Handbook](#) and the [Employee Benefits and Policies Manual](#). The [WPI Ombuds Office](#) helps faculty, students, and staff address issues and conflicts that may arise. The office is independent of all other offices on campus; it is impartial, and it offers a safe, confidential way to help individuals with concerns. Additionally, regular assessments are conducted to understand employee satisfaction, (e.g., the COACHE survey discussed in Standards 2 and 6).

The institution is committed to attracting and retaining qualified administrators, faculty, and staff as described in WPI's 2015-2018 Strategic Plan: *Elevate Impact* and further articulated in its [DEI Strategic Framework](#) and [Sustainable Inclusive Excellence Plan](#) (See Standard Two). The DEI Strategic Framework specifically articulates the following talent-focused strategies:

- *Objective #1*—Establish and embed equitable and socially just practices/procedures in attracting, developing, and retaining marginalized and underrepresented staff and faculty at all levels of the institution.
- *Objective #2*—Develop inclusive onboarding, mentorship, and support services that promote organizational learning, holistic development, and positive mental health.
- *Objective #3*—Develop equitable pathways for professional growth and promotion/tenure, including recognizing and rewarding staff and faculty contributions toward advancing DEI strategic outcomes and goals.

Along with faculty and staff development, diversity and inclusion are critical cross-cutting enablers. WPI recognizes the need to attract the best and brightest through the talent acquisition process, and to also retain capable, motivated, and dedicated employees to carry out the university's mission. To support this work, as part of the 2017 reorganization of Talent and Inclusion, WPI invested in several new positions, including a compensation analyst and a talent acquisition specialist. These two roles help ensure that hiring processes are equitable and effective and are committed to external benchmarking to remain competitive and pay fairly through the College and University Professional Association (CUPA). Results of the faculty benchmarking study, conducted every three years, are reported to the general faculty body. For faculty salaries, a target of median salaries falling within 85% to 115% of the median of WPI's benchmarked schools has been achieved; where necessary, individual salaries that are below 85% of the median have been adjusted, if appropriate. Both internal and external factors are considered when making pay decisions; the external market consists of both academic institutions and general industry employers with whom it competes for employees with similar skills and experience.

WPI is committed to being fair, flexible, competitive, and forward-thinking when designing and implementing faculty and staff compensation practices. Upon hire, terms of employment are detailed in offer letters and faculty appointment letters. Compensation programs are designed to: ensure fair and consistent pay practices and compliance with applicable federal and state laws and regulations by mirroring the university's commitment to affirmative action and equal opportunity; ensure alignment with the university's overall business and educational strategies and goals in order to attract and retain key faculty and staff; allow the university to offer competitive salaries and benefits relative to the labor markets in which it recruits; and operate within the university's budget and financial resources.

WPI plans for the successful attainment of student learning outcomes and success measures by hiring a diverse group of faculty members who are demonstrated experts in their fields. Annually, once new positions are approved, the university conducts national searches for faculty at the tenure/tenure-track level and those on the research and teaching tracks. The Diversity Advocate Program was developed as part of the faculty hiring process to enhance WPI's commitment to diversity. At the commencement of a faculty search, the search committee advertises the position in publications focused on diverse populations. Faculty members are encouraged to promote positions to professional contacts from a wide range of professional and cultural backgrounds. Each search committee is required to document efforts towards reaching diverse populations and is encouraged to interview candidates from underrepresented groups that meet the criteria for the position.

The commitment of WPI employees to the university's overall success and mission is aligned through the annual performance management program; in this way, individual goals are linked to the university's strategic and operational goals. Through the work of WPI's compensation specialist, in partnership with hiring departments, WPI supports a fair, equitable, and consistent approach to compensation for all employees, and recognizes individual results using an annual merit review process based on performance and the achievement of goals. WPI acknowledges employee contributions by granting the highest increases to individuals with outstanding job performance. WPI provides competitive overall compensation packages, including competitive base salaries, generous benefit offerings for employees and dependents, retirement savings opportunities, and wellness programs. Due to COVID-19, WPI paused the employee merit pool and promotions and reduced 403(b) contributions. Post-pandemic, salary increases have been reinstated as part of the performance appraisal process and the institution is committed to examining 403(b) contributions to remain competitive.

Also post-pandemic, WPI recognizes that the nature of work has changed. In response, WPI is piloting a [Remote and Flexible Work Policy](#) to permit many ways of working and support employee retention and satisfaction, while still ensuring that WPI achieves its operational goals. When the policy is enacted, it will allow WPI to think strategically and creatively about space utilization.

Learning and Development

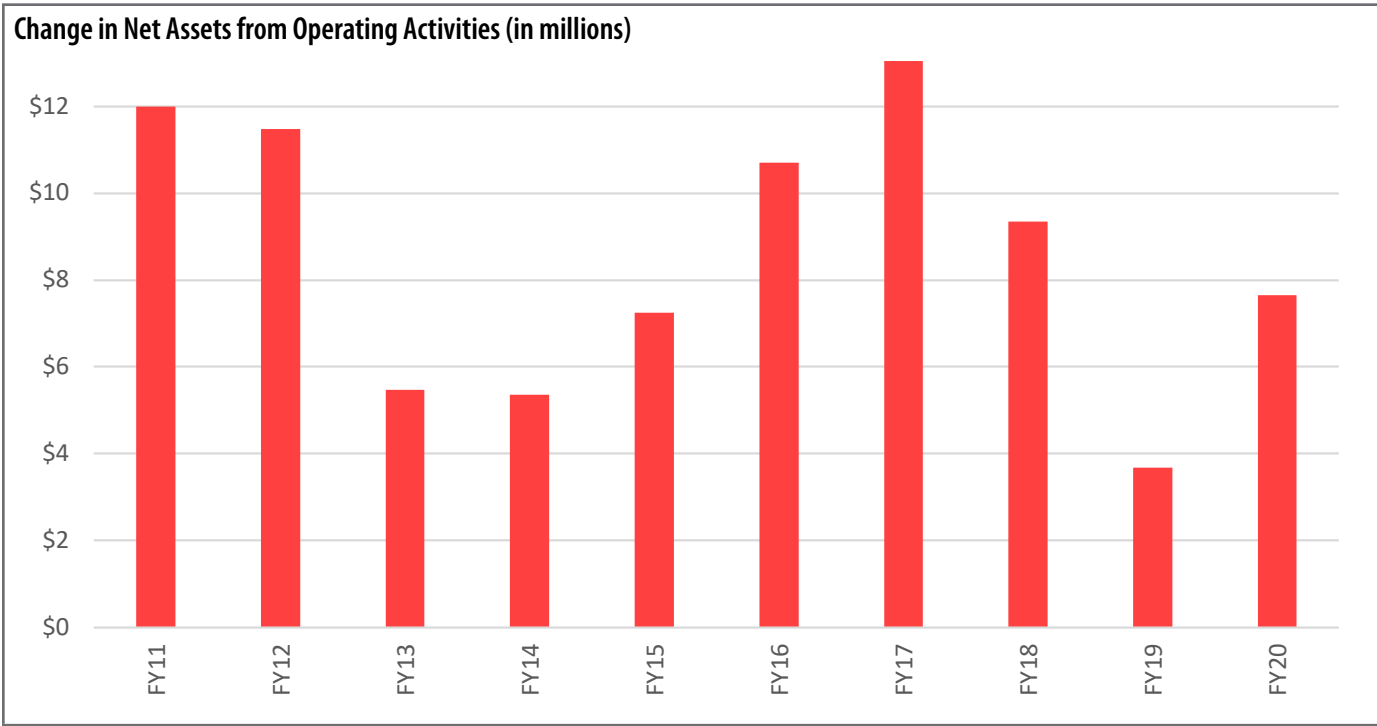
WPI offers several [learning and development](#) opportunities. As part of a consortium of local higher education institutions, WPI employees may benefit from the offerings at other universities. Each division is provided with annual funding to support professional development. Staff and faculty may also access learning resources through [WPI's Learning Academy](#), an online platform with a robust repository of videos, books, audiobooks, white papers, and journals. Employees are assigned to annually complete training on such topics as FERPA, personally identifiable information, and sexual harassment.

Responsibility for professional development of faculty is shared by multiple offices: the Morgan Center for Teaching and Learning (pedagogical development, teaching innovation, mentoring programs for early- and mid-career faculty); Office of Sponsored Programs and the Research Solutions Institute (research and proposal development); and the Gordon Library (teaching and research). The Technology for Teaching and Learning team within the Information Technology Division includes instructional designers who focus on faculty professional development. Student Affairs provides regular training to identify students in distress. Since 2018, Talent and Inclusion and Academic Affairs have jointly funded an institutional membership in the National Center for Faculty Development and Diversity.

Financial Resources

Financial Condition

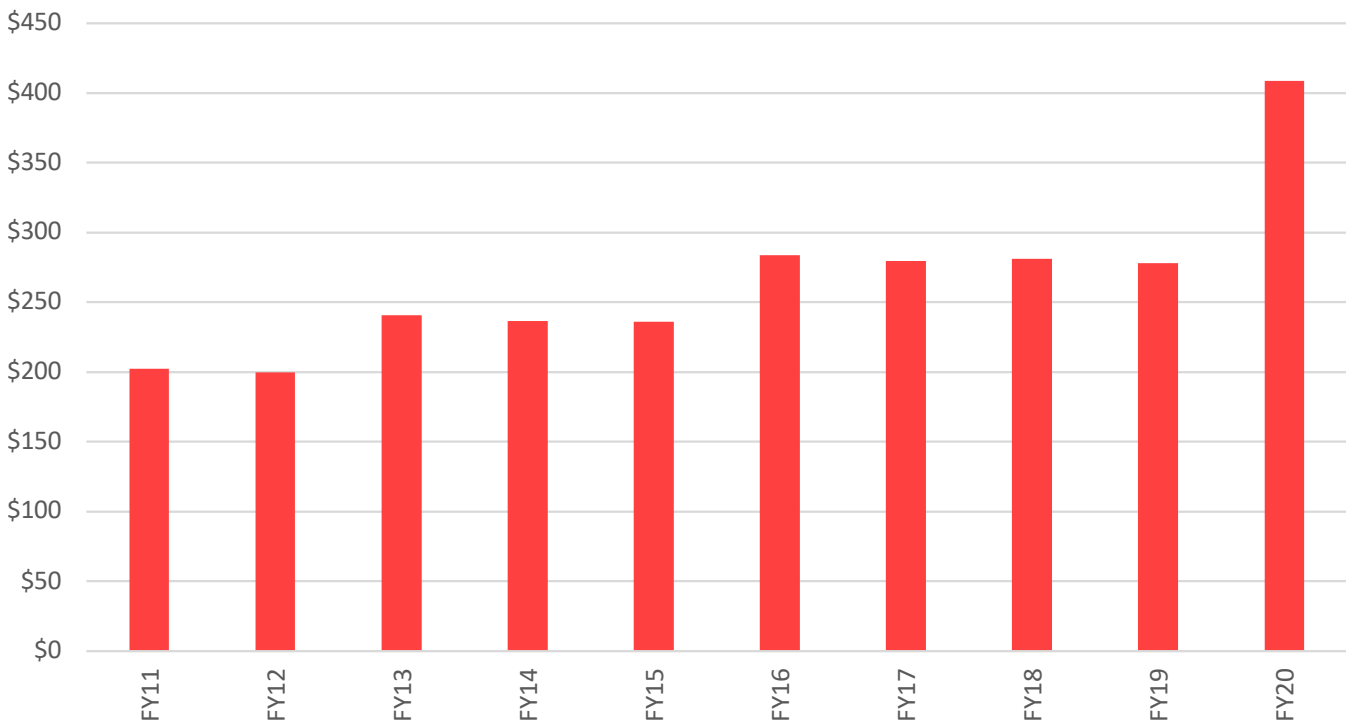
Having effectively managed its resources through a number of difficult economic periods, WPI is in a solid financial position and has generated operating surpluses since 2004 (see below for details on the most recent 10 years). Sixteen consecutive years of operating surpluses have provided significant resources to support the goals and objectives of strategic planning. In 2019, after 18 months of internal review involving a wide selection of stakeholders, the Board of Trustees approved a five-year institutional and capital plan. The plan called for growth in undergraduate and graduate enrollment and financial aid support, moderate increases in tuition, growth in research, a comprehensive fundraising campaign, and new academic and residential facilities. The pandemic led WPI to re-evaluate capital plans and assess evolving market conditions. WPI took aggressive action to reduce spending, including a reduction in 403(b) contributions and no employee salary increases. It redirected savings toward pandemic-related support, allowing the institution to continue offering its program in hybrid mode and to finish the fiscal year with a surplus. While campus housing was de-densified, the use of a local hotel for student housing offset much of the potential loss in auxiliary revenue. WPI is currently assessing its Five-Year Institutional Plan in light of the pandemic and pending projections of the long-term impact on residential and on-campus living and learning.



Total Net Assets (in millions)



Total Outstanding Debt (in millions)

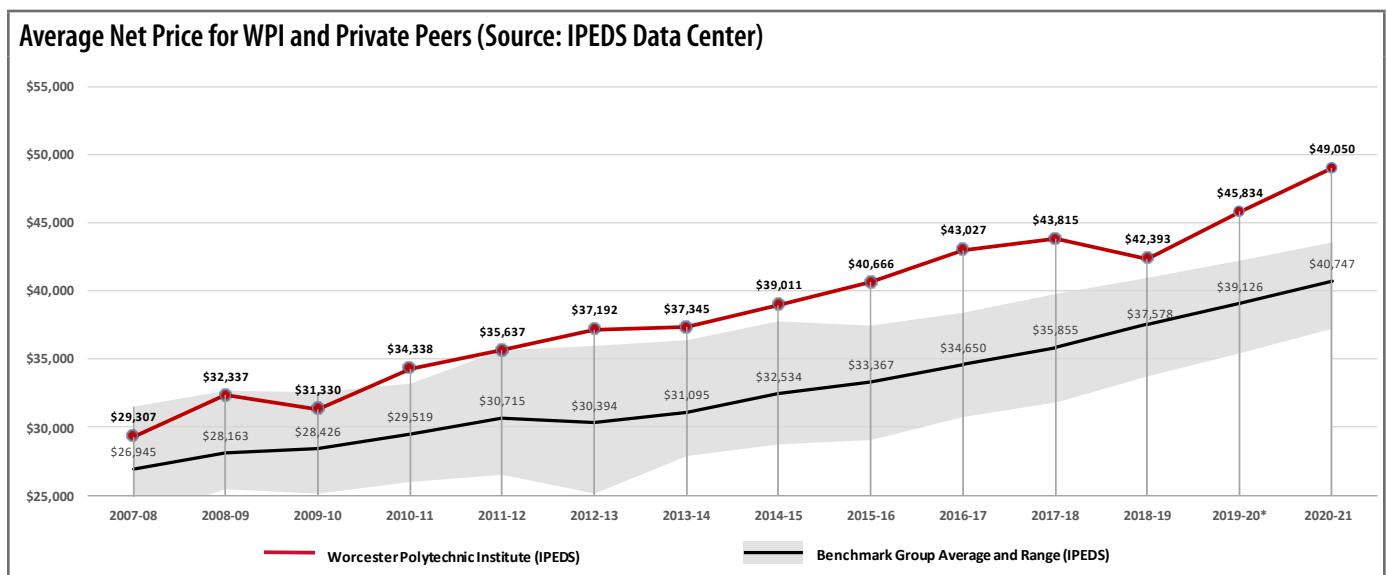


Both Moody's Investor Services and Standard & Poor's agencies have strong underlying ratings for WPI. In 2019, consistent with the Five-Year Institutional Plan, the university issued \$125 million of tax-exempt debt to partially fund a new academic building and various deferred maintenance projects; it planned to issue another \$75 million in FY 2020. The university's outstanding debt has increased from \$202 million in 2011 to \$409 million in 2020. In 2020, the ratings evaluations considered the \$200 million of planned debt, which resulted in a downgrade by Moody's and Standard from A1 to A2 and by Poor's from A+ to A. WPI received stable outlooks with an expectation that that over a two-year outlook, WPI will generate close to balanced operations and maintain current enrollment trends, improving the available resources relative to pro forma debt, consistent with the rating category.

In 2019 the Investment and Budget and Finance committees of the Board of Trustees approved a debt policy that provides a framework within which decisions are made concerning the use, management, and reporting of debt. Through this policy, several debt, expense, and cash flow ratios used by the rating agencies are considered annually along with any debt consideration. While WPI's overall aim is to maintain "A" category or better ratings, it recognizes that to achieve the strategic goals it may issue debt that causes one or more of the metrics to exceed its applicable range. Projected positive results for FY 2021 indicate that all metrics will improve.

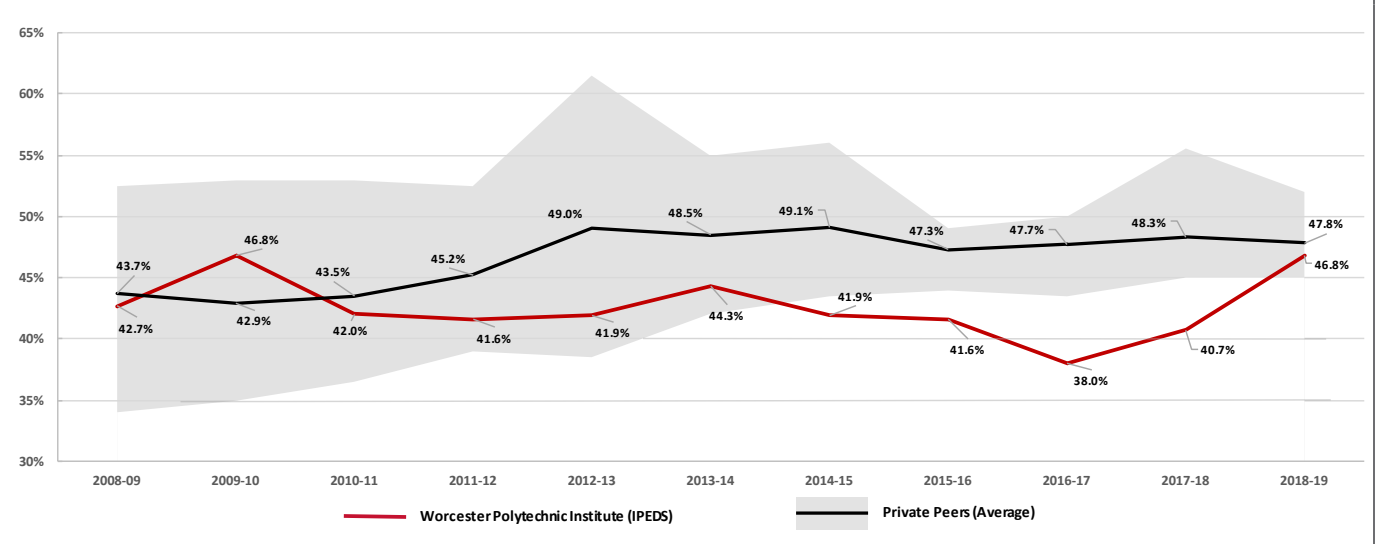
Educational Affordability

WPI has long been committed to offering an accessible and affordable education. The trustees regularly review admissions and financial aid metrics to assess short-term outcomes and long-term trends. Need-based and merit-based aid are used fully as a means of enrolling qualified and diverse students. Since 2018, the university has become increasingly aware of price sensitivity and growing competition in tuition discounting. Many studies, including WPI's annual admitted student questionnaire (ASQ), have demonstrated increased price sensitivity of prospective students and families, which has broadened WPI's list of competitor institutions. More than half of WPI's non-enrolling accepted students enroll at a public university. While WPI is competitive based on published price (tuition and fees) when compared to its private peers, it maintains the highest average net price for families.

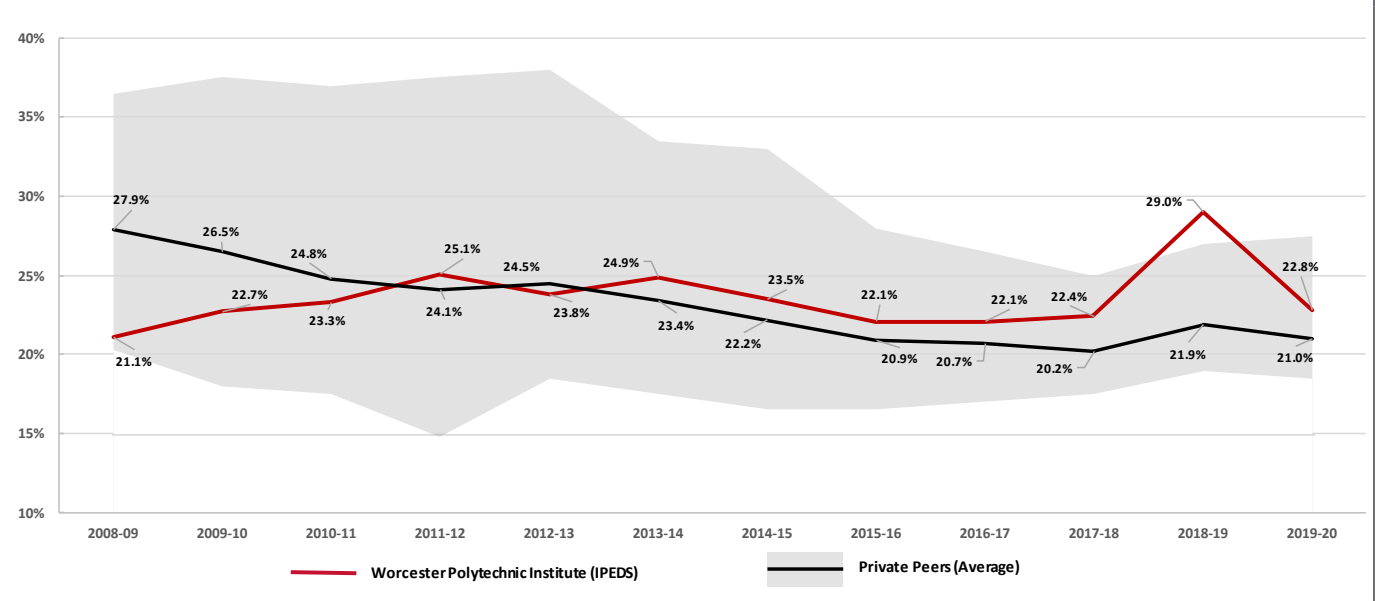


WPI's discount rate has been among the lowest in this peer set since 2010; it was the absolute lowest from 2014 to 2017. In 2016, its discount rate was 9.7% lower than the private peer set's average; as a result, the admit rate was 48% and the yield was 22.1%. Two years later, when WPI was within 1% of the average, it achieved a record-low admit rate (41.6%) and its highest yield (29.1%) since 2002. Moving forward, WPI continues to look at ways to address price sensitivity and provide a net price to families that will support enrollment and institutional goals. As articulated in the strategic plan, financial aid and, more specifically, institutional accessibility, is a critical strategic initiative. In the coming years, WPI will be adjusting financial aid policy and practices to ensure that it continues to provide a competitive net price while also adjusting for demographic changes domestically and internationally and an increasingly competitive enrollment market.

First-Year Discount Rate for WPI and Private Peers (Source: IPEDS Data Center)



First-Year Yield for WPI and Private Peers (Source: IPEDS Data Center)



Financial Management

Pursuant to [WPI's Bylaws](#), various trustee standing committees provide oversight for WPI's finances, budget, internal controls, and risks. The Board formally monitors WPI's fiscal condition through the Board's Budget and Finance Committee, whose current chair is currently an experienced CFO. Fiscal expertise on the Board remains strong, with more than half of the trustees having held senior leadership roles in major corporations. In addition, the Board's Audit and Risk Committee regularly reviews the institution's systems of enterprise risk management, external audits, regulatory compliance, internal controls, and contingency management. The Board's Audit and Risk Committee regularly reviews the WPI Risk Register. Lastly, the Board's Investment Committee oversees WPI's investment policies and manages the investment of the endowment.

Under the leadership of the Executive Vice President and Chief Financial Officer, the university has strengthened financial management in the areas of budget and planning, controller, and financial services, with well-qualified professionals filling these roles. The EVP/CFO had chosen to retire this year; the replacement EVP/CFO joined the team starting in August.

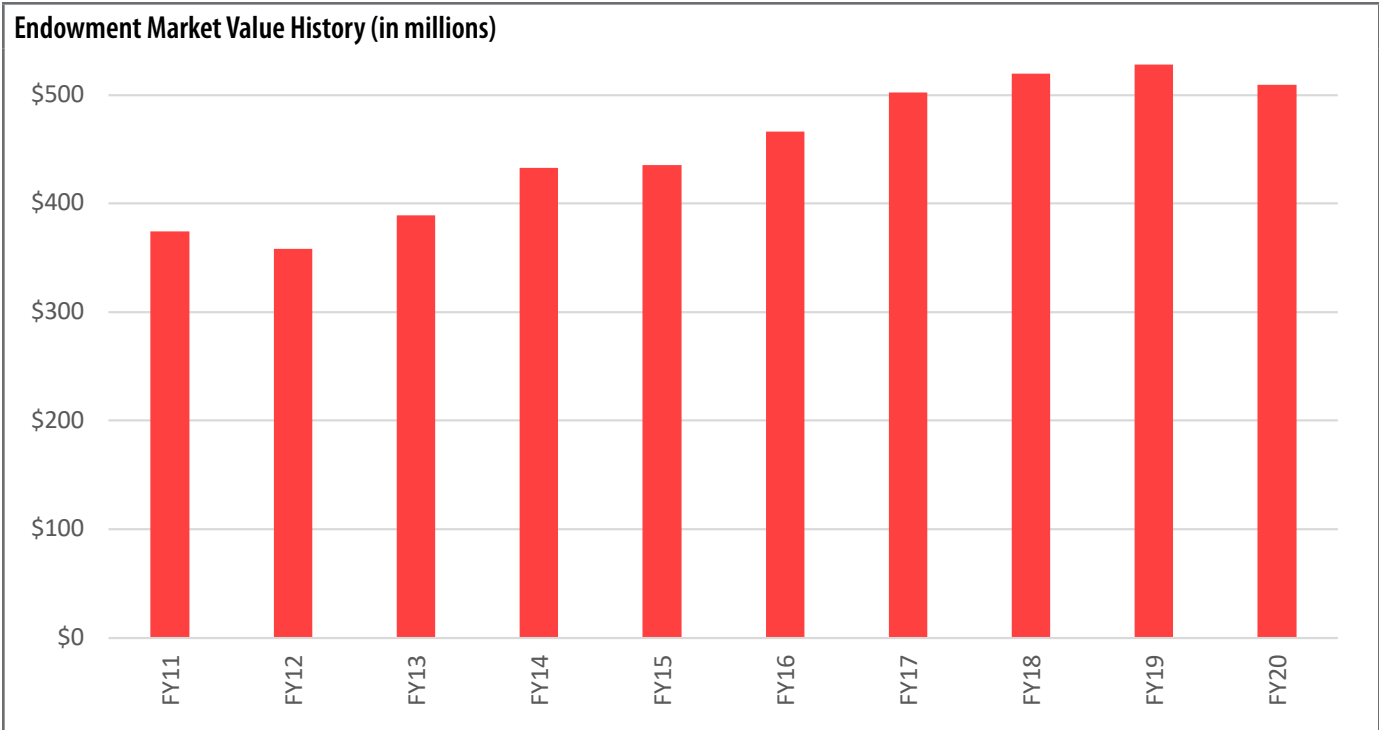
The university, strengthened by the Board’s Audit Committee oversight, meets or exceeds the timeliness requirements of its financial reporting and the breadth of its financial disclosures. The fiscal year audit and WPI’s Report on Federal Awards in Accordance with OMB Uniform Guidance is performed by PricewaterhouseCoopers (PWC); both documents are reviewed by the Audit Committee. WPI has engaged with the Boston Consortium to act as internal auditors and report directly to the Audit Committee. No significant deficiencies or material weaknesses have been identified. Additionally, WPI maintains a Business Ethics Policy to provide the community with a way to anonymously and confidentially report activities that may involve unethical or inappropriate activity, in violation of WPI’s established policies. The Audit Committee is updated on any reports submitted to Ethics Point.

WPI maintains and regularly updates its various fiscal policies. Policies are available to the community on the website of the Controller’s Office and through the Administrative Policies Group. A directory of WorkAids and procedures are available for Workday support on the WPI Hub. Training is provided through the WPI Change Management team and subject matter expert training.

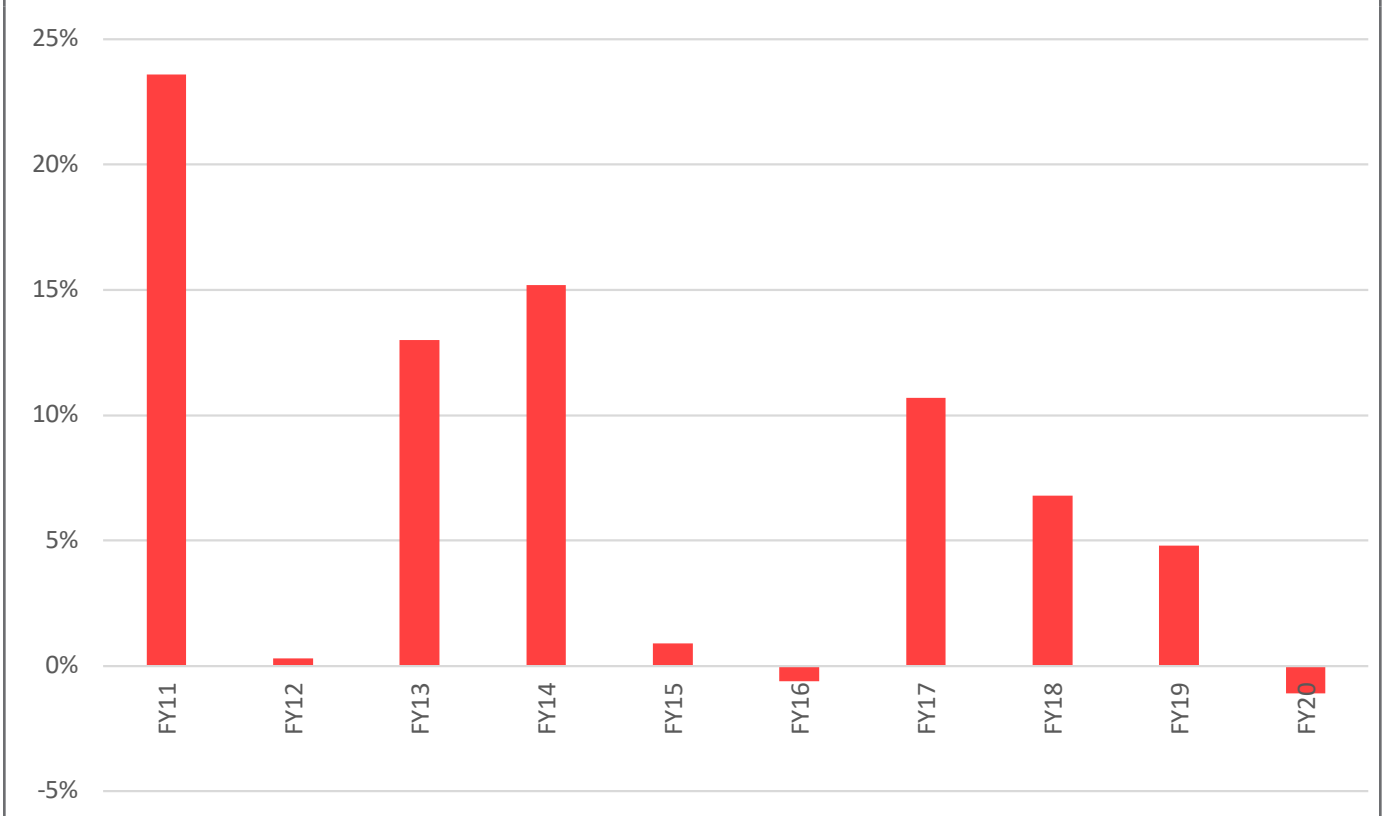
Budget Planning and Analysis

Major budgetary and resource allocation decisions and planning are considered within the context of the Strategic Plan and the five-Year Institutional Plan. Macroeconomic and industry trends, along with information regarding peer institutions (AITU and schools with cross-application history), are factored into the planning process. In 2019, WPI embarked on an initiative called WPI Forward. The institution engaged the services of a consulting group to conduct an administrative efficiency assessment, aimed at identifying approximately \$12 million to reallocate to strategic priorities. The result was nine projects that are at various stages of implementation (these are detailed in Standard Two).

The university’s operating budget remains tuition dependent; undergraduate tuition net of financial aid provided approximately 57% of total revenues in FY 2020; graduate tuition provided approximately 13%, for a combined 70% of total revenue. The endowment’s support of the operating budget has remained stable at approximately 10% of total revenue; it currently provides approximately \$24 million per year. As of June 30, 2020, the endowment value was \$484 million, reflecting a pandemic-related market dip. It has since recovered to a historic high of \$582 million as of the end of the 2020 calendar year. The FY 2021 budget assumed a 5% decline in undergraduate enrollment and a 20% decline in graduate revenue. The current projection is that undergraduate enrollment will exceed pre-COVID targets and graduate enrollment will be roughly 6% below pre-COVID revenue targets due to international travel restrictions. WPI continues to work to diversify revenue streams by exploring growth in graduate programs.



Endowment Historical Performance



Under the supervision of the Board's Investment Committee and supported by an independent investment consultant, WPI has implemented a broadly diversified asset allocation policy that is expected to provide at least the spend rate with an appropriate level of risk. Actual performance is reviewed monthly and at Investment Committee meetings, where a full discussion of the portfolio takes place based on appropriate peer and industry benchmarks. Each meeting includes a review of overall portfolio liquidity. Overall average annual performance has been above peer medians (34th percentile) for the 10 years ended June 30, 2020. WPI's endowment spending rate in 2012 was 5.3%. The institution gradually reduced the draw rate to the current 4.7% by 2018; this is more consistent with industry best practices for preserving buying power for future generations.

Budget planning at WPI is conducted within the context of a five-year rolling operating budget model, along with an annual operating and capital budget development cycle. Using the current year operating budget and latest projection as a base, revenue and expenditure assumptions and parameters are input for the following four years. An operating contingency of \$3 million has been included in the operating budget since FY 2011. In FY 2021, in response to uncertainty of the pandemic, two reserves were created in lieu of a general contingency to address financial aid and COVID-19-related expenses; these totaled \$10.5 million. The five-year model is regularly updated based on the latest projections.

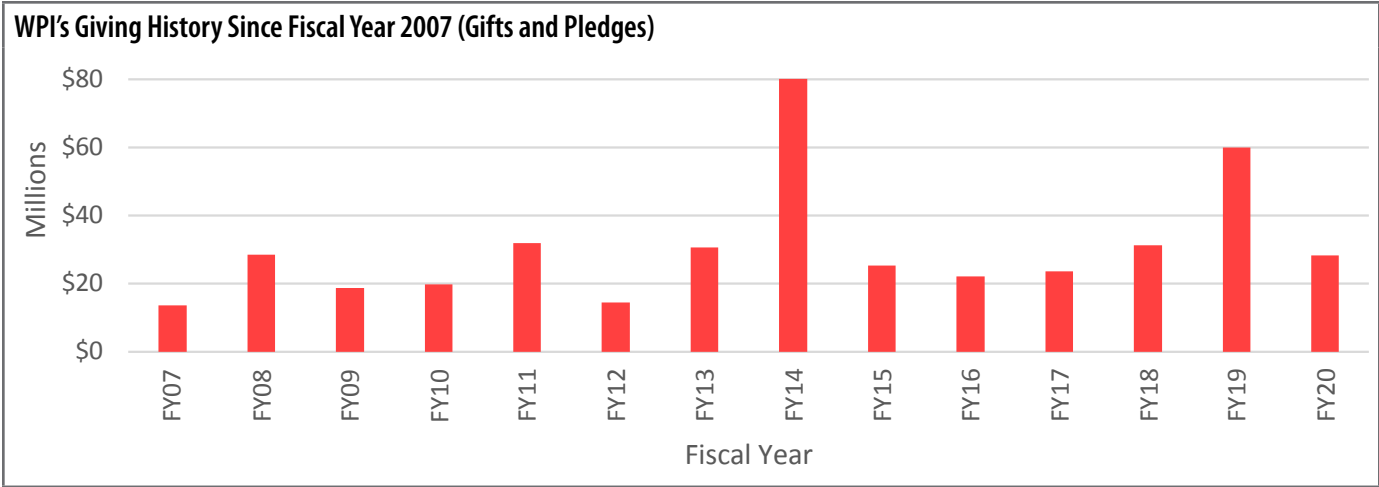
The annual operating and capital budget development cycle begins in the fall under the leadership of the President along with the Executive Vice President and Chief Financial Officer through the Office of Budget and Planning. The October meeting of the Board of Trustees' Budget and Finance Committee includes a full review of the prior fiscal year operating and capital budget results, along with an update on any budgetary issues for the current fiscal year and discussion of goals and objectives of strategic planning and the Five-Year Institutional Plan. Macroeconomic and industry trends are also considered, as these influence financial parameters and assumptions, such as tuition increases, endowment draw, and salary increases. The annual budget development process is designed to include a broad constituency of the university and to elicit programmatic, administrative, and physical resource needs. As such, divisional leaders work closely with their teams to develop formal requests that define resource needs and redeploy resources to further institutional goals. Major budget parameters and assumptions are also reviewed with the faculty Committee on Financial and Administrative Policy.

At the February Board meeting, the Facilities and Infrastructure Committee and the Budget and Finance Committee review major operating budget parameters and assumptions and the capital budget. The detailed line-item operating budget is presented in May to the Budget and Finance Committee, which in turn recommends approval to the full Board. For FY 2023, the budget process will be moved to the October Board meeting to better coordinate with financial aid decision timing.

The Budget Office monitors and analyzes departmental budgets and overall university revenues and expenses throughout the year. University budget managers can access their budgets online and are supported by the Office of Budget and Planning, which offers training in budget development, analysis of operating activity compared to budget, and resolution of budget issues. At the end of each quarter, each division head does a budget review to discuss variances and forecasts, which are included in year-end projections reported to the Board’s Budget and Finance Committee.

Advancement and Fundraising

WPI’s philanthropy and research funding priorities are closely tied to strategic planning. Over the last 10 years, WPI completed a campaign and is currently launching a new campaign, both tied to strategic plans. In 2008, WPI launched *if...The Campaign to Advance WPI*, with a goal of \$200 million to support student financial assistance, academic programs, and campus facilities. In 2015, during the university’s sesquicentennial, the campaign closed at just over \$248 million, nearly 25% above the goal, resulting in \$110 million for student financial aid, \$36 million for academic support, \$52 million for facilities, and \$50 million unrestricted. Additionally, a new benchmark for annual fundraising increased average annual dollars from \$8 million to \$12 million (pre-campaign) to a new base-level of \$25 million post-campaign. The campaign resulted in WPI’s first eight-figure gift and concluded with 45 gifts of \$1 million or more. It also produced record numbers in senior class giving totals and participation and established a robust planned giving pipeline that is projected to result in approximately \$70 million over the next 20 years.



Beyond These Towers: The Campaign for WPI

In July 2017, WPI embarked on a feasibility study to demonstrate support for a comprehensive fundraising campaign that would include elements of WPI’s strategic plans, as well as a vision for the future of the university. In March 2018 the Board of Trustees approved a comprehensive campaign of \$500 million: \$350 million in philanthropic fundraising and \$150 million in research funding. In February 2021, WPI began the third year of a quiet, or leadership, phase with \$293 million (59%) raised towards the goal. For FY 2021, WPI reached \$323 million or 65% of the goal. Campaign governance is led by the Vice President of University Advancement, the Associate Vice President and Campaign Director, and the Board of Trustees’ Campaign Executive and Advancement committees. With guidance from WPI’s Campaign Counsel, they will be responsible for setting the date of the public launch, currently expected to be in October 2021, as well as finalizing the comprehensive goal and the timeframe prior to launch.

All gifts are guided by WPI’s Advancement Gift Acceptance Policy, which ensures that they support donor intentions. The policy also allows WPI to decline any proposed gift that is deemed to be not in the best interests of WPI or that is inconsistent with its mission, program, or strategic goals.

Information, Physical, and Technological Resources

The planned growth of the university has prodded investment in facilities, human resources, information services, and infrastructure.

Technological Resources

The Information Technology (IT) Department provides a wide variety of systems and services to support the university's academic mission. With an annual operating budget of \$16 million, IT employs 86 staff members and 35 students, who are organized into the units below.

- The Change Management, Training, and Communications team provides outreach to ensure community members are well-informed and supported.
- Enterprise Information Systems provide the technical support for WPI's enterprise information system and the growing number of integrated third-party products.
- IT Infrastructure provides stable and secure platforms for hosting software and integrating applications and services on campus, as well as those hosted off-site. This team manages core-computing services, computer laboratories, email infrastructure, identity management, database administration, data storage, data backup, and off-site secure storage. It also includes the Technology Helpdesk, located in the Gordon Library. The team oversees the network backbone, server room infrastructure and connectivity, all internal and external fiber and copper communications infrastructure, Internet and telecommunications connectivity, card access, and WPI's off-site disaster recovery site.
- Information Security focuses on reliability/resilience, integrity, and privacy across WPI's key computing, networking, and information resources. The focus of WPI's security program is industry standard security controls that align with the NIST Cybersecurity Framework (CSF) and CIS, the Critical Security Controls.
- Academic and Research Computing (ARC) maintains state-of-the-art equipment and facilities, including computing infrastructure, laboratories and facilities, and software.
- The Academic Technology Center (ATC) supports teaching and learning endeavors. A team of instructional technologists and media specialists support the learning management system (Canvas, since 2016) and many related teaching tools. Staff in the ATC also design, install, and maintain the AV equipment in classrooms, tech suites, and conference rooms, and the audio-visual hardware needed to support the Global Project Program.

Significant Changes and Investments: Over the last 10 years, with the rise of remote learning and with increasing technology options, IT has made numerous resources available to the community.

- WPI transitioned the learning management system (LMS) from Blackboard to Canvas in 2016.
- As part of a four-year Enterprise Transformation Project, WPI launched the implementation of Workday for human capital management (HCM) and finance in 2019 and Workday Student in 2021. The university also implemented a new Identity and Access Management system, built a new data analytics repository, and upgraded its eProjects system to a modern, web-based system that has automated many processes around project-based learning and saved hundreds of hours of work. Fifteen employees were hired to work on the ETP Project. Four were temporary hires and have since left the project. Seven employees have or will be moved to permanent IT operating positions through attrition and retirements. Four new permanent positions were created in IT as part of the FY 2022 operating budget.
- WPI engaged external vendors to perform a full security assessment in 2018 and again in 2021. IT also performed an internal security assessment in 2020. Results of these assessments were published and communicated to university leadership. Using the NIST framework, WPI scores 68% against CIS controls, with a goal of reaching 90% over the next year. WPI uses a variety of security tools and independent assessments to assist in implementing the controls, remediating the gaps, and achieving the target profile that helped move to a more secure state.
- IT supports over 200 academic software applications and productivity tools that are available to the WPI community 24/7 in computer labs. These resources have expanded to meet the unique needs of computing-intensive academic programs such as Interactive Media and Game Development, Architectural Engineering, Data Science, and Robotics Engineering. On an annual basis, IT performs outreach to faculty and builds requests into the annual budget process. From a research perspective, IT continually measures key performance metrics to ensure there are enough resources for students and faculty, and then, through the annual capital process, makes adjustments and purchases new equipment, as needed.

- IT added ubiquitous remote access to WPI-hosted software and systems. The burden of cost for high-end workstations and high-bandwidth requirements has been reduced for students.
- In response to student and faculty feedback on the need for more online training, the ARC team has created an online, self-paced training library available to all students through Canvas.
- Based on feedback from faculty and academic leadership, ATC has expanded its services to incorporate new technologies that support on-campus, online, and hybrid courses with focus on collaboration tools to facilitate project-based coursework and universally accessible content. As part of this effort, all classrooms were equipped with lecture capture technology.
- The hiring of two additional instructional designers has allowed IT to work with faculty to convert courses to an online and/or a hybrid environment and to partner with the Morgan Center for Teaching and Learning to offer grants for teaching innovation and active learning.
- The Classroom Advisory Committee, consisting of faculty and staff from Academic Affairs, Facilities, and ATC, was formed in 2016 to address the design, installation, and maintenance of classroom spaces. Surveys conducted in 2017 and 2019 solicited faculty input on priorities for facility improvements to existing classrooms.
- Over the last two years, IT has also worked with WPI's Information Security, Research, and Compliance Committee and the Administrative Policy Group to create 10 new policies to safeguard and protect systems and information at WPI.

IT also leverages a 10-year capital plan model to forecast funding to support replacement cycles of existing technology infrastructure as well as new initiatives. The plan is adjusted as needed to accommodate changes in the technology landscape. The university's commitment to the information and technology needs of the campus is evident in the annual IT capital allocation. As part of its planning efforts, IT partners with the Provost through an Academic Technology Advisory Board. Consisting of key faculty, Academic Affairs staff, and IT staff, the advisory board identifies emerging technologies and develops a five-year technology plan. Recent priorities have included investment in high-performance computing, data science, artificial reality, and stackable credentials. This plan feeds into IT capital budget planning and strategic priorities to meet new academic program needs and academic initiatives (e.g., online programs). This coordinated approach has allowed IT to pursue strategic initiatives such as exploring augmented/virtual reality, 3D projection, and virtual tours into teaching and research.

Physical Resources

With more than 86 properties or parking structures, the WPI campus consists of over 95 acres in a mixed urban-residential area of Worcester, New England's second largest city. The Fifth-Year Interim Report identified effectiveness of space utilization and expanding space allocated to academic activities as a focus. The university conducted a space study in 2016 that suggested a need to focus on additional space allocations to support planned student and faculty growth. WPI also conducts regular assessment of space needs and space improvement through the annual planning and budgeting process. Academic, student life, and administrative units identify new space and space improvement needs, which are prioritized in importance to the institutional mission and balanced against available capital financial resources for the upcoming fiscal year. For example, the Student Government Association partnered with Facilities to conduct a study of available study space on campus. As a result, additional spaces were allocated. Needs that cannot be accomplished in the coming fiscal year may be reconsidered in the next fiscal cycle, resulting in steady progress in meeting the university's facility needs.

Significant investment in facilities over the past 10 years has focused on academic, research, and student space. In 2012 the Gateway II research building opened. The university leased 30,000 square feet in the building for several programs, including Fire Protection Engineering, The Business School, and the Biomanufacturing Education and Training Center, an industry collaboration organization. The 145,000-square-foot Sports and Recreation Center opened in 2012 to support athletics and recreation programs. The Park Avenue Garage and Athletic Fields were completed in 2013 to meet campus parking needs and provide multisport athletic fields. Also in 2013, the LEED Silver Certified Faraday Residence Hall opened, providing housing for 260 undergraduates.

In 2014 WPI completed an addendum to its Campus Master Plan. To meet growing academic and administrative space needs, the university leased and fit out space at 85 Prescott Street and 108 Grove Street for Robotics Engineering, University Advancement, and Information Technology. The Seaport facility, a space in Boston's seaport district for engaging with industry collaborators and to facilitate student project work in the city, opened in 2017. The 77,000-square-foot, mixed-use, LEED Gold Certified Innovation Studio/Messenger Hall opened in 2018 with new classrooms and teaching labs, makerspaces, space to support innovation and entrepreneurship and global projects, and a 140-bed residence hall. Around this time, WPI developed a Five-Year Capital Plan (2019-2023) to guide new building projects and renovations to ensure the university has sufficient and appropriate space to

deliver its mission. In 2019, 30,000 square feet of additional space was opened in Gateway II to support work in photonics, medical device research and development, and neuroscience. In 2020 the university created 25,000 square feet of research and support space for emerging fields of advanced manufacturing, robotics, and artificial intelligence in a nearby facility on Sagamore Road. That year also saw the start of construction of a 100,000-square-foot academic building, to open in 2022.

In addition to the new space created over the past 10 years, nearly 50% of the Five-Year Capital Plan established in 2018 (approximately \$125 million) is dedicated to reinvestment in campus buildings to renew and replace building and infrastructure systems and modernize and repurpose existing space with an eye toward sustainability, accessibility, and inclusivity. Funding for the \$278 million Five-Year Capital Plan comes from fundraising, issuance of debt, grants, and university reserves and operating budget support (the later increased from \$9.5 million in FY 2015 to \$11.2 since FY 2019). The changing nature of work at WPI in the wake of the pandemic provides a unique opportunity to creatively and strategically reconfigure space to meet the needs of a remote and in-person workforce.

Information Resources

WPI's Gordon Library fulfills its [stated mission](#) to enrich WPI and the global community, inspire and support research exploration and discovery, and provide user-centered spaces and innovative services and tools that anticipate and respond to WPI's changing information needs. The library provides WPI with access to a deep portfolio of essential research information resources. In recent years more than 56% of the library's operating budget has helped provide information access. The library emphasizes digital access, prioritizing access to digital full text for journal publications, ensuring immediate access around the globe to simultaneous users, and providing excellent support for hybrid online/onsite teaching and learning. The growth and enhancement of Digital WPI, WPI's global digital repository, shares two decades of WPI undergraduate project reports and graduate theses and dissertations.

The library maintains generous open hours. Access to comfortable and well-equipped study and meeting spaces is a major priority. Eleven team meeting rooms (tech suites) can be reserved online and are equipped with wireless screensharing software. In 2019 the library expanded its multimedia computing lab and created a digital scholarship lab equipped with touchscreen computers, scanners, and visualization technologies. New virtual teaching technologies installed in 2020-21 include hybrid virtual conferencing technology and a Revolution Lightboard in a dedicated studio for faculty use.

Library staffing was reorganized in 2017. The Research and Instruction and Collections Management teams were merged to form an integrated Library Academic Strategies department, which emphasizes delivering academic services through digital systems. The Access Services team became the Access and Outreach Services department.

The library regularly assesses preferences and needs for study spaces through annual student surveys and consultation with its student advisory group. The library collaborates with Facilities to support studies that will enhance the sustainability of the library as a campus building that sees high usage. As student FTE has grown, student use of the library has continued to outpace capacity. Data show high use of the library, with "more space to study" as one of the highest priorities identified by students in recent surveys. Some relief for students has come as other campus study spaces have come online (e.g., the Innovation Studio), and the library has led a collaboration that provides students with information via online apps about study locations across the campus. Several steps were taken to improve the library as a study facility. For example, in 2016 the university completed a multimillion-dollar HVAC project and created multiple ADA-accessible gender-inclusive restrooms throughout the building.

The library has two standing advisory groups. The first is a board of students who meet monthly with library staff to discuss library services and student priorities. The second, organized in collaboration with IT, is a joint eProjects-Digital WPI advisory group composed of faculty and academic leaders and experts who provide input on priorities and practices for these two systems, which help support and curate the life cycle of undergraduate projects and digitally archive graduate theses and dissertations.

After a temporary pandemic-related pause, the library will reset its plans for a series of exciting architectural projects over the next five years that will modernize and expand student study spaces. A five-year capital plan was drafted in fall 2019 and the library began working with advancement officers to identify and engage potential donors. In spring 2020 an initial set of architectural designs were completed for the first two major projects in this phased plan. Longer-term plans include projects that will enhance the sustainability and energy-efficiency of the 55-year-old Gordon Library building.

Emergency Preparedness and Disaster Recovery

The institution has a comprehensive emergency preparedness and disaster recovery program. With the hiring of a Director of Emergency Preparedness in 2018 and the creation of an emergency operations center, the institution was well-postured to manage challenges such as an eastern equine encephalitis outbreak in Massachusetts and the COVID-19 pandemic. The institution has detailed emergency preparedness documentation, monitors changing environmental conditions, builds after-action reports to encourage learning, and has adapted a systemic, codified approach to incident management that involves all campus sectors. This formalized approach has been leveraged for planned events (Commencement), low-impact incidents (inclement weather) and high-impact emergencies (the pandemic). In response to the pandemic, in March 2020 the President created the Coronavirus Emergency Response Team (CERT), which had continued to meet, develop policies, and determine actions as the pandemic has evolved.

PROJECTIONS AND ASPIRATIONS FOR THE FUTURE

- WPI will continue to develop, refine, and implement the five-year sustainable financial and capital model to ensure that adequate resources are available to support and enhance institutional priorities. WPI will continue to be mindful of its debt capacity at its current ratings levels in its future planning.
- In the immediate future, the long-term impact of COVID-19 will be incorporated into the next Five-Year Institutional Plan and Strategic Plan. This includes strategically restoring the budget reductions required to offset the costs related to the pandemic and using this new base to forecast the next four years with priorities that include increased financial aid, restoration of merit pools, reset of the 403b employer contribution, funding for the new academic building support, and increased funding for deferred maintenance.
- WPI will review and adjust its financial aid policy and practices to ensure that it continues to provide competitive net price while also adjusting for demographic changes domestically and internationally, as well as an increasingly competitive enrollment market.
- WPI will work to achieve its DEI Strategic Framework goals to recruit and retain diverse talent.
- IT will successfully complete the Enterprise Transformation Project with full implementation of Workday Student and associated ecosystems.
- WPI will pilot its new Remote and Flexible Work Policy and make appropriate space and training adjustments to support a flexible work environment with a multi-modal workforce.
- The comprehensive campaign will be re-evaluated considering current philanthropic trends, including increased research activities.
- IT will continue to identify technological efficiencies to support business processes, stackable credentials, global growth, and continued technology-use in teaching.

DATA FIRST FORMS

STANDARD 7: INSTITUTIONAL RESOURCES

Headcount of Employees by Occupational Category

The data reported on the IPEDS Human Resources Survey (Parts B and D1) for each of the years listed.

	3 Years Prior (FY 2018) Fall 2017			2 Years Prior (FY 2019) Fall 2018			1 Year Prior (FY 2020) Fall 2019			Current Year (FY 2021) Fall 2020		
	FT	PT	Total	FT	PT	Total	FT	PT	Total	FT	PT	Total
	Instructional Staff	396	82	478	400	98	498	419	94	513	408	73
Research Staff	41	0	41	41	0	41	37	2	39	38	4	42
Public Service Staff	0	0	0	0	0	0	0	0	0	0	0	0
Librarians	12	2	14	15	0	15	13	0	13	12	0	12
Library Technicians	1	0	1	3	2	5	3	2	5	3	2	5
Archivists, Curators, Museum staff	0	0	0	0	0	0	0	0	0	0	0	0
Student and Academic Affairs	11	1	12	17	0	17	16	0	16	14	0	14
Management Occupations	117	0	117	126	1	127	117	3	120	103	4	107
Business and Financial Operations	133	2	135	108	1	109	120	2	122	116	2	118
Computer, Engineering and Science	103	2	105	101	3	104	113	3	116	112	5	117
Community, Social Service, Legal, Arts, Design, Entertainment, Sports, and Media	93	1	94	122	3	125	125	2	127	115	1	116
Healthcare Practitioners & Technical Service Occupations	3	0	3	7	1	8	7	1	8	10	1	11
Sales and Related Occupations	7	0	7	0	0	0	0	0	0	0	0	0
Office and Administrative Support	136	8	144	155	5	160	150	3	153	141	1	142
Natural Resources, Construction, Maintenance	17	0	17	23	0	23	20	0	20	21	0	21
Production, Transportation, Material Moving	0	0	0	0	0	0	0	0	0	0	0	0
Total	1,165	99	1,264	1,212	116	1,328	1,242	121	1,363	1,184	99	1,283

Please enter any explanatory notes in the box below

IPEDS HR Component Summary; fall 2020 data; fall 2019 data corrected to match IPEDS update (PT instructional staff changed from 121 to 94).

STANDARD 7: INSTITUTIONAL RESOURCES

Statement of Financial Position/Statement of Net Assets

Fiscal Year ends - month & day: (06/30)	2 Years Prior (FY 2018)	1 Year Prior (FY 2019)	Most Recent Year (FY 2020)	Percent Change	
				2 yrs-1 yr prior	1 yr- most recent
ASSETS (in 000s)					
Cash and Short-Term Investments	\$65,569	\$39,646	\$45,848	-39.5%	15.6%
Cash held by State Treasurer				-	-
Deposits held by State Treasurer				-	-
Accounts Receivable, Net	\$7,690	\$12,260	\$12,515	59.4%	2.1%
Contributions Receivable, Net	\$7,896	\$9,124	\$23,741	15.6%	160.2%
Inventory and Prepaid Expenses	\$7,514	\$7,494	\$7,713	-0.3%	2.9%
Long-Term Investments	\$543,705	\$551,282	\$518,260	1.4%	-6.0%
Loans to Students	\$18,432	\$17,110	\$15,717	-7.2%	-8.1%
Funds held under bond agreement	\$377	\$378	\$92,185	0.3%	24287.6%
Property, plants, and equipment, net	\$347,653	\$370,538	\$433,529	6.6%	17.0%
Other Assets	\$18,295	\$17,061	\$14,869	-6.7%	-12.8%
Total Assets	\$1,017,131	\$1,024,893	\$1,164,377	0.8%	13.6%
LIABILITIES (in 000s)					
Accounts payable and accrued liabilities	\$31,837	\$32,633	\$39,140	2.5%	19.9%
Deferred revenue & refundable advances	\$13,053	\$10,117	\$14,743	-22.5%	45.7%
Due to state				-	-
Due to affiliates				-	-
Annuity and life income obligations	\$8,484	\$7,861	\$7,141	-7.3%	-9.2%
Amounts held on behalf of others	\$4,177	\$4,290	\$4,787	2.7%	11.6%
Long-term investments	\$281,097	\$278,150	\$408,886	-1.0%	47.0%
Refundable government advances	\$9,359	\$9,492	\$9,624	1.4%	1.4%
Other long-term liabilities	\$7,998	\$9,630	\$28,235	20.4%	193.2%
Total Liabilities	\$356,005	\$352,173	\$512,556	-1.1%	45.5%
NET ASSETS (in 000s)					
Unrestricted net assets					
Institutional	\$307,008	\$322,876	\$299,833	5.2%	-7.1%
Foundation				-	-
Total	\$307,008	\$322,876	\$299,833	5.2%	-7.1%
Temporarily restricted net assets					
Institutional	\$134,608	\$128,976	\$126,924	-4.2%	-1.6%
Foundation				-	-
Total	\$134,608	\$128,976	\$126,924	-4.2%	-1.6%
Permanently restricted net assets					
Institutional	\$219,510	\$220,868	\$225,064	0.6%	1.9%
Foundation				-	-
Total	\$219,510	\$220,868	\$225,064	0.6%	1.9%
Total Net Assets	\$661,126	\$672,720	\$651,821	1.8%	-3.1%
TOTAL LIABILITIES and NET ASSETS	\$1,017,131	\$1,024,893	\$1,164,377	0.8%	13.6%

Please enter any explanatory notes in the box below

Increase in other liabilities for FY20 is due to the addition of lease liabilities from adopting ASU 2016-02 on a prospective basis.

STANDARD 7: INSTITUTIONAL RESOURCES

Statement of Revenues and Expenses

Fiscal Year ends - month& day: (06/30)	3 Years Prior (FY 2018)	2 Years Prior (FY 2019)	Recently Completed Year (FY 2020)	Current Year (FY 2021 Estimate)	Next Year Forward (FY 2022 Projected)
OPERATING REVENUES (in 000s)					
Tuition and fees	\$251,343	\$269,881	\$281,208	\$292,045	\$300,806
Room and board					
Less: Financial aid	-\$80,217	-\$90,159	-\$96,602	-\$105,127	(\$108,281)
Net student fees	\$171,126	\$179,722	\$184,606	\$186,918	\$192,526
Government grants and contracts	\$27,328	\$37,127	\$37,663	\$38,743	\$39,905
Private gifts, grants and contracts	\$7,938	\$7,976	\$20,075	\$17,525	\$18,051
Other auxiliary enterprises	\$29,641	\$32,846	\$25,213	\$26,703	\$27,504
Endowment income used in operations	\$23,384	\$22,764	\$23,351	\$25,264	\$26,022
Other revenue: Other educational activities	\$3,029	\$4,040	\$2,825	\$998	\$1,028
Other revenue: Other investment Income	\$2,780	\$2,323	\$1,776	\$735	\$757
Other revenue	\$4,838	\$5,389	\$6,481	\$4,846	\$4,991
Net assets released from restrictions					
Total Operating Revenues	\$270,064	\$292,187	\$301,990	\$301,732	\$310,784
OPERATING EXPENSES (in 000s)					
Instruction	\$120,809	\$131,278	\$130,486	\$116,394	\$119,886
Research	\$25,403	\$31,137	\$32,802	\$36,523	\$37,619
Public Service	\$12,180	\$12,514	\$13,066	\$11,292	\$11,631
Academic Support	\$50,464	\$56,102	\$57,378	\$59,614	\$61,403
Student Services	\$23,612	\$25,747	\$26,283	\$31,859	\$32,814
Auxiliary enterprises	\$28,253	\$31,732	\$29,185	\$29,776	\$30,670
Depreciation (if not allocated)					
Other expenses			\$5,130		
Total Operating Expenditures	\$260,721	\$288,510	\$294,330	\$285,458	\$294,022
Change in net assets from operations	\$9,343	\$3,677	\$7,660	\$16,274	\$16,762
NON OPERATING REVENUES (in 000s)					
Investment return	\$9,336	\$752	-\$28,806	\$119,723	\$30,393
Gifts, bequests, and contributions not used in operations	\$2,591	\$9,873	\$9,560	\$7,645	\$7,874
Other: Gains on beneficial interests in trust	\$798	\$354	-\$1,853	\$4,796	\$4,940
Other: change in value of split-interest agreements	-\$518	-\$231	\$142	-\$53	(\$55)
Other: Losses on interest rate agreements	\$1,095	-\$2,831	-\$3,193	\$1,024	\$1,055
Other: Losses on disposal of land			-\$4,409		
Other: Loss on extinguishment of debt	-\$4,184				
Net non-operating revenues	\$9,118	\$7,917	-\$28,559	\$133,135	\$44,208
Income before other revenues, expenses, gains, or losses	\$18,461	\$11,594	-\$20,899	\$149,409	\$60,970
TOTAL INCREASE/DECREASE IN NET ASSETS	\$18,461	\$11,594	-\$20,899	\$149,409	\$60,970

STANDARD 7: INSTITUTIONAL RESOURCES

Statement of Debt

FISCAL YEAR ENDS month & day (06/30)	3 Years Prior (FY 2018)	2 Years Prior (FY 2019)	Recently Completed Year (FY 2020)	Current Year (FY 2021 Estimate)	Next Year Forward (FY 2022 Projected)
Long-term Debt					
Beginning balance	\$279,430	\$281,097	\$278,150	\$408,886	\$407,727
Additions	\$80,342	\$1,960	\$136,439	\$1,670	\$1,670
Reductions	(\$78,675)	(\$4,907)	(\$5,703)	(\$2,829)	(\$2,926)
Ending balance	\$281,097	\$278,150	\$408,886	\$407,727	\$406,471
Interest paid during fiscal year	\$10,674	\$10,946	\$10,772	\$11,030	\$16,793
Current Portion	\$4,324	\$4,637	\$4,841	\$4,966	\$4,654
Bond Rating (Moody's)					
	A1 Stable	A1 Negative	A2 Stable	A2 Stable	A2 Stable
Debt Service Coverage Operating Income / (Annual Interest + Current Portion of Debt)					
	0.62	0.24	0.49	1.02	0.78
Debt to Net Assets Ratio Long-term Debt / Total Net Assets					
	0.43	0.41	0.63	0.51	0.47
Debt to Assets Ratio Long-term Debt / Total Assets					
	0.28	0.27	0.35	0.31	0.30
<p>Debt Covenants: (1) Describe interest rate, schedule, and structure of payments; and (2) indicate whether the debt covenants are being met. If not being met, describe the specific covenant violation (i.e., requirement of the lender vs. actual achieved by the institution). Also, indicate whether a waiver has been secured from the lender and/or if covenants were modified.</p> <p>Debt covenants exist on the letters of credit securing the 2008A and 2008B loans and the \$50M revolving loan. Covenants consist of maintaining a minimum expendable net asset ratio of .65 OR minimum debt service ratios of 1.25.</p>					
<p>Line(s) of Credit: List the institutions line(s) of credit and their uses.</p> <p>\$25M FY18 and FY19. \$50M in FY20. For general operations with no amounts outstanding in any period.</p>					
<p>Future borrowing plans (please describe).</p> <p>No plans currently as a result of the pandemic until further review of a residence hall and other capital projects is completed and budgeted. Upon completion and budgeting, certain portions of future capital work may be funded through debt. In the prior five-year plan, additional debt was forecasted.</p>					

STANDARD 7: INSTITUTIONAL RESOURCES

Supplemental Data

FISCAL YEAR ENDS month & day (06/30)	3 Years Prior (FY 2018)	2 Years Prior (FY 2019)	Recently Completed Year (FY 2020)	Current Year (FY 2021 Estimate)	Next Year Forward (FY 2022 Projected)
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NET ASSETS					
Net assets beginning of year	\$642,665	\$661,126	\$672,720	\$651,821	\$801,230
Total increase/decrease in net assets	\$18,461	\$11,594	(\$20,899)	\$149,409	\$60,970
Net assets end of year	\$661,126	\$672,720	\$651,821	\$801,230	\$862,200

FINANCIAL AID					
Source of funds					
Unrestricted institutional	\$69,751	\$81,367	\$85,449	\$95,364	\$98,225
Federal, state, and private grants	\$3,549	\$7,353	\$6,363	\$6,191	\$6,377
Restricted funds	\$9,136	\$8,733	\$11,153	\$8,913	\$9,180
Total	\$82,436	\$97,453	\$102,965	\$110,468	\$113,782
% Discount of tuition and fees	31.9%	33.4%	34.4%	36.0%	36.0%
% Unrestricted discount	27.8%	30.1%	30.4%	32.7%	32.7%
Net Tuition Revenue per FTE	\$29,912	\$30,226	\$30,155	\$31,153	\$32,088

FEDERAL FINANCIAL RESPONSIBILITY COMPOSITE SCORE	2.9	3.0	2.2	3.0	
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Please indicate your institution’s endowment spending policy:

The university observes a spending rule with respect to total return on investments of the endowment. Under the spending rule, the university appropriates 4.7% of its endowment’s average unit fair value for the previous 12 quarters from the beginning of the fiscal year.

Please enter any explanatory notes in the box below.

STANDARD 7: INSTITUTIONAL RESOURCES

Liquidity

FISCAL YEAR ENDS month & day (06/30)	3 Years Prior (FY 2018)	2 Years Prior (FY 2019)	Recently Completed Year (FY 2020)	Current Year (FY 2021 Estimate)	Next Year Forward (FY 2022 Projected)
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CASH FLOW					
Cash and Cash Equivalents beginning of year	\$50,278	\$62,346	\$39,646	\$138,033	\$107,653
Cash Flow from Operating Activities	\$20,913	\$427	\$8,073	\$11,678	\$11,678
Cash Flow from Investing Activities	(\$6,413)	(\$30,517)	(\$50,742)	(\$40,000)	(\$50,000)
Cash Flow from Financing Activities	(\$2,432)	\$7,390	\$141,056	(\$2,058)	(\$2,058)
Cash and Cash Equivalents end of year	\$62,346	\$39,646	\$138,033	\$107,653	\$67,273

LIQUIDITY RATIOS					
Current Assets	\$73,259	\$51,906	\$58,363	\$67,046	\$69,057
Current Liabilities	\$44,890	\$42,750	\$53,883	\$49,507	\$50,992
Current Ratio	1.63	1.21	1.08	1.35	1.35
Days Cash on Hand ((Cash and Cash Equivalents / [Operating Expenses + Depreciation and other noncash expenses]) / 365)	94.85	54.62	186.28	149.28	90.34

Please enter any explanatory notes in the box below that may impact the institution's cash flow.

Cash and cash equivalents above include restricted cash as required by current accounting standards. FY21 ending cash balances consist of ~\$57M of cash and cash equivalents and \$52.3M of bond proceeds restricted for use.

Has the institution needed to access its restricted net assets or liquidate other financial assets to fund operations? If so, please describe and indicate when approvals (if required) were obtained from the stat's authority.

No

Please enter any explanatory notes in the box below.

STANDARD 7: INSTITUTIONAL RESOURCES

Information Resources

3 Years Prior (FY 18)	2 Years Prior (FY 19)	Recently Completed Year (FY 20)	Current Year (FY 21)	Next Year Forward (goal) (FY 22)
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Total Expenditures (in 000s)

Materials	\$2,672	\$2,716	\$2,834	\$2,373	\$2,735
Salaries & wages (permanent staff)	\$1,694	\$1,817	\$1,654	\$1,418	\$1,725
Salaries & wages (student employees)	\$123	\$115	\$75	\$89	\$120
Other operating expenses	\$351	\$366	\$282	\$261	\$286

Expenditures/FTE student (in 000s)

Materials	\$0.45	\$0.44	\$0.47	\$0.40	\$0.46
Salaries & wages (permanent staff)	\$0.28	\$0.30	\$0.28	\$0.24	\$0.29
Salaries & wages (student employees)	\$0.02	\$0.02	\$0.01	\$0.01	\$0.02
Other operating expenses	\$0.06	\$0.06	\$0.05	\$0.04	\$0.05

Collections

Percent available physically	15.80%	15.13%	10.47%	10.47%	10.00%
Percent available electronically	84.20%	84.87%	89.53%	89.53%	90.00%
Number of digital repositories	2	2	2	1	1

Personnel (FTE)

Librarians - main campus	14.75	15.75	18.86	15.86	18.86
Librarians - branch /other locations	n/a	n/a	n/a	n/a	n/a
Other library personnel - main campus	6.55	6.55	0.5	0	0
Other library personnel - other locations	n/a	n/a	n/a	n/a	n/a

Availability/attendance

Hours of operation/week main campus	107	107	107	93	107
Hours of operation/week other locations	n/a	n/a	n/a	n/a	n/a

Consortia/Partnerships

NERL (NorthEast Research Libraries), LYRASIS, WALDO (Westchester Academic Library Directors Organization) EAST (Eastern Academic Storage Trust), Five College Library Repository, SPARC, Digital Commonwealth, ELUNA, NASIG, NISO, LOE

URL of most recent library annual report: libguides.wpi.edu/c.php?g=1114627&p=8126991

Please enter any explanatory notes in the box below

* includes benefits

See Form 4.5 for data about Information Literacy

STANDARD 7: INSTITUTIONAL RESOURCES

Technological Resources

3 Years Prior	2 Years Prior	Recently Completed Year	Current Year	Next Year Forward (goal)
(FY 2018)	(FY 2019)	(FY 2020)	(FY 2021)	(FY 2022)

Course management system

Canvas - Release 2021-02-20

Number of classes using the system

1,583	1,623	1,828	1,923	2,065
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Bandwidth

On-campus network

40 Gbps	40 Gbps	40 Gbps	40 Gbps	40 Gbps
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Off-campus access

commodity internet (Mbps)

1.5 Gbps	1.5 Gbps	2 Gbps	2 Gbps	2 Gbps
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high-performance networks (Mbps)

20 Gbps	20 Gbps	20 Gbps	20 Gbps	20 Gbps
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Wireless protocol(s)

WiFi 5	WiFi 5	WiFi 5	WiFi 5	WiFi 6e
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Typical classroom technology

Main campus

Podium with Extron switcher, PC, Echo360 appliance, document camera, Wacom Interactive Pen display, Solstice wireless content sharing, voice amplification, "Zoom" capable, and HDMI/USB-C inputs

Branch/other locations

Same as above

Software systems and versions

Students

Banner Student (current version 9.3.15.2.1)

Finances

Workday (current version 2020R2)

Human Resources

Workday (current version 2020R2)

Advancement

Salesforce (Spring '21)

Library

Hyrax/Samvera (current version 2.5.0)

Website Management

Drupal 7 CMS for wpi.edu

Portfolio Management

Microsoft Planner

Interactive Video Conferencing

Zoom Education Plan (current version as of 2/2/21 = 5.5.0)

Digital Object Management

Flight by Canto (DAM for photos) Ensemble/Youtube (DAM for videos)

Website of technology policies/plans

Integrity and security of data

CyberSecurity program: In workroom

Privacy of individuals

wpi.edu/about/policies/privacy-policy

Appropriate use

wpi.edu/about/policies/acceptable-use

Disaster and recovery plan

Business continuity plan: In workroom

Technology replacement

www.wpi.edu/sites/default/files/2020/11/21/Computer-Systems-Purchasing-Policy.pdf

Please enter any explanatory notes in the box below

STANDARD 7: INSTITUTIONAL RESOURCES

Physical Resources

Campus location	Serviceable Buildings	Assignable Square Feet (in 000s)
Main campus	86	1,420
Other U.S. locations	1	5
International locations	0	0

	3 Years Prior (FY 18)	2 Years Prior (FY 19)	1 Year Prior (FY 20)	Current Year (FY 21) Estimated	Year Forward (FY 22) Budgeted
Revenue (in 000s)					
Operating budget	\$28,773	\$28,398	\$11,534	\$12,725	\$11,700
Gifts and grants	\$31,827	\$7,382	\$8,475	\$6,925	\$2,500
Debt		\$8,000	\$47,513	\$26,780	\$50,633
Total	\$60,600	\$43,780	\$67,522	\$46,430	\$64,833

Expenditures (in 000s)					
New construction	\$34,352	\$17,138	\$33,360	\$30,000	\$34,000
Renovations, maintenance, & equipment	\$17,971	\$16,280	\$26,241	\$6,615	\$26,933
Technology	\$8,277	\$10,362	\$7,921	\$9,815	\$3,900
Total	\$60,600	\$43,780	\$67,522	\$46,430	\$64,833

Assignable square feet (in 000s)	Main campus	Off-campus	Total
Classroom	63		63
Laboratory	226		226
Office	201	3	204
Study	52		52
Special	224		224
General	58		58
Support	86	2	88
Residential	510		510

Major new buildings, past 10 years

Building name	Purpose(s)	Assignable Sq Ft (in 000s)	Cost (in 000s)	Year
Sagamore Research Building	Research	18.00	\$2,000	2020
Innovation Studio/Messenger Hall	Academic/Res Hall	47.00	\$48,000	2018
Park Avenue Garage	Parking/Rooftop Fields	N/A	\$15,000	2013
37 Lee Street	Administration	18.0	\$13,000	2012
Gateway II	Academic/Research	61.00	\$25,000	2012
Faraday Hall	Residence Hall	58.00	\$35,000	2012
Sports and Recreations Center	Recreation/ Athletics	102.00	\$55,000	2012

New buildings, planned for next 5 years

New Academic Building	Teaching, Research	60.00	\$80,000	2022
New Residence Hall	Residence Hall	80.00	\$60,000	2023

The lists below include renovations costing **\$5,000,000** or more

Major Renovations, past 10 years

Harrington Auditorium	Athletics, Assembly	67.00	\$6,000	2020
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Renovations planned next 5 years

Kaven Hall	Academic, Research	25.00	\$16,900	2022
Stratton Hall	Academic, Research	17.00	\$17,000	2025
Olin Hall	Academic, Research	25.00	\$20,000	2026

Please enter any explanatory notes in the box below

FY18 and FY19 debt and gift revenues were not tracked separately and have been consolidated in the gifts and grants line. Expenditures by year include both actuals and projected to completion for projects budgeted/initiated in that fiscal year.

STANDARD EIGHT: EDUCATIONAL EFFECTIVENESS

DESCRIPTION AND APPRAISAL

WPI's motto, Theory and Practice, guides its approach to assessment. Project-based learning shifts the focus from content covered and courses completed to what students can actually do with what we think they have learned. WPI's assessment plans focus primarily on capstone project work where students demonstrate that they can integrate and apply what they have learned, with less focus on the individual courses in the curriculum. The core graduation requirements, for all majors, are projects with learning outcomes that map to the institution's learning outcomes. We define student success as the ability to learn and the ability to put this learning into actions that matter.

The faculty, administration, and students work together to collect and assess data on educational effectiveness. These assessments play a significant role in faculty promotion and tenure, department self-studies, and university-wide discussions on teaching effectiveness and culture. Some of the most recent strategic changes at WPI, including making a global project experience available to all undergraduates and the introduction of The Global School, have been motivated and evaluated by assessment of key learning outcomes. In this, community members are in constant conversation (similar to what Bob Broad describes in *What We Really Value: Beyond Rubrics in Teaching and Assessing Writing* [2003]), involving all significant stakeholders in these important formative conversations.

Basic Measures of Student Success

WPI collects data on traditional measures of student success, such as retention and graduation rates as well as employment status upon graduation. These data are shared on the university's public [data dashboards](#), [first destination outcomes reports](#), and on the [web](#). As shown in the Data First Forms, the first-to-second-year retention rate for undergraduate students was 95% or higher. This compares favorably with select peer institutions: the published retention rate for RIT is just under 90%, for RPI it is 92%, and for Carnegie Mellon it is 97%. The data for underrepresented minority students (URM), Pell grant recipients, first-generation students, women, and international students are comparable.

Undergraduate First to Second Year Retention Rates				
	2017-18	2018-19	2019-20	2020-21
URM students	93%	94%	94%	98%
Pell grant recipients	92%	93%	93%	93%
First-generation students	93%	95%	92%	93%
Women students	95%	97%	96%	96%
International students	95%	96%	93%	96%
All students	95%	96%	95%	95%

The development of two key programs were motivated by assessment of first-to-second-year retention and have had a significant positive impact on WPI's retention rate. The rate improved from around 86% to over 90% with the introduction of the Insight Advising Program (described in Standard Four). The rate increased from 92% to 96% after the introduction of the Great Problems Seminar in 2007 and has remained at 95% or above since. Retention data was a key indicator used to assess these programs.

The six-year graduation rate for full-time undergraduates has ranged from 85% for the fall 2008 cohort to 89% for the fall 2014 cohort. Again, this compares favorably with the published six-year graduation rates for select peers: RIT's rate is about 66%, RPI's is just over 83%, and Carnegie Mellon's is just under 90%. As shown below, international and women students complete degrees at a higher rate than average and URM students and Pell grant recipients have a slightly lower six-year graduate rate that is still consistent with peer institutions. WPI regularly reviews the records for students who do not complete their degrees, with a particular focus on helping students close to completion.

Undergraduate Six-Year Graduation Rates

	Fall 2011	Fall 2012	Fall 2013	Fall 2014
URM students	81%	80%	87%	80%
Pell grant recipients	83%	88%	85%	85%
Women students	91%	94%	92%	92%
International students	87%	92%	87%	93%
All students	89%	87%	89%	89%

Graduate student retention is also strong with students retained from first to second year between 2017 and 2021 averaging 93.5% for master's students and 94.5% for doctoral students. Master's students have completed degrees in 150% time at a rate of 92.8% over the last four years.

The Career Development Center annually [collects and reports data on post-graduation statistics](#). More than 90% of 2019 graduates were employed, in graduate school, on active-duty military, or engaged in volunteer service within six months. This is higher than the national average of 86%. WPI also has an exceptionally high knowledge rate for its graduates: the university knows the employment status of over 97% of bachelor's degree graduates on average (compared with a national average of 65%). In other words, its 90% success rate is not inflated by non-reporting for unemployed graduates. For the Class of 2020, the mean annual salary for those seeking employment was just under \$73,000, compared to \$60,803 for the Class of 2013. This average often appears in "top-10" lists for starting salaries, which is a reflection of success for WPI graduates (as well as the job opportunities in engineering and computer science disciplines).

Data for graduates with advanced degrees (master's and PhD) are similar. For master's degree graduates in the Class of 2019, 94.9% were employed, in graduate school, on active-duty military, or engaged in volunteer service. For PhD graduates of the same year, 95.9% were employed or in graduate school. The knowledge rate for master's (73.9%) and PhD (81.7%) degree recipients is typically lower than that of bachelor's degree graduates (97.4%), largely because of the difficulty in tracking outcomes for international students, who are over-represented in graduate degree programs as compared to undergraduate, and the likelihood that working professionals in graduate degree programs tend not to respond to outreach, compared to full-time, campus-based undergraduates. Salary results for graduate degree recipients remain strong, with master's degree recipients earning on average \$84,957 and PhD recipients earning \$101,769. The Survey of Earned Doctorates from 2019 also reports that most of WPI's doctoral graduates pursue work in research and development arenas.

As discussed in Standard Five, the percentage of students who graduate with debt is approximately 59.6% (compared to 72% in FY 2011). As shown in the Data First Forms for Standard 5, the drop from 64.2% of undergraduates with debt in 2019-20 to only 59.6% in 2020-2021 is indicative of WPI's commitment to making WPI more affordable and demonstrates the effectiveness of efforts by WPI to increase financial aid opportunities to offset increases in tuition over the past decade. The average amount of federal debt for undergraduate students leaving with a degree has remained steady at approximately \$25,000 for the most recent three-year period. In fact, it is nearly the same as 10 years ago (\$25,689 in FY 2011). Average total debt is a new measure for WPI as it had previously reported only federal aid debt, consistent with other reports. Because WPI cares deeply about access and affordability, the institution has developed stronger metrics to assess overall known debt. Affordability, a key to any plan to increase access to a WPI education, is one of the central pillars for the current strategic plan.

Additionally, data from the Noel Levitz Student Satisfaction Survey (2010, 2012, 2014, and 2016) and the Enrolled Student Survey (2019) suggest students have a high level of satisfaction at WPI and would choose to attend again if given the chance. These data are presented in Standard Two.

Layers of Undergraduate Programs Outcomes Assessment

Assessment is part of the culture at WPI. From its beginning, the WPI Plan did not have the usual structure of required courses that could be used as a proxy for measuring what students had learned. Student performance in the required projects, the Major Qualifying Project (MQP) and the Interactive Qualifying Project (IQP), has been the primary measure of student learning. During the 1980s, faculty began a regular review of student achievement embodied in project reports and used this to improve the academic programs. When ABET made the transition to an outcomes assessment framework for engineering accreditation, WPI was one of the two universities chosen to pilot the approach.

Today, the university has articulated learning outcomes at several levels and has (or is working on) enacting assessment plans for each level. At the highest level, the faculty approved a set of Undergraduate Learning Outcomes in 2004, along with an assessment plan. While that assessment plan used some surveys (such as NSSE) as well as course completion (for foundational knowledge in math, science, and the humanities), the primary sources for assessment of student learning were the two required projects: the MQP and the IQP. Additionally, each individual department and program has defined learning outcomes and, while focused on program assessment and improvement, they provide useful information at a more granular level of student mastery of disciplinary content.

Undergraduate Learning Outcomes

WPI developed the following list of Undergraduate Learning Outcomes in 2004. Learning Outcomes #8 was modified in 2019 to better articulate the university's mission as a global polytechnic.

WPI Learning Outcomes Mapped to Project Learning Outcomes/Goals		
Graduates of WPI will...	MQP LO	IQP LO
have a base of knowledge in mathematics, science, and humanistic studies	X	X
have mastered fundamental concepts and methods in their principal areas of study	X	
understand and employ current technological tools	X	
be effective in oral, written, and visual communication	X	X
function effectively both individually and on teams		X
be able to identify, analyze, and solve problems creatively through sustained critical investigation	X	X
be able to make connections between disciplines and to integrate information from multiple sources	X	X
demonstrate global and intercultural competency by developing the capacity to identify, explain, and critically analyze the forces (such as cultural, historical, political, economic) that shape the self and others as they engage with local and global communities		X
be aware of personal, societal, and professional ethical standards	X	X
have the skills, diligence, and commitment to excellence needed to engage in lifelong learning	X	X

The MQP supports eight out of the 10 Undergraduate Learning Outcomes, missing Outcome #5 on teamwork (not all MQPs are team projects) and Outcome #8 on global learning. The IQP has an impact on eight out of the 10 institutional learning outcomes. (Note that the IQP does not contribute directly to Undergraduate Outcomes #2 and #3, which focus on disciplinary learning.)

The outcomes were developed along with an outcomes assessment plan that included a matrix defining *criteria*, *data sources*, *an evaluator*, and *a schedule* for detailed assessment of each learning outcome. With the assessment plan, the faculty, in 2003, approved the creation of the Undergraduate Outcomes Assessment Committee (UOAC) as a standing faculty governance committee. UOAC meets weekly during the academic year to review assessment information, plan for future assessment, and report to the faculty Committee on Academic Policy (CAP) when outcomes data indicates need for program or policy review. These data are used to start conversations to improve programs and not to evaluate faculty.

Student projects, especially the final written reports, are scheduled for review by the faculty; these reviews provide assessment data for six of the 10 outcomes. Student responses on national surveys (including NSSE), with comparison to an appropriate group of AITU peer institutions, have been reviewed on a three-year cycle by UOAC. When UOAC identifies an area of concern, the results are reported to the faculty Committee on Academic Policy, the department heads, and the full faculty.

Learning Outcomes for the MQP and IQP

The core graduation requirements for all majors are the Major Qualifying Project (MQP) and the Interactive Qualifying Project (IQP). The faculty has adopted a set of learning outcomes for each project and mapped them to the Undergraduate Learning Outcomes. WPI does not have a general education requirement *per se*, but the IQP could be viewed as the capstone for general education. Nine IQP learning outcomes were approved by the faculty in 2007. The numbers in parentheses at the end of each outcome in the table map project outcomes to the university-wide learning outcomes.

Learning Outcomes for the MQP	Learning Outcomes for the IQP
<p>Students who complete an MQP will...</p> <ol style="list-style-type: none"> 1) apply fundamental and disciplinary concepts and methods in ways appropriate to their principal areas of study. (1, 2) 2) demonstrate skill and knowledge of current information and technological tools and techniques specific to the professional field of study. (2, 3) 3) use effectively oral, written, and visual communication. (4) 4) identify, analyze, and solve problems creatively through sustained critical investigation. (6) 5) integrate information from multiple sources. (7) 6) demonstrate an awareness and application of appropriate personal, societal, and professional ethical standards. (9) 7) practice the skills, diligence, and commitment to excellence needed to engage in lifelong learning. (10) 	<p>Students who complete an IQP will...</p> <ol style="list-style-type: none"> 1) demonstrate an understanding of the project's technical, social, and humanistic context. (1, 7, 8) 2) define clear, achievable goals and objectives for the project. (6) 3) critically identify, utilize, and properly cite information sources, and integrate information from multiple sources to identify appropriate approaches to addressing the project goals. (7, 10) 4) select and implement a sound approach to solving an interdisciplinary problem. (7, 10) 5) analyze and synthesize results from social, ethical, humanistic, technical, or other perspectives, as appropriate. (8, 9) 6) maintain effective working relationships within the project team and with the project advisor(s), recognizing and resolving problems that may arise. (5) 7) demonstrate the ability to write clearly, critically, and persuasively. (4) 8) demonstrate strong oral communication skills, using appropriate, effective visual aids. (4) 9) demonstrate an awareness of the ethical dimensions of their project work. (9)

Student Success and the MQP Learning Outcomes

There are four systems in place to measure student gains and student achievement for the MQP learning outcomes:

- 1) All students are surveyed at the completion of the MQP and asked to report their growth in the learning outcomes.
- 2) All project advisors are surveyed at the completion of the MQP and asked to report, for each individual student, the student's achievement of the learning outcomes.
- 3) Almost all students present their MQP work in a public forum, Project Presentation Day, and their work is judged by faculty as well as external evaluators (employers, project sponsors, and members of departmental and school advisory boards).
- 4) Student MQP reports are reviewed using a rubric defined by the appropriate learning outcomes. Almost all student project reports are publicly available, in the WPI Library and on the [Digital WPI](#) website. (search "MQP" to access to over 3,700 student project reports).

Student Surveys of MQP Learning Outcomes: Surveys conducted at the completion of the MQP (as well as the IQP) ask students to report their personal progress in the dimensions of the learning outcomes. This survey has been built into the project submission path (so that students complete the survey when they are submitting their final project report). The response rates for these surveys have been between 90% and 95%. The scale goes from 1 (no progress at all) to 5 (substantial progress). The table shows a high level of student-reported progress toward all undergraduate leaning outcomes.

Questions Related to MQP Learning Outcomes from Post-Completion Survey

MQP LO	WPI LO	Survey Question	WPI Avg 2016-17 (n=805)	WPI Avg 2017-18 (n=695)	WPI Avg 2018-19 (n=974)
1	1, 2	Applying fundamental and disciplinary concepts and methods specific to my major	4.35	4.36	4.37
2	2, 3	Demonstrating skill and knowledge of current technological tools and techniques relevant to my major	4.38	4.41	4.37
3	4	Developing skill in written communication	4.18	4.15	4.17
3	4	Developing skill in oral expression and public speaking	3.92	3.94	3.96
3	4	Developing skill in visual communication (i.e., use of images and graphics to convey information, data, and ideas)	4.16	4.19	4.19
4	6	Identifying, analyzing, and solving problems creatively through sustained critical investigation	4.42	4.45	4.38
5	7	Finding, critically evaluating, and integrating information and ideas from multiple sources.	4.29	4.32	4.29
6	9	Understanding and applying ethical standards in my field (for example, human and animal rights in research, respect for intellectual property, social and environmental responsibility, honest reporting of data, sensitivity to conflict of interest)	3.72	3.79	3.85
7	10	Taking responsibility for my own learning and project direction	4.53	4.50	4.44
-		Overall, I rate my learning from this project as	4.38	4.34	4.35
-		On average, how many hours per week did you spend on this project	18.71	20.08	17.94

Note that the survey collects additional information about the project experience (including time-on-task) and the student assessment of their project advisor(s). This later data is used in reviews for tenure and promotion and in annual reviews of faculty.

The lowest average is for Q8 (Learning Outcome #6) related to the MQP outcome regarding understanding ethical standards (average = 3.85). The second lowest average is for Learning Outcome #4 related to developing skill in oral expression (average = 3.96). Only the questions on progress on oral expression and public speaking and the question related to ethical standards have an average below 4.00 on the 5-point scale.

The Undergraduate Outcomes Assessment Committee (UOAC) reviews the data, provides reports to the faculty, and looks for changes over time and for differences between departments (a full report of all departments is available in the workroom). For example, the following table summarizes learning outcomes for a subset of engineering programs.

Engineering Programs 2018-19

Program		Aerospace	Biomedical	Chemical	Mechanical	Robotics	All Engineering	WPI
Number of Responses		46	72	73	222	50	628	974
Q1	Applying fundamental and disciplinary concepts and methods specific to my major	4.00	4.29	4.36	4.34	4.20	4.34	4.37
Q2	Demonstrating skill and knowledge of current technological tools and techniques relevant to my major	3.96	4.22	4.33	4.36	4.24	4.33	4.37
Q3	Developing skill in written communication	3.83	4.18	4.39	4.17	3.96	4.15	4.17
Q4	Developing skill in oral expression and public speaking	3.67	4.36	4.13	3.99	3.82	3.99	3.96
Q5	Developing skill in visual communication (i.e., use of images and graphics to convey information, data, and ideas)	3.65	4.33	4.22	4.19	3.96	4.16	4.19
Q6	Identifying, analyzing, and solving problems creatively through sustained critical investigation	4.28	4.26	4.54	4.39	4.20	4.39	4.38
Q7	Finding, critically evaluating, and integrating information and ideas from multiple sources.	4.22	4.38	4.51	4.26	4.10	4.32	4.29
Q8	Understanding and applying ethical standards in my field	3.35	4.03	3.99	3.95	3.40	3.89	3.85
Q9	Taking responsibility for my own learning and project direction	4.24	4.49	4.64	4.46	4.26	4.44	4.44
Q10	My progress in working with others as a member of a team was	4.24	4.36	4.38	4.38	4.06	4.34	4.29
Q16	Overall, I rate my learning from this project as	4.09	4.40	4.49	4.31	4.08	4.34	4.35
Hours	On average, how many hours per week did you spend on this project	17.20	16.96	17.14	16.75	18.26	17.45	17.94

UOAC and the Morgan Teaching and Learning Center have organized faculty discussions, led by Biomedical Engineering and Chemical Engineering faculty, which encouraged faculty members to share methods they use to structure MQP advising in their programs.

As noted, UOAC usually reviews these data annually, but the data have not been available for the past two years while work has continued with the Enterprise Transformation Project (Banner to Workday). One challenge is that much of the IT infrastructure needed to support WPI's qualifying projects is not standard for higher education and must be built by WPI.

Advisor Surveys of MQP Learning Outcomes: Each faculty advisor is also surveyed at the completion of a project and asked to assess each individual student's achievement of each learning outcome. The following is an excerpt from this advisor survey.

This student demonstrated the following levels of achievement for institute wide MQP learning outcomes:

	Unacceptable	Acceptable	Exceptional	N/A
1) Applying fundamental and disciplinary concepts and methods specific to the major	O	O	O	O
2) Skill and knowledge of current technological tools and techniques relevant to the major	O	O	O	O
3a) Skill in written communication	O	O	O	O
3b) Skill in oral expression and public speaking	O	O	O	O
3c) Skill in visual communication (i.e., use of images and graphics to convey information, data, and ideas)	O	O	O	O
4) Identifying, analyzing, and solving problems creatively through sustained critical investigation	O	O	O	O
5) Finding, critically evaluating, and integrating information and ideas from multiple sources	O	O	O	O
6) Understanding and applying ethical standards (for example, human and animal rights in research, respect for intellectual property, social and environmental responsibility, honest reporting of data, sensitivity to conflict of interest)	O	O	O	O
7) Taking responsibility for learning and project direction	O	O	O	O
8) Ability to work with others as a member of a team	O	O	O	O

The response rate for faculty has been much lower (as low as 15%, compared to the student response of close to 95%) and the surveys have not been available for more than two years during the university's implementation of Workday. The surveys are set to relaunch in October 2021, with improvements designed to make faculty access to the survey much easier. The advisor survey will be placed in the project system so that faculty see the learning outcomes and are asked to evaluate student achievement of the learning outcomes before they assign final grades for the projects.

MQP Reviews: Project Presentation Day: The academic calendar cancels classes one day each April so that the entire WPI community (faculty, staff, and students) can participate in Project Presentation Day. Smaller departments will schedule 15-to-20-minute presentations for each MQP team, with a published schedule and a well-defined system of judging. Larger departments will hold a poster session, again with a schedule of judging and well-defined rubrics for evaluation. This judging is used by many departments for program assessment and also to determine academic awards for the graduating seniors. Project Presentation Day provides evidence of student achievement for the undergraduate learning outcomes associated with oral presentation skills. It also provides an opportunity for an external (employer and alumni) perspective and input to help improve the undergraduate programs. During the pandemic year, Project Presentation Day was virtual and student presentations were [available online](#).

MQP Project Report Reviews: Academic departments are scheduled to perform a review of student project reports to obtain another measure of student success relative to the MQP learning outcomes. In many departments, this is taken as an opportunity for faculty development; one of the best ways for a new faculty member to learn about MQP expectations is to review completed MQPs. Other departments have used external evaluators to avoid any possible conflicts of interest on the part of faculty who may have been involved in advising the projects.

For many years, individual departments have taken different approaches and used different evaluation rubrics. In 2015, UOAC worked with departments to define a standard core set of questions for all MQP reviews, questions specifically tied to the learning outcomes that could be assessed from the written report alone. The goal was to create a common data set to help departments benchmark their students' achievement against other programs. All the programs reviewed for ABET accreditation completed MQP reviews in 2020 and the data are included in the ABET reports in the workroom.

One recent MQP review is of particular interest for a few reasons. The Biology and Biotechnology Department was the first to test the standard core of questions. (Their work will be published in a book chapter entitled *Assessing Undergraduate Research, a High Impact Practice*.) This review also provided a valuable “focus on common errors that were notable and actionable” in addition to simple numerical ratings. The goal is to help create improved university-wide guidelines for students and advisors. For example, the report for Biology specifically uncovered the need to help students identify the audience for their report. Assuming a too-broad audience tended to encourage a superficial introduction while assuming a too-expert audience tended to produce very specific introduction missing important context for the project. In other words, the assessment plan is learning from the assessment plan.

Achievement of IQP Learning Outcomes

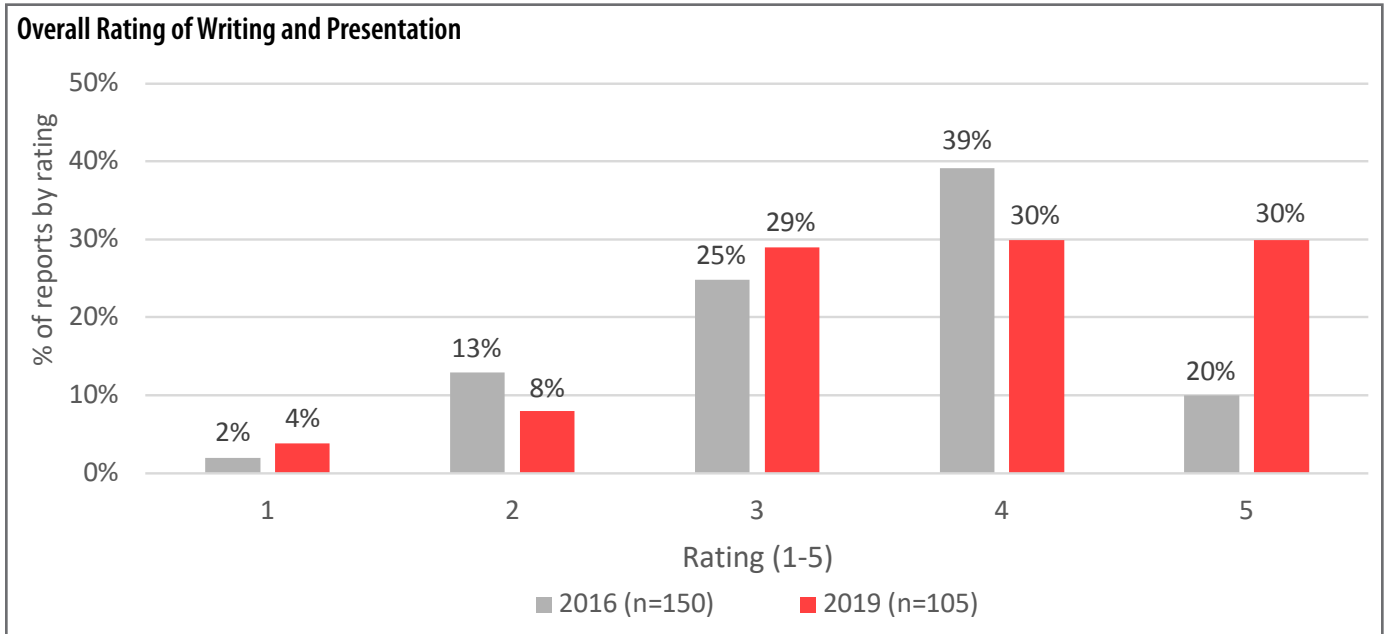
The learning outcomes for the IQP are assessed in much the same way as the MQP outcomes. Students are surveyed to record their level of progress on each IQP outcome, and these data are reviewed annually by UOAC and shared with the faculty. IQP advisors are surveyed at project completion and asked to record the *level of achievement* for each student for each learning outcome. These are very much like the advisor survey for the MQP learning outcomes presented above, except IQPs are almost always completed in teams, with students from different majors and advised by faculty from all academic disciplines, so IQP learning is not evaluated by discipline. Response rates from faculty have not been high to date and survey implementation has been slowed due to the resources needed for the Workday transition. Finally, there is a cycle of reviews for IQP reports going back many years. These reviews were organized by the Interdisciplinary and Global Studies Division (IGSD, now The Global School).

The Global School (formerly IGSD) organizes a review of IQP reports roughly every three years. In this review, a group of faculty members evaluates a random sample of projects using a standard rubric. In 2013 and 2016, groups of 10 faculty members reviewed 150 randomly selected projects completed in the preceding five academic terms. In 2019, WPI completed a similar evaluation of 105 projects, but included a sampling from the small number of on-campus projects. These data are shared with the faculty through UOAC and play an important role in the design and planning for annual new-advisor workshops organized by The Global School.

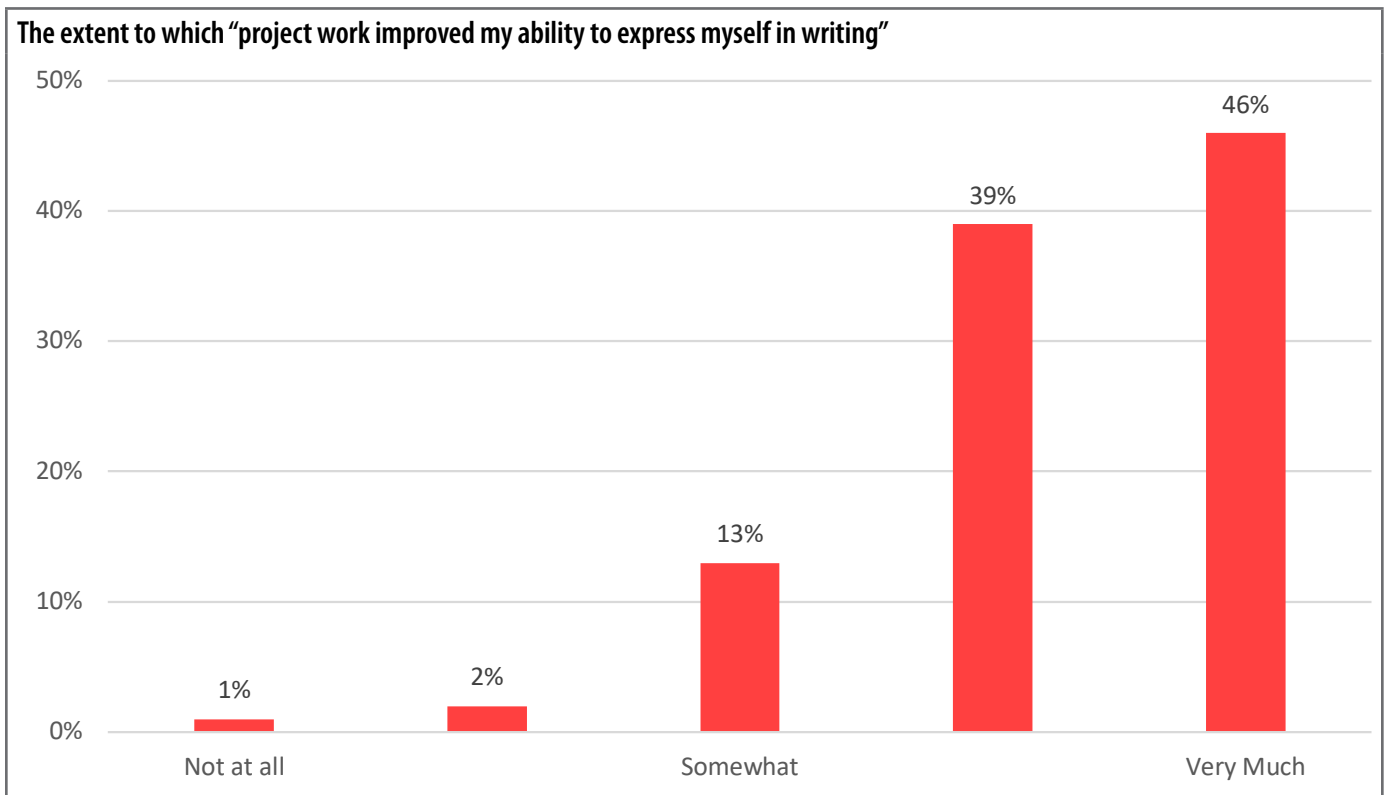
Rater Evaluation of Random Sample of IQP Reports				
IQP LO	WPI LO	Outcomes Measured	Mean Scores	
			2016 (n=150)	2019 (n=105)
7	4	Overall rating of writing and presentation	3.62	3.75
5, 9	8, 9	Understanding of the impact of engineering or technological solutions on society	2.77	2.42
	6, 10	The extent to which students acquired and applied knowledge not obtained from prior coursework	3.53	3.38
3	7	The extent to which the project shows evidence of critical evaluation of the quality of information resources	2.92	3.29
3	7	Integrates multiple sources that reflect different and contradictory perspectives	2.58	2.66
3	7	Completeness and integration of the literature review	3.27	3.33
9	9	An awareness of the ethical responsibility of researchers	2.77	2.8
5, 9	8, 9	Extent to which discussion of the impact of technology on society reflected recognition of the social responsibilities of individuals, scientists and/or engineers	3.08	3.7

*5-point Likert scale. 1 is low/poor performance, 3 is acceptable performance, and 5 is excellent performance.

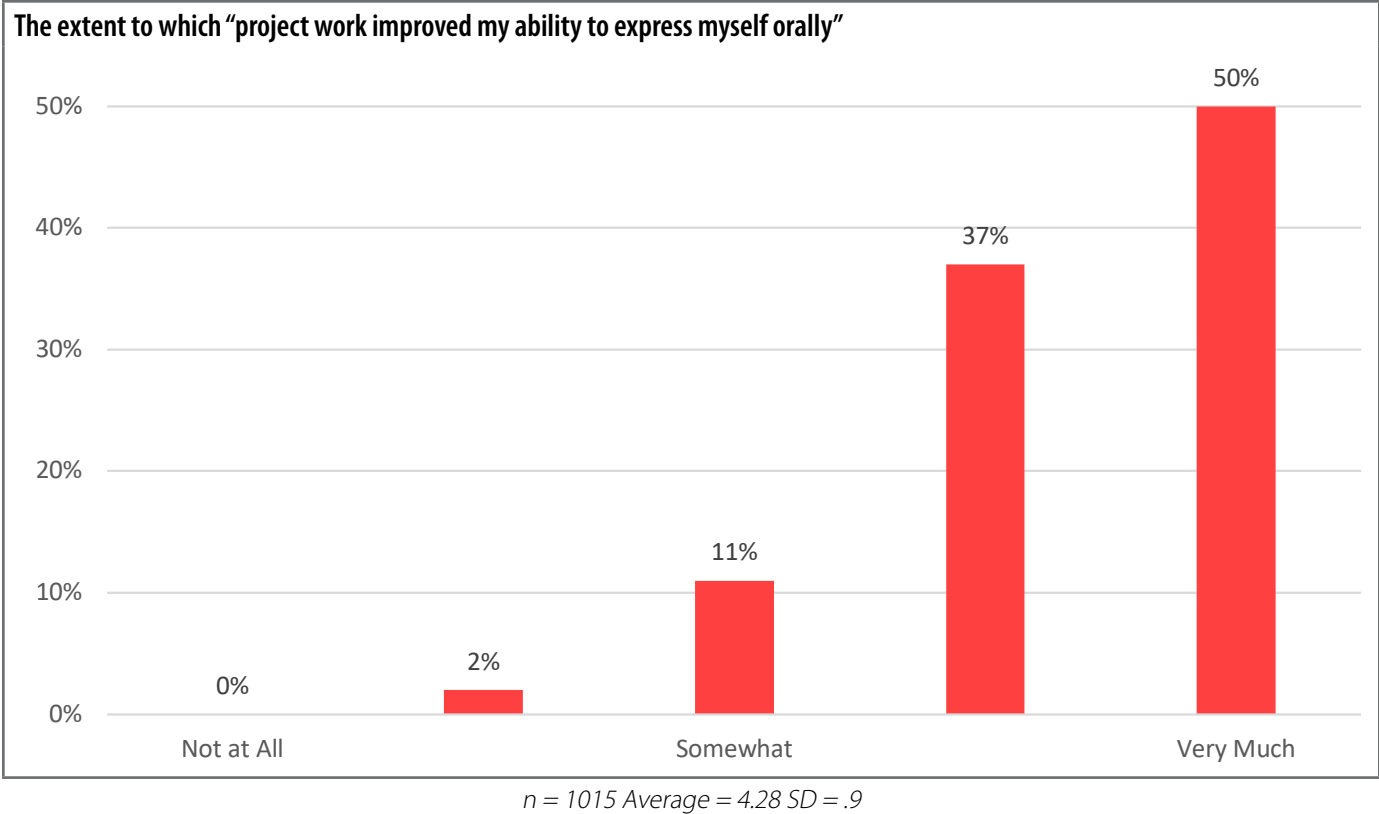
The following chart summarizes the results of rater evaluation of student success for Outcome #4 regarding communication, representing improvement in overall report quality over time between 2016 and 2019.



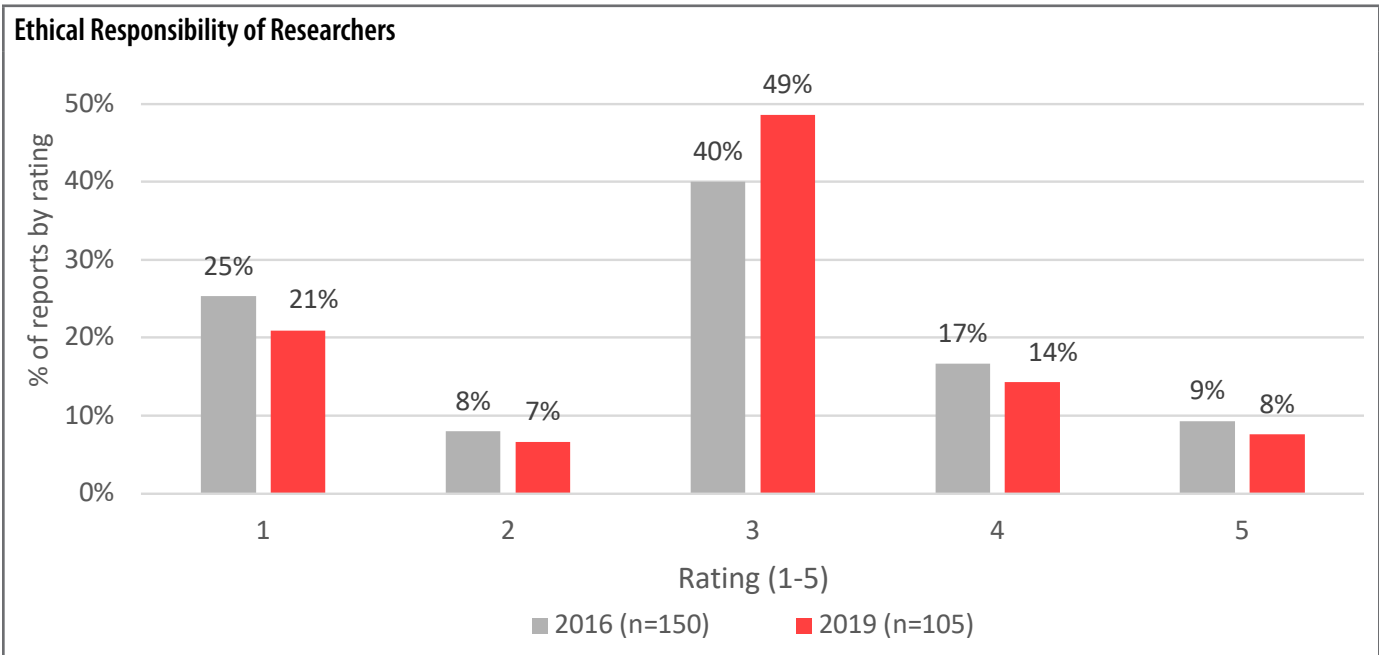
Students are also asked to rate their *own improvement* in their communication skills over the course of the project. Overall, we see strong, self reported evidence of improvement in 2019.



n = 1017 Average = 4.23 SD = .9

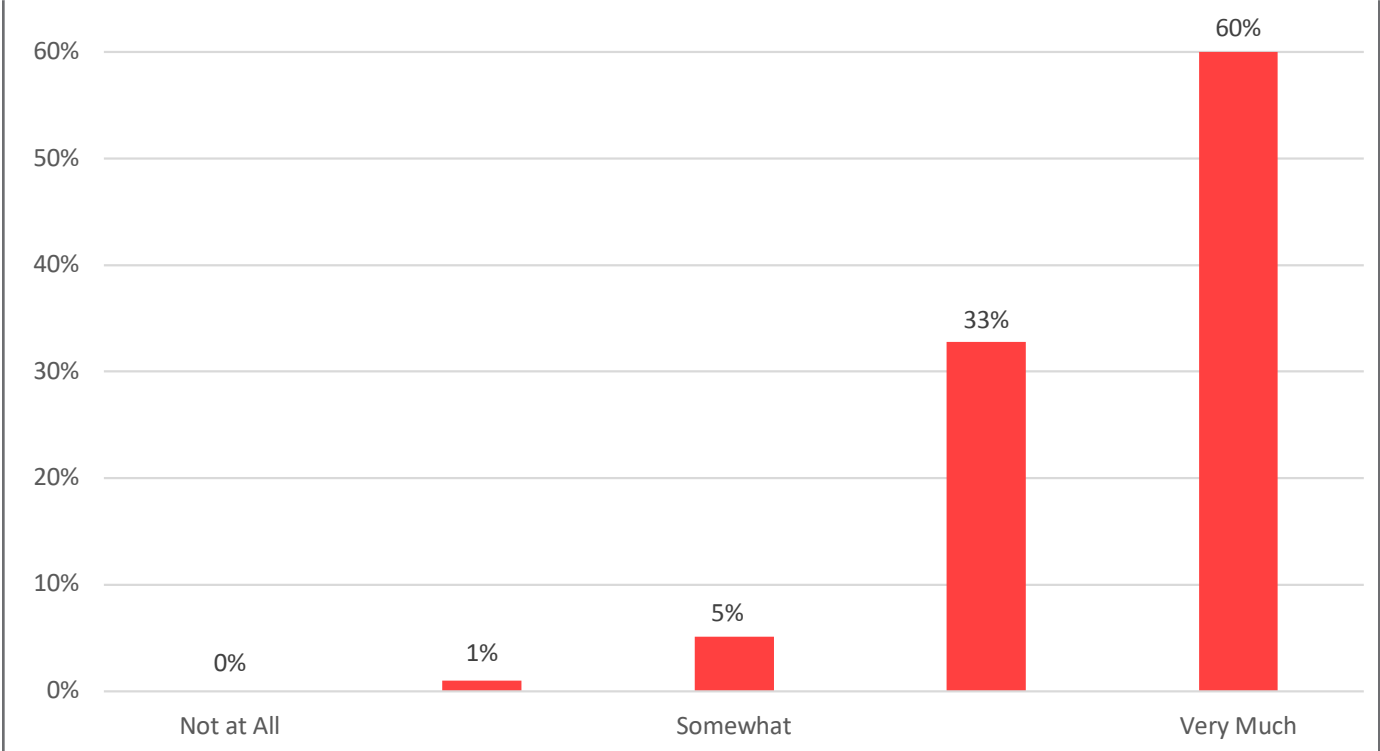


The faculty who review the IQP reports are also asked to evaluate the “extent to which discussion of the impact of technology on society reflected recognition of the social responsibilities of individuals, scientists and/or engineers.” The majority of reports have been rated “acceptable” (level 3) with between 20% and 25% rated as either inadequate or absent from the report.



Nearly all Interactive Qualifying Projects are completed by teams of students. The student survey asked students to report the extent that working on the project helped them to “acquire skills in working with others on a team.” Ninety-three percent answered “much” or “very much.” Only 1% answered “none” or “a little.” WPI students work in teams routinely, not just on the two major projects. A survey of faculty revealed faculty use at least one team-based learning project in 70% of courses. Given this broad exposure to teamwork, it is not surprising that students often report learning effective teamwork skills.

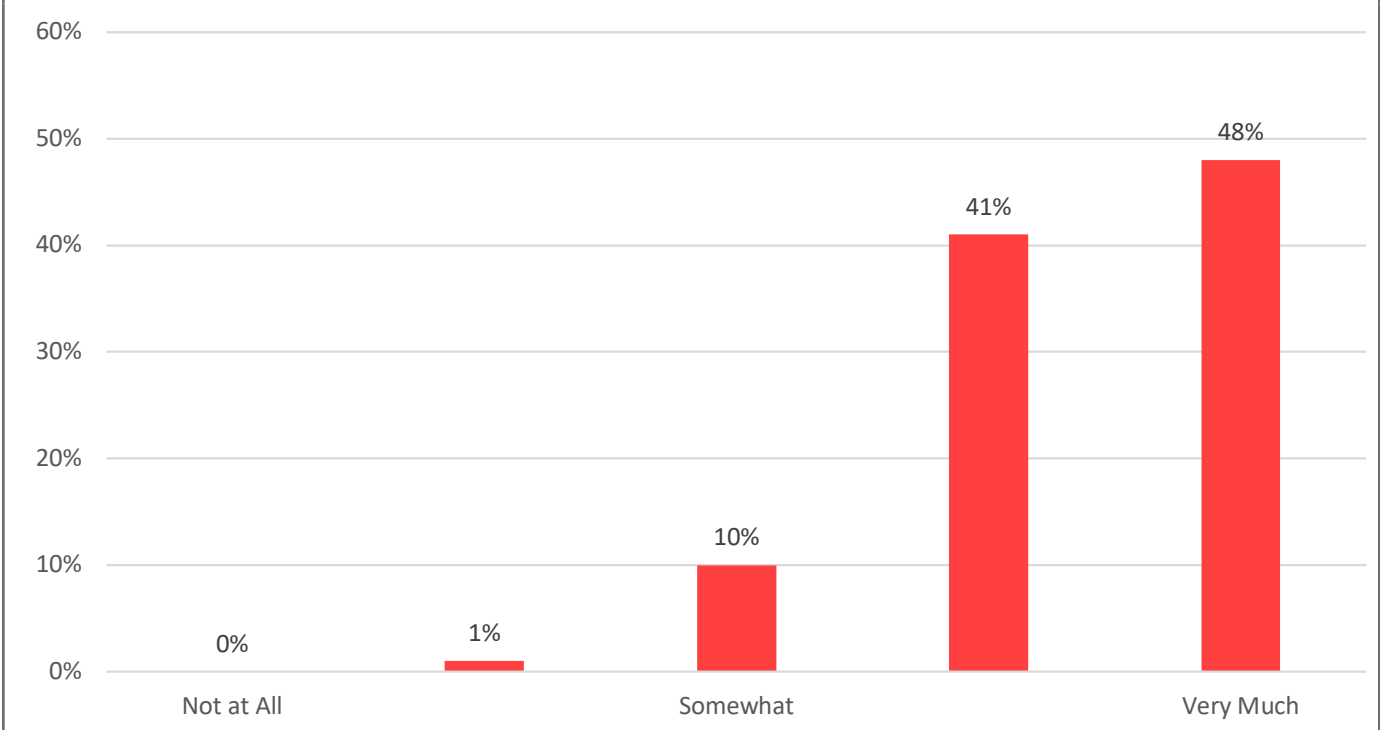
The extent to which “project work helped acquire skill working with others as a member of a team”



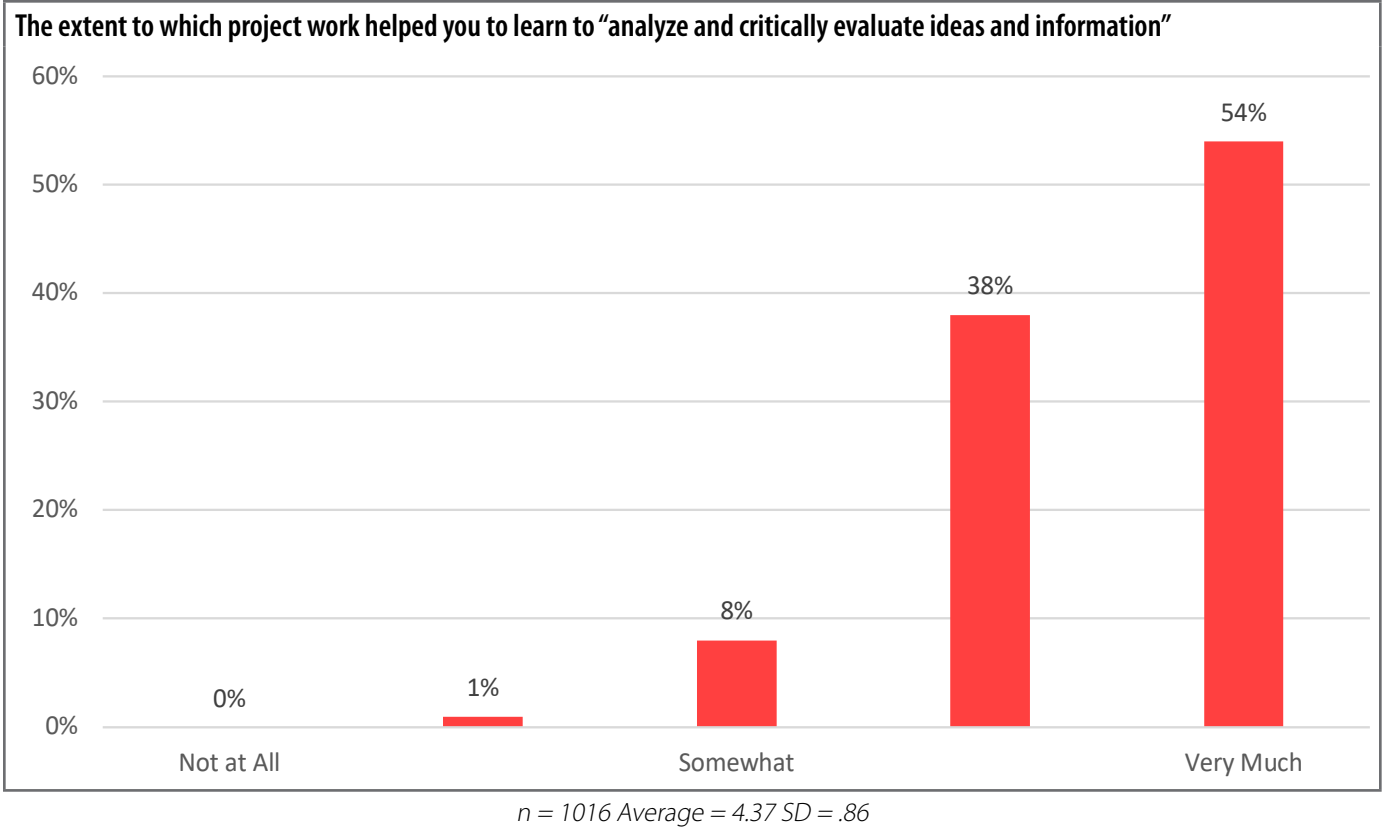
n = 1006 Average = 4.4 SD = .97

The student survey asked two questions about information integration (IQP Outcome #3 and #5; WPI Outcome #7 and #8). The first question asked about the extent to which they learned how to find and use information resources during their project. Eighty-nine percent answered this question “much” or “very much.” The second question asked the extent to which the project work helped students to learn to analyze and critically evaluate ideas and information. Here again, over 90% answered positively. While the indicators for this learning outcome are favorable overall, the faculty reported significant weakness when it comes to integrating multiple or conflicting viewpoints (average of 2.66 of 5), which is an area of focus in future years.

The extent to which project work helped you to “learn how to find and use information resources”



n = 1017 Average = 4.3 SD = .86



One consistent result from the review of IQP reports was that the quality of projects completed at off-campus project centers exceeded that of project completed on-campus. This, along with the results of the 2012 Alumni Study discussed below, motivated the 2015 strategic plan work to make a global project experience available to all undergraduate students.

Learning Goals for the Humanities and Arts

Like WPI overall, the Humanities and Arts Department has a long tradition of reviewing outcomes of student project work. Department committees conducted reviews of Humanities and Arts projects during the summers of 1992, 1996, 1999, and 2004. The insight gained from these reviews guided revisions to the Humanities and Arts Requirement. Developed in 2006-07, the revisions added a “breadth component” to the requirement; students still choose an area of focus but are now required to complete at least one course outside this area. The revised requirement also introduced the Inquiry Seminar and Practicums as a more structured capstone project experience.

The faculty in the Humanities and Arts Department are currently working on assessment plans for their programs, with the first step being a revised survey (to be completed by students and faculty) upon completion of the Inquiry Seminar and Practicums.

Goals of the Humanities and Arts Requirement

- to introduce students to the breadth, diversity, and creativity of human experience as expressed in the humanities and arts
- to develop students’ ability to think critically and independently about the world
- to enhance students’ ability to communicate effectively with others in a spirit of openness and cooperation
- to enrich students’ understanding of themselves
- to deepen students’ ability to apply concepts and skills in a focused thematic area through sustained critical inquiry
- to encourage students to reflect on their responsibilities to others in local, national, and global communities
- to kindle in students a lifelong interest in the humanities and arts

We note that this is a list of goals and not a list of assessable learning outcomes. It provides a valuable statement to guide faculty in the development of courses and capstone seminars, and it does help communicate the purpose of the requirement to the students. Part of the challenge here is that WPI students choose an area of focus in the Humanities and Arts, and it is difficult to define one set of outcomes and one standard assessment plan. A student who chooses a focus in history, for example, could, in the Inquiry Seminar, complete a research paper. A student who chooses a focus in music could, in the Inquiry Practicum, compose an original piece of music with a public performance. Students who choose to focus on a foreign language may complete their requirement in a language immersion program at an off-campus center (in Morocco, Germany, or Argentina, for example). The definitions of student success and the artifacts for assessment are fundamentally different.

Program Learning Outcomes

A list of learning outcomes has been developed for each major. Published in the [online undergraduate catalog](#) each year, they provide the frameworks used by departments and programs in reviewing their curricula and the distribution requirements. The assessment plan usually maps key components of the undergraduate program back to the department’s learning objectives. Examples of various department program and direct and indirect learning outcomes assessment strategies and findings can be seen in the most recent ABET and AACSB reports included in the workroom.

Alumni Studies: The Long-Term Measures of Student Success

In partnership with the Donahue Institute, WPI in 2012 completed a study of the long-term impacts of the IQP and MQP on 38 years of WPI alumni. The survey explored such project outcomes as *professional skills, world views, and personal impacts*. Below are a few of the perceptions of professional impacts of WPI project work along with the percentage of alumni who agreed that WPI’s projects helped them develop in that area “moderately,” “much,” or “very much.”

Alumni Study-Professional Impact of Project Work	
Professional Impact Area	Percentage Agreeing
Take responsibility for one’s own learning	90%
Develop ideas	90%
Integrate information from multiple sources	90%
Solve problems	89%
Effectively manage a project	89%
Interact effectively within a professional capacity	88%
Master fundamental concepts and methods in the major	85%

As expected, project work prepared alumni for problem solving, teamwork, and communication, but also in areas related to *leadership and career advancement*. The list below presents impacts less-commonly associated with engineering education: *world views* and *personal impacts*. These findings suggest that WPI’s project-based curriculum prepares graduates for leadership and global competence, as well as in such areas as personal character and empowerment.

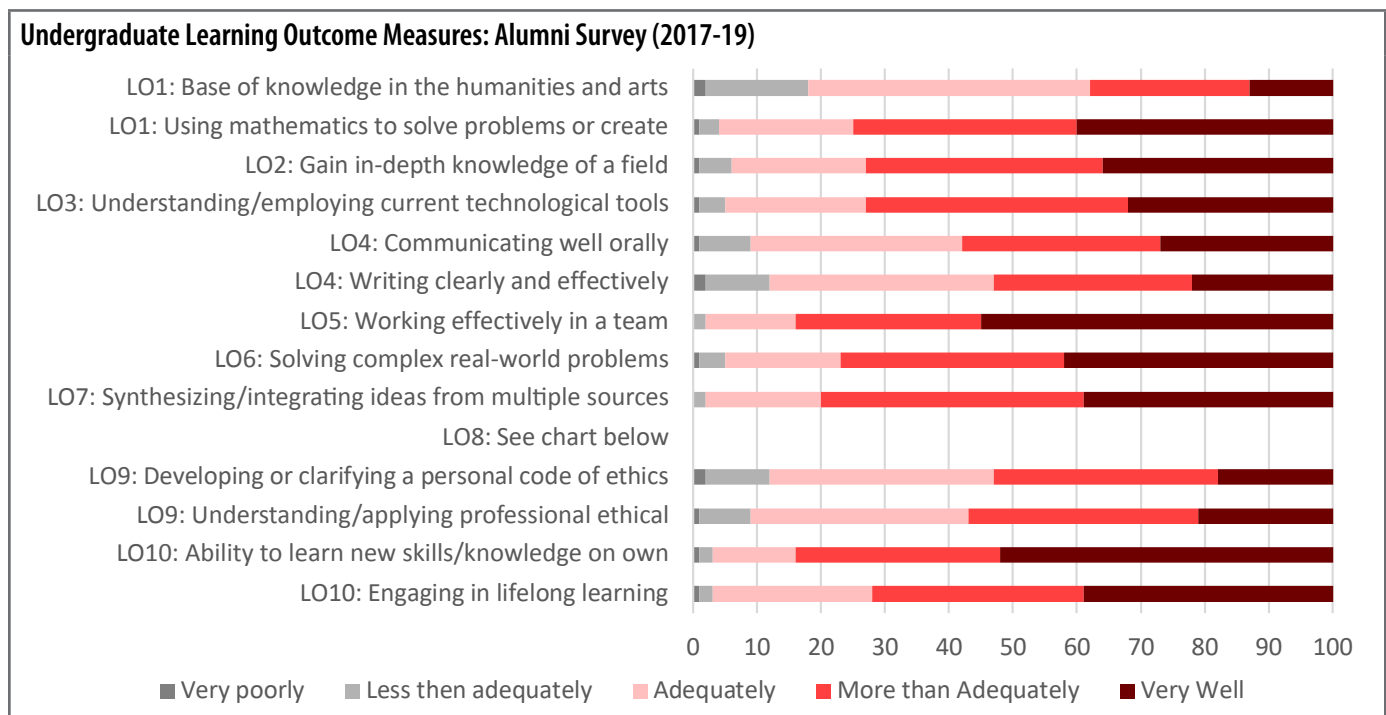
Alumni Study-Personal Impact of Project Work	
Personal/World View Impact	Percentage Agreeing
Develop a stronger personal character	88%
View issues from different perspectives	81%
Recognize that own ideas are valuable	80%
Understand connections between technology and society	79%

Three particularly striking results of the alumni study were cited by the National Academy of Engineering when it awarded WPI the 2016 Bernard M. Gordon Prize for Innovation in Engineering and Technology Education.

- 1) Almost all the statistics reported in the tables above are consistent over the 38 years studied in the survey; the results are just as strong for students who graduated in 2008 as they are for students who graduated in 1978.
- 2) Female alumni reported higher learning gains than male alumni in 36 of 39 areas, consistent with research suggesting women are highly motivated by social relevance and collaboration.
- 3) Alumni who had a global project experience reported higher learning gains in 21 out of 24 questions related to undergraduate learning outcomes. Assessment of student project work (primarily the written reports) has regularly indicated that the quality of global projects exceeds that of on-campus projects, but this was the first strong evidence for a difference in the impact of the off-campus project experience over a long period.

The results of the 2012 Alumni Study provided strong evidence for the expansion of the Global Projects Program. In the 2015 strategic plan *Elevate Impact*, WPI set the goal of Global Projects for All. Participation in the Global Projects Program had been steadily increasing since the late 1990s, but with the strategic commitment and faculty support, WPI substantially increased its capacity to offer IQPs at off-campus project centers, expand off-campus MQP centers, and develop opportunities for students to complete a term of Humanities and Arts coursework (and capstone) in another country. Growth in these programs was also supported by WPI's ability to offer a Global Scholarship to each admitted student, beginning with the Class of 2022. Each admitted student is offered a scholarship of up to \$5,000 as a credit on their account during the semester they participate in an off-campus opportunity. As a result, about 90% of current sophomores are applying to complete their IQPs at off-campus centers each year. Parts of the 2012 study connecting student success to project-based learning have been replicated, with the most recent results received in 2021.

The most recent alumni surveys provide evidence for student success and guide efforts to improve the undergraduate programs. Results below suggest that in response to the question, "How well did your undergraduate experience at WPI prepare you in the following areas?" 97% of respondents were adequately, more than adequately, or very well prepared for lifelong learning; 98% were prepared to learn new skills on their own; and 98% of respondents were prepared to work in teams. The lowest performing outcomes (yet still quite high) were acquiring a base of knowledge in the humanities and arts (81% were adequately or better prepared); writing clearly and effectively (88%); and developing or clarifying personal values (88%). Overall data suggest that WPI graduates perceive that the Undergraduate Learning Outcomes are being achieved.



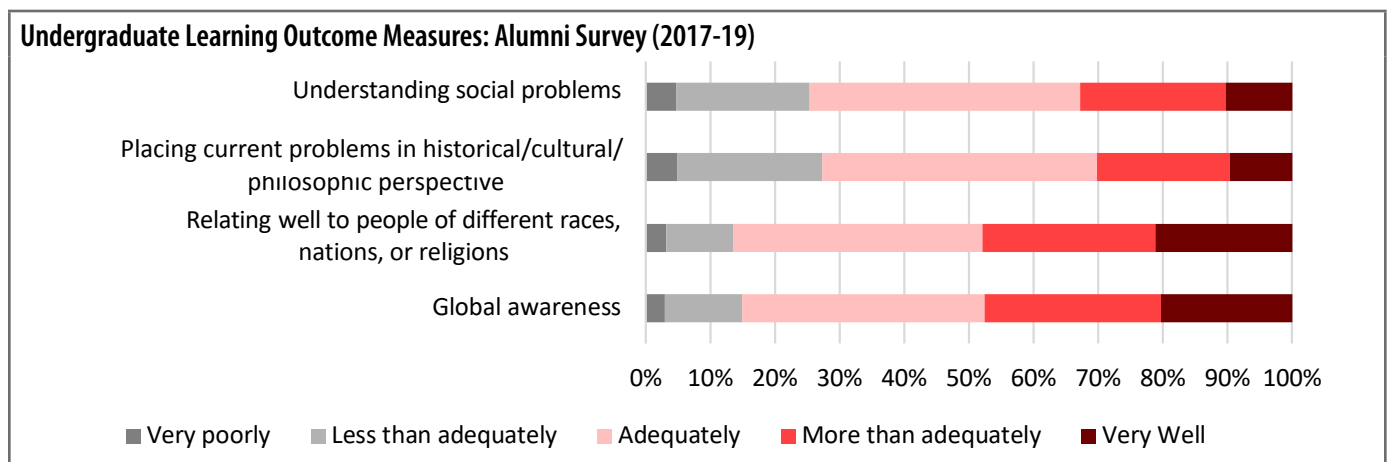
Opportunities for Further Development in Assessment of Undergraduate Learning Outcomes

WPI demonstrates data that supports ongoing achievement of undergraduate learning outcomes; however, there are opportunities for improvement. The surveys developed to record faculty assessment of student achievement of the learning outcomes for the IQP and the MQP were used for three years, with low response rates, and then went unused for three years as the eProjects system has been rebuilt. That work, part of the much larger project to transition from Banner to Workday, has delayed the redeployment of the advisor surveys for the IQP and the MQP. The new system should be in place for the fall terms of 2021, allowing for a consistent, methodical, multi-faceted process for measuring outcomes achievement

WPI's lowest rated outcome by faculty and students is ethical development. IQP and MQP advisors are not directly asked to engage students in the ethical concerns that are relevant to their projects and, anecdotally, some faculty intentionally shy away from discussions of social ethics in advising. Assessment data has shown that there are programs with outcomes above the university average, and UOAC and the Morgan Teaching and Learning Center will continue to support programs to share good practices. This is an area for further faculty development.

In addition to review of the assessment plan for the ethics learning outcome, the Undergraduate Outcomes Assessment Committee plans to work on updating the assessment plan for the new global and intercultural competency outcome.

Learning Outcome #8 was rewritten after UOAC determined that the outcome was not a good description of the university's evolving definition of global learning. The original outcome stated that *"WPI graduates will ... be aware of how their decisions affect and are affected by other individuals separated by time, space, and culture."* One criticism of this statement was that it was not assessable. (How does one assess "awareness"?) There was also concern among the faculty that the statement did not clearly differentiate between "global competency" and "intercultural competency." The report of a faculty working group introduced new language (approved by the full faculty in 2018). The report also recommended changes to the assessment plan for this learning outcome. Findings from alumni survey data conducted between 2017 and 2019 (and incorporating responses of graduates between 1974 and 2014) show that the majority of respondents report adequate or better preparation on related measures.



Graduate Programs Outcomes Assessment

The 2012 NEASC report to WPI noted that no graduate outcomes or program educational objectives were reported for any graduate program. Graduate programs are designed to focus on deep disciplinary knowledge and, in general, do not have the same breadth of purpose as undergraduate programs. WPI believes graduate learning outcomes should be defined at the program and departmental levels and not at the university level.

The Office of Graduate Studies is working with graduate programs that do not have clearly defined outcomes and objectives—beyond obtaining a deep disciplinary knowledge—to refine departmental outcomes. Programs that have well-defined outcomes and objectives have used traditional means of evaluating achievement of outcomes, such as qualifying and/or comprehensive exam completion, capstone projects, theses or dissertations, graduate seminars, publications, and conference presentations. These are assessed by the advisor, graduate committee, graduate coordinator, and thesis or dissertation committees. WPI will also be instituting a graduate alumni survey, which will provide an opportunity to assess achievement of programmatic learning objectives.

PROJECTIONS AND ASPIRATIONS FOR THE FUTURE

- The practice of regular assessment for the undergraduate learning outcomes has not followed the theory defined in the faculty-approved policies. Student and advisor surveys of project learning have not been available for the past three years. Returning to the regular assessment schedule is an immediate goal.
- WPI's graduate programs do not have learning outcomes at the same depth as the undergraduate program. Part of the reason for this is that graduate programs are more narrowly focused on disciplinary specialization, and so achievement in coursework is a clearer indicator of disciplinary mastery. A faculty group is beginning work to address this gap, with a plan to redefine the Undergraduate Outcomes Assessment Committee as a university-wide assessment committee with responsibility for programs at all levels.
- The current strategic plan challenges WPI to increase access and affordability. This will also challenge WPI to provide new dimensions of assessment and support for transfer students, students of diverse backgrounds, and students with very different educational backgrounds.
- One of WPI's strategic goals is to identify metrics and assess postgraduation outcomes beyond traditional first destination indicators of salary and employment status. These metrics will better capture long-term career performance and outcomes along with social mobility indicators.

DATA FIRST FORMS

STANDARD 8: EDUCATIONAL EFFECTIVENESS

Undergraduate Retention and Graduation Rates

Student Success Measures/ Prior Performance and Goals	3 Years Prior	2 Years Prior	1 Year Prior	Current Year	Next Year Forward (goal)
	(FY 2018)	(FY2019)	(FY 2020)	(FY 2021)	(FY 2022)

IPEDS Retention Data

IPEDS 17-18 IPEDS 18-19 IPEDS 19-20 IPEDS 20-21

Bachelor's degree students

95%	96%	95%	95%	96%
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IPEDS Graduation Data (150% of time)

Enter Fall 2011 Enter Fall 2012 Enter Fall 2013 Enter Fall 2014

Bachelor's degree students

89%	87%	89%	89%	89%
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IPEDS Outcomes Measures Data

First-time, full-time students

Enter Fall 2009 Enter Fall 2010 Enter Fall 2011 Enter Fall 2012

Awarded a degree within six years

84%	86%	89%	87%	89%
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Awarded a degree within eight years

85%	87%	89%	88%	89%
-----	-----	-----	-----	-----

Not awarded within eight years but still enrolled

0%	0%	0%	0%	0%
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First-time, part-time students

Awarded a degree within six years

57%			67%	
-----	--	--	-----	--

Awarded a degree within eight years

57%			67%	
-----	--	--	-----	--

Not awarded within eight years but still enrolled

0%			0%	
----	--	--	----	--

Non-first-time, full-time students

Awarded a degree within six years

86%	83%	89%	84%	86%
-----	-----	-----	-----	-----

Awarded a degree within eight years

89%	83%	89%	84%	86%
-----	-----	-----	-----	-----

Not awarded within eight years but still enrolled

0%	0%	0%	0%	0%
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Non-first-time, part-time students

Awarded a degree within six years

100%	80%	67%	75%	78%
------	-----	-----	-----	-----

Awarded a degree within eight years

100%	80%	67%	75%	78%
------	-----	-----	-----	-----

Not awarded within eight years but still enrolled

0%	0%	0%	0%	0%
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Other Undergraduate Retention/Persistence Rates

1	URM students (retention)	93%	94%	94%	98%	98%
2	Pell grant recipients (retention)	92%	93%	93%	93%	94%
3	First-generation students (retention)	93%	95%	92%	93%	94%
4	Women students (retention)	95%	97%	96%	96%	97%
5	International students (retention)	95%	96%	93%	96%	96%

Other Undergraduate Graduation Rates

Enter Fall 2013 Enter Fall 2014 Enter Fall 2015 Enter Fall 2016

1	Four-year graduation rate	82%	81%	81%	82%	83%
2	Pell grant recipient 4-year graduation rate	78%	81%	72%	77%	77%
3	URM student 4-year graduation rate	75%	74%	73%	75%	76%

Definition and Methodology Explanations

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STANDARD 8: EDUCATIONAL EFFECTIVENESS

Student Success and Progress Rates and Other Measures of Student Success

Category of Student/Outcome Measure	Bachelor Cohort Entering		Associate Cohort Entering	
	6 years ago	4 years ago	6 years ago	4 years ago
First-time, Full-time Students				
Degree from original institution	89%	85%		
Not graduated, still enrolled at original institution	1%	4%		
Degree from a different institution	3%	1%		
Transferred to a different institution	3%	5%		
Not graduated, never transferred, no longer enrolled	4%	5%		
First-time, Part-time Students				
Degree from original institution	Unknown	Unknown		
Not graduated, still enrolled at original institution	Unknown	Unknown		
Degree from a different institution	Unknown	Unknown		
Transferred to a different institution	Unknown	Unknown		
Not graduated, never transferred, no longer enrolled	Unknown	Unknown		
Non-first-time, Full-time Students				
Degree from original institution	86%	77%		
Not graduated, still enrolled at original institution	2%	13%		
Degree from a different institution	0%	3%		
Transferred to a different institution	0%	3%		
Not graduated, never transferred, no longer enrolled	11%	5%		
Non-first-time, Part-time Students				
Degree from original institution	Unknown	Unknown		
Not graduated, still enrolled at original institution	Unknown	Unknown		
Degree from a different institution	Unknown	Unknown		
Transferred to a different institution	Unknown	Unknown		
Not graduated, never transferred, no longer enrolled	Unknown	Unknown		

Measures of Student Achievement and Success/Institutional Performance and Goals					
	3 Years Prior	2 Years Prior	1 Year Prior	Current Year	Next Year Forward (goal)
	(FY 17)	(FY 18)	(FY 19)	(FY 20)	(FY 21)

Success of students pursuing higher degrees

1	Graduate school placement rate	19.4%	22.4%	26.5%	33.9%	
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Other measures of student success and achievement, including success of graduates in pursuing mission-related paths and success of graduates in fields for which they were not explicitly prepared

2	Volunteer Service	11 students	4 students	2 students	3 students	
3	Military Service	16 students	14 students	20 students	10 students	

Definition and Methodology Explanations

The percentage of undergraduate students enrolling in graduate school as their primary activity within six months after graduation (Source: First Destination Survey). Current year refers to students who graduated in 2020. FY21 data will be available in October. Includes counts of known volunteers and military personnel who responded to the First Destination Survey.

STANDARD 8: EDUCATIONAL EFFECTIVENESS

Licensure Passage and Job Placement Rates

	3-Years Prior		2 Years Prior		1 Year Prior		Most Recent Year	
	(AY 2017)		(AY 2018)		(AY 2019)		(AY 2020)	
Name of exam	# took exam	# who passed	# took exam	# who passed	# took exam	# who passed	# took exam	# who passed
State Licensure Examination Passage Rates								
Massachusetts Test for Educator Licensure	8	8	11	9	6	5	3	2
National Licensure Passage Rates								
Job Placement Rates								
Major/6 months after graduation	# of grads	# with jobs	# of grads	# with jobs	# of grads	# with jobs	# of grads	# with jobs
1 Actuarial Mathematics B.S.	17	14	11	10	10	7	10	5
2 Aerospace Engineering B.S.	42	26	43	28	55	30	37	10
3 Architectural Engineering B.S.	11	9	13	8	17	8	9	5
4 Biochemistry B.S.	24	7	23	9	16	9	20	10
5 Bioinformatics & Computational Biology B.S.	3	1	2	0	8	6	6	3
6 Biology & Biotechnology B.S.	50	27	32	20	32	17	37	13
7 Biomedical Engineering B.S.	94	61	86	51	79	39	99	56
8 Chemical Engineering B.S.	86	59	103	63	78	53	75	40
9 Chemistry B.S.	11	5	3	3	6	4	2	0
10 Civil Engineering B.S.	48	38	49	36	53	40	49	31
11 Computer Science B.S.	143	111	148	95	172	115	170	101
12 Data Science B.S.	NA	NA	NA	NA	NA	NA	2	2
13 Economics B.S.	3	3	1	1	3	3	2	1
14 Electrical & Computer Engineering B.S.	108	81	95	72	101	35	89	46
15 Environmental Engineering B.S.	22	15	14	10	14	12	9	2
16 Environmental & Sustainability Studies B.A.	NA	NA	1	1	3	3	1	0
17 Humanities & Arts B.S.	2	0	4	3	3	2	1	1
18 Industrial Engineering B.S.	31	21	27	19	36	27	30	14
19 Interactive Media & Game Development B.A./B.S.	30	19	23	10	26	12	24	7
20 International & Global Studies B.S.	6	2	4	3	9	4		
21 Business B.S.	5	4	5	3	4	4	11	5
22 Management Engineering B.S.	21	18	20	15	23	16	25	14
23 Management Information Systems B.S.	13	12	8	4	4	3	9	7
24 Manufacturing Engineering B.S.	NA	NA	NA	NA	NA	NA	1	0
25 Mathematical Sciences B.S.	34	16	17	4	15	8	15	6
26 Mechanical Engineering B.S.	215	123	229	153	248	161	243	116
27 Physics B.S.	18	7	13	4	18	6	9	0
28 Professional Writing B.S.	8	7	6	3	12	9	5	3
29 Psychological Science B.S.	2	1	2	2	5	1	4	2
30 Robotics Engineering B.S.	75	54	79	53	83	51	90	55
31 Aerospace Engineering M.S.	13	9	17	10	23	14	25	10
32 Applied Mathematics M.S.	5	2	5	1	3	1	4	1
33 Applied Statistics M.S.	8	6	18	8	7	6	6	2
34 Biochemistry M.S.	NA	NA	1	1	NA	NA	4	2
35 Bioinformatics & Computational Biology M.S.	1	1	2	2	4	2	NA	NA

	3-Years Prior		2 Years Prior		1 Year Prior		Most Recent Year		
	(AY 2017)		(AY 2018)		(AY 2019)		(AY 2020)		
Major/6 months after graduation	# of grads	# with jobs	# of grads	# with jobs	# of grads	# with jobs	# of grads	# with jobs	
36	Biology & Biotechnology M.S.	NA	NA	2	1	1	1	2	1
37	Biomedical Engineering M.S. & M.Eng.	21	14	12	10	13	12	13	8
38	Bioscience Administration M.S.	NA	NA	5	4	2	2	NA	NA
39	Biotechnology M.S.	NA	NA	NA	NA	NA	NA	3	2
40	Chemical Engineering M.S.	4	3	7	2	6	2	9	6
41	Chemistry M.S.	1	0	NA	NA	1	1	2	1
42	Civil Engineering M.S. & M.Eng.	8	8	4	4	8	8	5	1
43	Computer Science M.S.	47	37	51	40	47	32	41	27
44	Construction Project Management M.S.	3	3	2	1	1	1	2	2
45	Data Science M.S.	42	36	46	41	51	40	55	34
46	Electrical & Computer Engineering M.S. & M.Eng.	77	57	39	27	54	24	46	28
47	Environmental Engineering M.S.	6	5	6	2	12	8	4	2
48	Financial Mathematics M.S.	20	15	18	7	12	3	3	0
49	Fire Protection Engineering M.S.	34	33	35	27	49	36	19	15
50	Industrial Mathematics M.S.	2	1	1	0	2	2	NA	NA
51	Information Technology M.S.	57	51	51	46	48	38	30	20
52	Innovation with UX M.S.	NA	NA	NA	NA	NA	NA	7	3
53	Interactive Media & Game Development M.S.	3	2	7	6	6	5	8	5
54	Interdisciplinary M.S.	NA	NA	NA	NA	2	2	2	0
55	Learning Sciences & Technology M.S.	NA	NA	1	0	4	1	1	0
56	Management M.S.	22	17	21	13	18	6	11	7
57	Manufacturing Engineering M.S.	21	14	14	9	8	4	5	4
58	Marketing & Innovation M.S.	14	9	30	16	28	12	4	1
59	Materials Process Engineering M.S.	1	1	2	1	3	1	2	2
60	Materials Science and Engineering M.S.	27	15	18	10	23	10	18	9
61	Mathematics for Educators M.S. & MME	4	4	NA	NA	11	2	NA	NA
62	Master of Business Administration, MBA	71	66	25	18	38	20	37	32
63	Mechanical Engineering M.S.	71	47	34	23	87	52	72	50
64	Operations Analytics & Management M.S.	23	19	31	23	32	26	16	11
65	Physics M.S.	5	1	7	0	NA	NA	3	1
66	Physics for Educators M.S.	2	1	NA	NA	4	1	2	1
67	Power Systems Engineering M.S. & M.Eng.	24	18	4	4	24	11	11	6
68	Power Systems Management M.S.	10	8	5	5	8	4	7	6
69	Robotics Engineering M.S.	56	45	49	42	72	56	56	33
70	Supply Chain Management M.S.	NA	NA	NA	NA	1	0	6	3
71	System Dynamics M.S.	4	3	4	1	2	0	1	1
72	Systems Engineering M.S.	39	28	22	21	78	41	44	33
73	Aerospace Engineering Ph.D.	1	1	3	2	2	2	NA	NA
74	Biochemistry Ph.D.	NA	NA	1	1	NA	NA	1	0
75	Bioinformatics & Computational Biology Ph.D.	NA	NA	NA	NA	1	1	1	1
76	Biology & Biotechnology Ph.D.	1	0	1	1	1	1	2	1
77	Biomedical Engineering Ph.D.	2	2	3	3	3	3	2	1
78	Chemical Engineering Ph.D.	4	3	3	3	2	1	4	1
79	Chemistry Ph.D.	0	0	1	0	2	1	NA	NA

	3-Years Prior		2 Years Prior		1 Year Prior		Most Recent Year	
	(AY 2017)		(AY 2018)		(AY 2019)		(AY 2020)	
Major/6 months after graduation	# of grads	# with jobs	# of grads	# with jobs	# of grads	# with jobs	# of grads	# with jobs
80 Civil Engineering Ph.D.	4	3	3	2	NA	NA	2	1
81 Computer Science Ph.D.	6	6	6	6	7	5	5	4
82 Data Science Ph.D.	NA	NA	NA	NA	2	2	NA	NA
83 Electrical & Computer Engineering Ph.D.	8	6	12	11	6	5	3	2
84 Learning Science & Technology Ph.D.	NA	NA	2	2	3	1	NA	NA
85 Manufacturing Engineering Ph.D.	1	1	4	4	3	2	1	0
86 Materials Science & Engineering Ph.D.	7	7	7	6	10	9	3	2
87 Mathematical Science Ph.D.	5	5	2	2	3	1	2	1
88 Mechanical Engineering Ph.D.	2	2	3	3	4	3	3	3
89 Physics Ph.D.	1	1	1	0	NA	NA	1	1
90 Robotics Engineering Ph.D.	2	2	3	2	5	4	5	4
91 Statistics Ph.D.	NA	NA	NA	NA	3	2	NA	NA
Web location of gainful employment report (if applicable)				NA				

NOTE: WPI offers no short-term vocational training programs. None of WPI's programs subject to gainful employment requirements.

Please enter any explanatory notes in the box below

Placement data from Career Development Center: First Destination Outcomes Reports. Does not account for graduates who move on to graduate programs or the military (which accounted for 33.9% of all undergraduate and 11.4% of master's graduates in 2020). # grads includes all graduates in the major program, including those whose employment status is unknown. Please consult First Destination Outcomes Reports (www.wpi.edu/student-experience/career-development/outcomes) for the most accurate data.

STANDARD 8: EDUCATIONAL EFFECTIVENESS

Graduate Programs, Distance Education, Off-Campus Locations

Student Success Measures/ Prior Performance and Goals	3 Years Prior	2 Years Prior	1 Year Prior	Current Year	Next Year Forward (goal)
	(FY 18)	(FY 19)	(FY 20)	(FY 21)	(FY 22)
	AY 2017-18	AY 2018-19	AY 2019-20	AY 2020-21	AY 2021-22

Master's Programs

Retention rates first-to-second year	94%	92%	95%	93%	94%
Graduation rates @ 150% time	92%	93%	92%	94%	93%
Average time to degree					

Doctoral Programs

Retention rates first-to-second year	95%	96%	94%	93%	95%
Graduation rates @ 150% time					
Average time to degree	4.6	4.8	4.8	4.9	4.8

First Professional Programs

Retention rates first-to-second year					
Graduation rates @ 150% time					
Average time to degree					

Distance Education

Course completion rates					
Retention rates					
Graduation rates					

Branch Campus and Instructional Locations

Course completion rates					
Retention rates					
Graduation rates					

Definition and Methodology Explanations

- 1 Retention includes only FT students entering fall semester who returned or graduated by the following fall (Entry fall 2016 thru fall 2019).
- 2 Master's graduation at 150% time: FT fall starters who completed within 3 years (Entry fall 2013 thru fall 2016).
- 3 PhD average time to degree: Completers who began FT, remained FT for >=50% of enrolled terms, had no longer than 1 term stop-out.

STANDARD NINE: INTEGRITY, TRANSPARENCY, AND PUBLIC DISCLOSURE

DESCRIPTION AND APPRAISAL

Founded in 1865, WPI is authorized by the Commonwealth of Massachusetts to grant degrees and is accredited by NECHE. Through its policies and practices, WPI demonstrates its steadfast commitment to integrity, transparency, and public disclosure.

Integrity

Since its last NECHE accreditation, WPI has undertaken substantial efforts in developing administrative policies and improving communication, training, and compliance. WPI states its expectations, including policies on ethics and academic freedom, in its [Student Code of Conduct](#) (which applies to undergraduate and graduate students), [Academic Catalogs](#), [Faculty Handbook](#), [Employee Benefits and Policies Manual](#), [Policies](#) website, as well as on other policy-specific websites, such as those for [Academic Integrity](#), the [Title IX Office](#), the [Registrar's Office](#), and the [Institutional Review Board](#). All trustees, officers, and key employees sign an [annual conflict of interest disclosure](#). WPI embraces high ethical standards as it balances open and interactive communication with privacy and fairness. In 2017, WPI created the Office of the General Counsel whose goals are institutional risk management, legal compliance, and educating the WPI community about laws, regulations, and policies.

The university's website serves as the primary platform for current and prospective students, employees, and the public to find complete and accurate information about the university. For example, current and prospective students and families can obtain information about applying and the cost of enrollment on the websites for [Admissions](#) and the [Office of Student Aid and Financial Literacy](#), as well as at the website's detailed [consumer information](#) section. For graduate students, every program section in the graduate catalog begins with faculty listing with their academic resume and research interests.

In 2016, the website was completely overhauled and rewritten with the user experience top of mind. The website redesign represents substantial progress in digital presentation and information sharing. Within the site, the university's mission comes to life in features, news releases, announcements, stories, visuals, data, and other content, including links to course catalogs, academic and administrative policies, the Faculty Handbook, and ways to contact offices and individuals. In 2020 the website expanded to include in-depth information and user-friendly resources about the university's response to the COVID-19 pandemic. A continually optimized search function helps users find information quickly and easily. The website also includes links to a wealth of additional information about WPI, including historical, operational, professional development, benefits, and course catalog content.

Policy Development and Review

In recent years, WPI has overhauled its processes for developing and approving institutional administrative policies. In March 2020, WPI established the [Administrative Policy Group](#) (APG) to codify [procedures](#) for developing and approving administrative policies; this replaced the previous ad hoc policy development process. The [APG](#) is composed of a cross-functional group of administrators and faculty members who meet as often as weekly during the academic year to create, revise, recommend, and publish institutional administrative policies. The APG focuses on ensuring that WPI complies with the letter and spirit of the law and that WPI's policies meet the highest legal and ethical standards.

The APG process includes a 30-day public comment period during which proposed policies are posted on the [APG website](#) to allow WPI community members to share thoughts and concerns about them. Following the public comment period, the APG reviews feedback and revises policies as needed before they are approved by the President. The public comment period ensures that the WPI community has substantial input into the administrative policymaking process.

As the APG's publicly available [Institutional Administrative Policy Proposal Docket](#) shows, since its formation in 2020, the APG process has resulted in the approval of nine new administrative policies; four additional policies have been approved on an interim basis to comply with changes in the law and institutional priorities. Notable among these new policies is [WPI's Participation of Minors in WPI Programs Policy](#), which updated a [2018 version](#) of this policy to support the influx of minors participating in WPI-sponsored online programs during the COVID-19 pandemic.

In recent years, WPI has also made substantial progress developing academic policies through the [Faculty Governance](#) process. These include the [Policy on Faculty Conduct](#) (approved in 2019) and the [WPI Policy on Research Conduct](#) (approved in 2017). Other notable policy updates include a substantial revision of the [Student Code of Conduct](#) (2018 and 2019) and substantial revisions to the [Employee Benefits and Policies Manual](#) (2019-2020), as well as trainings for employees on such topics as FERPA, personally identifiable information, data security, and sexual harassment.

Discrimination and Harassment Policies

Like most universities, WPI continually adapts its policies and practices to changing laws and norms to ensure the fair resolution of grievances and disputes. As part of its ongoing work to foster a campus culture that rejects bias, prejudice, and discrimination, in 2020 WPI established a [Bias Response Program](#) (BRP) to address individual and community-wide incidents of bias. The BRP operates within the framework established by WPI's [Notice of Non-Discrimination](#), WPI's [faculty](#) and [employee](#) policies prohibiting discrimination and harassment, and WPI's [Title IX and Sexual Misconduct Policy](#).

Over the past 10 years, WPI's Sexual Misconduct Policy has undergone some of the most substantial revisions of all WPI's policies, largely in response to changing federal and state laws, regulations, and guidance. As stated in the 2016 Interim Report, sexual violence prevention, training, and legal compliance continue to be high priorities for WPI. To that end, WPI's Sexual Misconduct Policy was substantially revised in 2018 in coordination with Faculty Governance. In August 2020, WPI introduced an interim Title IX Policy to ensure the university's compliance with the new federal Title IX regulations finalized in May 2020; WPI also updated its prohibition on broader forms of sexual misconduct through its interim [Title IX and Sexual Misconduct Policy](#) most recently updated in 2021 to ensure continued compliance with Title IX and a January 2021 Massachusetts law on sexual violence, and to improve the clarity of those policies for the WPI community. WPI's [Title IX Office webpage](#) includes detailed information about those policies, as well as other resources for complainants, respondents, and members of the WPI community.

The university provides information and outlets for community members with concerns. Students may direct their concerns to the Dean of Students or the Dean of Graduate Studies. Policies affecting academics, such as academic standing or grade appeals and grade changes, are articulated in student catalogs; processes to address other policy violations are articulated in the [Student Code of Conduct](#). Employees may follow the grievance procedures outlined in the [Employee Benefits and Policies Manual](#) or speak with the [University ombudsperson](#) or their union representative.

Transparency and Public Disclosure

WPI's Marketing Communications Division provides editorial, design, and production strategy and support for university communications. Individual departments and subject matter experts have primary responsibility for content in print materials, public and media relations, social media, and the WPI website. The university's public relations team has fulfilled WPI's responsibility to [publicize](#) the reaccreditation process. A call for public comment, included in the workroom, was distributed to the local media and the public [via the website](#), to employees via the daily web-based newsletter (*WPI Today*), to families (via *The Fountain*), and to WPI alumni (via *The Bridge*).

Audited financial statements may be found on the WPI [Controller's website](#). Equal employment policies are articulated in the [Employee Benefits and Policy Manual](#). The Office of Government Relations partners with community and government officials to share the ways WPI supports the local community.

Website Redesign

In 2016 WPI launched a complete redesign of its website (www.wpi.edu) following two years of community input and intensive content and technological development. WPI's guiding principles for its website are to 1) create accurate content once, making it easy to link to information from anywhere on the website; 2) improve the authoring experience for trained community members; and 3) ensure an optimal user experience regardless of device. As of 2019, 38% of web visitors are on mobile devices, 58% are on desktop computers, and 4% are on tablets.

The new information architecture organizes content by "who needs the information" rather than "who owns the information." For example, the website has centrally managed pages that are available and accessible by internal and external users, such as every [degree program](#), [facts and figures](#), [data dashboards](#), [policies](#), [employment outcomes](#), [consumer information](#), [student cost and debt data](#), and the [WPI directory](#) (including the [WPI faculty directory](#)). Over the past 10 years, WPI has reduced the number of print publications, making [undergraduate and graduate catalogs](#), [course schedules](#), and [academic calendars](#) available online.

WPI regularly reviews its print and digital communications to ensure that they are complete, accurate, available, readily accessible, and current. In response to a U.S. Department of Education Office for Civil Rights review, WPI published a [Digital Accessibility Policy](#) and committed to following technical accessibility standards established by the World Wide Web Consortium. WPI's Marketing Operations team supports WPI's efforts to ensure the accessibility of its website.

COVID-19 and the “We Are WPI” Website

During summer 2020, WPI’s Marketing Communications Division developed the [We Are WPI webpage](#) and email address (wearewpi@wpi.edu) to provide consistent, coordinated communication to students, parents, faculty, staff, and the public about the university’s response to the COVID-19 pandemic. The *We Are WPI* webpage is one of the most visited and most frequently updated webpages on the WPI website. Since it launched in July 2020, it has been the third most visited page, having been viewed more than 147,000 times. It includes pertinent information for students and employees about campus operations, as well as information on WPI’s compliance with [Massachusetts guidance](#). WPI’s [COVID Testing Dashboard](#) provides members of the WPI community and the public with information on seven-day and 30-day trends in tests, positive test results, and campus positivity rate. The COVID Testing Dashboard has had more than 341,000 page views since COVID-19 testing began at WPI in summer 2020.

WPI has also successfully used [Facebook](#), [Instagram](#), [email announcements](#), and other forms of communication, such as virtual Town Halls livestreamed and on [YouTube](#), to effectively reach members of the WPI community and to provide important information about the university’s response to COVID-19. President Leshin’s virtual Town Halls are widely attended (averaging 588 people per meeting) and were viewed more than 10,000 times between March 2020 and February 2021.

Marketing Communications Programs and Process

The systems and processes that have supported WPI’s approach to communications during the COVID-19 pandemic are the same as those that drive the university’s initiatives to connect and engage with prospective students and employees, the broader Worcester community, WPI’s partners in government and industry, foundations, and WPI faculty, staff, parents, and alumni.

In 2011-12, WPI conducted an image and reputation study and a marketing operations assessment to inform integrated strategies to support WPI’s reputation, enrollment, and development goals. The broad takeaway regarding WPI’s image was that it was “well-done but not well-known.” An outside consultant recommended that Marketing Communications expand its core capabilities (which at the time focused primarily on branding, PR, publications, and design) to include marketing strategists who would provide campus partners with strategic counsel, planning, implementation or oversight, and guidelines to better integrate messaging and the university’s visual identity and to provide pathways for its audiences to find and use information. This resulted in the Marketing Resources and Tools, which are available on the [website](#) to help the campus community create unified, branded, and targeted communications.

WPI’s Marketing Communications Division operates with an emphasis on agility in a hyper-connected, always-on world to help the university achieve its most ambitious and strategic visibility goals. For most of the past 10 years, those goals have focused on impactful projects for WPI students, a pedagogy that could transform higher education, and purpose-driven research—all of which were critical to public relations and marketing programs and stakeholder communications for *Elevate Impact*, the university’s 2015-2019 strategic plan.

PROJECTIONS AND ASPIRATIONS FOR THE FUTURE

- WPI will continue to prioritize the highest ethical standards in the management of its affairs and the transparent and accurate presentation and distribution of policies, procedures, and other information that helps stakeholders, including the public, make informed decisions about the institution. WPI will continue to enhance the technological underpinnings and the content strategy of wpi.edu.
- In the spring of 2021, the university will fully transition to digital catalogs for undergraduate and graduate programs, aiming to improve accessibility, accuracy, and timeliness (for special courses, for example) and to enable the seamless integration of up-to-date course information on WPI degree webpages.
- The Administrative Policy Group will continue its collaborative work developing institutional policies. As new policies are approved, communications about the policies will be part of the community daily e-newsletter and posted for reference on the university’s [Policies](#) website.
- As the university works on its next strategic plan, Marketing Communications is at the table, working on a community engagement plan and the production of the plan itself, as well as mechanisms for providing progress updates in the years ahead.

DATA FIRST FORMS

STANDARD 9: INTEGRITY, TRANSPARENCY, AND PUBLIC DISCLOSURE

Integrity

Policies	Last Updated	Website location where policy is posted	Responsible Office or Committee
Academic honesty	2020 2019	www.wpi.edu/about/policies/academic-integrity www.wpi.edu/about/policies/academic-integrity/dishonesty http://www.wpi.edu/sites/default/files/AcademicDishonestyResolutionProcess.pdf	Dean of Students
Intellectual property rights	2016 2005	www.wpi.edu/about/policies/intellectual-property www.wpi.edu/about/policies/copyright-compliance/copyright-policy	Office of Technology Commercialization, Academic Planning Committee Office of the General Counsel, IT
Conflict of interest	2017	www.wpi.edu/about/policies/faculty-exempt-staff-conflict-of-interest	Office of Sponsored Programs Office of the General Counsel
Privacy rights	2020 2020 2016 2020	www.wpi.edu/about/policies/privacy-policy www.wpi.edu/about/policies/acceptable-use www.wpi.edu/offices/registrar/policies-procedures/ferpa www.wpi.edu/sites/default/files/2020/12/14/FINAL_BackgroundCheckPolicy_12.10.2020.pdf	IT Office of the Registrar Talent and Inclusion
Fairness for students	2020	www.wpi.edu/offices/dean-students/code-of-conduct www.wpi.edu/offices/registrar/policies-procedures/grade-appeal-grade-change-policy	Dean of Students Office of the Registrar
Fairness for faculty	2020	www.wpi.edu/offices/faculty-governance	Faculty Governance
Fairness for staff	2020	Employee Handbook: www.wpi.edu/offices/talent/policies-compliance-notices/policies	Talent and Inclusion
Academic freedom	2020	www.wpi.edu/offices/faculty-governance	Committee on Tenure and Academic Freedom
Research	2017	www.wpi.edu/sites/default/files/docs/About-WPI/Policies/Research_Misconduct_Policy.pdf	Faculty Governance
Title IX	2020	www.wpi.edu/sites/default/files/2020/08/13/InterimTitleIX-Policy.pdf	Title IX Coordinator Office of the General Counsel
Sexual Misconduct Policy	2020	www.wpi.edu/sites/default/files/2020/08/13/InterimSexual-MisconductPolicy.pdf	Title IX Coordinator Office of the General Counsel
Participation of Minors in WPI Programs Policy	2020	www.wpi.edu/sites/default/files/2020/11/21/Participation-of-Minors-in-WPI-Programs-Policy.pdf	Office of the General Counsel
FERPA Policy	2016	www.wpi.edu/offices/registrar/policies-procedures/ferpa	Registrar
Copyright Policy	2005	www.wpi.edu/about/policies/copyright-compliance/copyright-policy	Office of the General Counsel, IT

Non-discrimination policies

Recruitment and admissions	2020	www.wpi.edu/about/policies/notice-of-non-discrimination	Dean of Students, Title IX Office, Office of Accessibility Services, Talent and Inclusion
Employment	2020	www.wpi.edu/about/policies/notice-of-non-discrimination	Talent and Inclusion
Evaluation	2020 2020	Employee Handbook: www.wpi.edu/offices/talent/policies-compliance-notices/policies Faculty Handbook: www.wpi.edu/offices/faculty-governance	Talent and Inclusion Faculty Governance

Disciplinary action	2020	Employee Handbook: www.wpi.edu/offices/talent/policies-compliance-notices/policies Faculty Handbook: www.wpi.edu/offices/faculty-governance	Talent and Inclusion Faculty Governance
Advancement	2020	Employee Handbook: www.wpi.edu/offices/talent/policies-compliance-notices/policies Faculty Handbook: www.wpi.edu/offices/faculty-governance	Talent and Inclusion Faculty Governance
Title IX	2020	www.wpi.edu/sites/default/files/2020/08/13/InterimTitleIX-Policy.pdf	Title IX Coordinator Office of the General Counsel
Sexual Misconduct Policy	2020	www.wpi.edu/sites/default/files/2020/08/13/InterimSexual-MisconductPolicy.pdf	Title IX Coordinator Office of the General Counsel
Digital Accessibility Policy	2019	www.wpi.edu/sites/default/files/2019/04/10/WPI_digital_accessibility_policy.pdf	IT
Bias Response Program	2020	www.wpi.edu/about/diversity-inclusion/bias-response-program	Bias Response Team, Talent and Inclusion, Student Affairs

Resolution of grievances

Policies	Last Updated	Website location or Publication	Responsible Office or Committee
Students	2020	www.wpi.edu/offices/dean-students/code-of-conduct	Dean of Students
Faculty	2020	Faculty Handbook: www.wpi.edu/offices/faculty-governance	Faculty Governance
Staff	2020	Employee Handbook: http://www.wpi.edu/offices/talent/policies-compliance-notices/policies	Talent and Inclusion
Ombudsperson	2020	www.wpi.edu/offices/ombudsperson	Ombudsperson
Notice of Non-Discrimination	2020	www.wpi.edu/about/policies/notice-of-non-discrimination	Dean of Students, Title IX Office, Accessibility Services, Talent and Inclusion
Title IX	2020	www.wpi.edu/sites/default/files/2020/08/13/InterimTitleIX-Policy.pdf	Title IX Coordinator Office of the General Counsel
Sexual Misconduct Policy	2020	www.wpi.edu/sites/default/files/2020/08/13/InterimSexual-MisconductPolicy.pdf	Title IX Coordinator Office of the General Counsel
Disability Grievance Procedure	2018	www.wpi.edu/sites/default/files/DisabilityGrievance_Procedure.pdf	Office of Accessibility Services
Bias Response Program	2020	www.wpi.edu/about/diversity-inclusion/bias-response-program	Bias Response Team, VP of Talent and Inclusion, VP for Student Affairs

Other	Last Updated	Website location or Publication	Responsible Office or Committee
Administrative Policy Group	2020	www.wpi.edu/about/policies/administrative-policy-group	Administrative Policy Group (APG), Office of the General Counsel
WPI Policies Page	2020	www.wpi.edu/about/policies	Administrative Policy Group (APG), Marketing Communications
IT Policies and Procedures	2020	hub.wpi.edu/article/139/it-policies-standards-and-procedures	IT

Please enter any explanatory notes in the box below

Explanatory note applicable to Column B: Fairness for Students, Fairness for Faculty, Fairness for Staff, Disciplinary Action, Resolution of Grievances for Students, Faculty, and Staff: Students, faculty, and staff are also subject to WPI's Title IX and Sexual Misconduct Policy, Bias Response Program, Policy on Research Conduct.

STANDARD 9: INTEGRITY, TRANSPARENCY, AND PUBLIC DISCLOSURE

Transparency

Information	Website location and/or Relevant Publication(s)
How can inquiries be made about the institution? Where are questions addressed?	www.wpi.edu/contact
Notice of availability of publications and of audited financial statement or fair summary	www.wpi.edu/offices/controller
Processes for admissions	www.wpi.edu/admissions/undergraduate/apply www.wpi.edu/admissions/graduate/how-to-apply
Processes for employment	www.wpi.edu/offices/talent/careers
Processes for grading	www.wpi.edu/offices/registrar/policies-procedures/grade-system www.wpi.edu/offices/registrar/policies-procedures/project-grading www.wpi.edu/offices/registrar/policies-procedures/grade-appeal-grade-change-policy Faculty Handbook: www.wpi.edu/offices/faculty-governance
Processes for assessment	web.wpi.edu/Images/CMS/Outcomes/Assessment_Plan.pdf
Processes for student discipline	www.wpi.edu/offices/dean-students/code-of-conduct
Processes for consideration of complaints and appeals	www.wpi.edu/offices/dean-students/code-of-conduct www.wpi.edu/about/diversity-inclusion/bias-response-program www.wpi.edu/sites/default/files/DisabilityGrievance_Procedure.pdf www.wpi.edu/offices/registrar/policies-procedures/grade-appeal-grade-change-policy www.wpi.edu/sites/default/files/docs/Offices/Registrar/GS%20Waive%20Dismissal_0.pdf

List below the statements or promises made regarding program excellence, learning outcomes, success in placement, and achievements of graduates or faculty and indicate where valid documentation can be found.

Statement/Promise	Website location and/or publication where documentation can be found
A Distinctive Approach to STEM Education/ Research	www.wpi.edu/about
Excellence in Research	www.wpi.edu/research
Excellence in Teaching	www.wpi.edu/academics/faculty/morgan-teaching-learning-center
Facts and Figures	www.wpi.edu/about/facts
Rankings	www.wpi.edu/about/facts
The WPI Plan	www.wpi.edu/project-based-learning/wpi-plan
Innovative project-based curriculum	www.wpi.edu/academics/undergraduate/project-based-learning
Interactive Qualifying Project Learning Outcomes	www.wpi.edu/academics/undergraduate/interactive-qualifying-project/outcomes
Major Qualifying Project Learning Outcomes	www.wpi.edu/academics/undergraduate/major-qualifying-project/learning-outcomes
Career Outcomes & Salary Data	www.wpi.edu/student-experience/career-development/outcomes
Career Outlook	www.wpi.edu/student-experience/career-development/majors/career-outlook
Employers Who Hire WPI Graduates	www.wpi.edu/employers-partners/hire-wpi
Alumni Awards	www.wpi.edu/alumni/awards
Faculty Awards	www.wpi.edu/offices/provost/faculty-awards
Consumer Information	www.wpi.edu/offices/institutional-research/consumer-information

Date of last review of:	
Print publications	Ongoing
Digital publications	Ongoing

Please enter any explanatory notes in the box below

Explanatory note applicable to Column A: Processes for Student Discipline and Processes for Consideration of Complaints and Appeals: Students are also subject to WPI's Title IX and Sexual Misconduct Policy, Disability Grievance Procedure, Bias Response Program, Policy on Research Conduct.

STANDARD 9: INTEGRITY, TRANSPARENCY, AND PUBLIC DISCLOSURE

Public Disclosure

Information	Website location
Institutional catalog	www.wpi.edu/academics/calendar-catalogs
Obligations and responsibilities of students and the institution	www.wpi.edu/offices/dean-students/code-of-conduct www.wpi.edu/academics/calendar-catalogs
Information on admission and attendance	www.wpi.edu/admissions www.wpi.edu/about/diversity-inclusion www.wpi.edu/admissions/tuition-aid www.wpi.edu/offices/registrar/policies-procedures/academic-standing
Institutional mission and objectives	https://www.wpi.edu/about/mission
Expected educational outcomes	www.wpi.edu/about/policies/undergraduate-learning-outcomes www.wpi.edu/academics/undergraduate/interactive-qualifying-project/outcomes www.wpi.edu/academics/undergraduate/major-qualifying-project/learning-outcomes www.wpi.edu/academics/graduate/resources
Status as public or independent institution; status as not-for-profit or for-profit; religious affiliation	https://www.wpi.edu/about/leadership/trustees/bylaws-corporation
Requirements, procedures, and policies re: admissions	www.wpi.edu/admissions www.wpi.edu/admissions/undergraduate/apply www.wpi.edu/admissions/graduate
Requirements, procedures, and policies re: transfer credit	www.wpi.edu/offices/registrar/policies-procedures/transfer-credit
A list of institutions with which the institution has an articulation agreement	www.wpi.edu/admissions/undergraduate/apply/transfer-students/transfer-student-faqs
Student fees, charges, and refund policies	www.wpi.edu/offices/bursar/tuition www.wpi.edu/offices/bursar/refunds https://nces.ed.gov/collegenavigator/?q=worchester&s=all&id=168421#expenses www.wpi.edu/admissions/tuition-aid www.wpi.edu/admissions/tuition-aid/financial-need/net-price-calculator www.wpi.edu/admissions/tuition-aid/cost-attendance
Rules and regulations for student conduct	www.wpi.edu/offices/dean-students/code-of-conduct
Procedures for student appeals and complaints	www.wpi.edu/offices/dean-students/code-of-conduct www.wpi.edu/offices/registrar/policies-procedures/grade-appeal-grade-change-policy www.wpi.edu/sites/default/files/docs/Offices/Registrar/GS%20Waive%20Dismissal_0.pdf
Other information re: attending or withdrawing from the institution	www.wpi.edu/offices/registrar/policies-procedures/withdrawal-or-leave-of-absence www.wpi.edu/offices/registrar/policies-procedures/returning-to-wpi
Academic programs	www.wpi.edu/academics/study www.wpi.edu/academics/schools-departments-programs https://nces.ed.gov/collegenavigator/?q=worchester&s=all&id=168421#programs
Courses currently offered	www.wpi.edu/offices/registrar/course-registration/schedules
Other available educational opportunities	www.wpi.edu/student-experience/resources/off-campus-projects/project-opportunities www.wpi.edu/offices/corporate-professional-education www.wpi.edu/student-experience/career-development/internships www.wpi.edu/research/centers
Other academic policies and procedures	www.wpi.edu/academics/calendar-catalogs www.wpi.edu/offices/registrar/policies-procedures
Requirements for degrees and other forms of academic recognition	www.wpi.edu/academics/calendar-catalogs www.wpi.edu/offices/registrar/graduation/checklist www.wpi.edu/academics/study www.wpi.edu/about/awards www.wpi.edu/student-experience/resources/academic-advising/program-tracking-sheets

Information	Website location
List of continuing faculty, department/program affiliation, degrees held, and institutions granting them	www.wpi.edu/academics/faculty/directory
Names/positions of administrative officers	www.wpi.edu/offices/president/leadership
Names, principal affiliations of governing board members	www.wpi.edu/offices/president/trustees
Locations and programs available at branch campuses, other instructional locations, and overseas operations at which students can enroll for a degree, along with a description of programs and services available at each location	www.wpi.edu/project-based-learning/project-based-education/global-project-program/project-centers The locations and programs at off-campus project centers are not permanent locations with permanent staffing.
Programs, courses, services, and personnel not available in any given academic year.	The Registrar can provide a list upon request. www.wpi.edu/offices/registrar
Size and characteristics of the student body	www.wpi.edu/about/facts www.wpi.edu/offices/institutional-research/data-dashboards
Description of the campus setting	www.wpi.edu/coming-to-campus
Availability of academic and other support services	www.wpi.edu/academics/calendar-catalogs . (Undergraduate: The WPI Plan, Resources and Special Programs, Career Development and Graduate School, Admission/Expenses/Financial Aid and Housing; Graduate: Admission Information, Application Requirements, Financial Assistance, Student Services) www.wpi.edu/offices/office-accessibility-services www.wpi.edu/offices/student-development-counseling-center
Range of co-curricular and non-academic opportunities available to students	www.wpi.edu/offices/student-activities www.wpi.edu/student-experience/getting-involved www.wpi.edu/student-experience
Institutional learning and physical resources from which a student can reasonably be expected to benefit	www.wpi.edu/library www.wpi.edu/student-experience
Institutional goals for students' education	www.wpi.edu/sites/default/files/2020/01/23/WPI_UG_Cat-2020-21-Final_WEB.pdf www.wpi.edu/sites/default/files/WPIGradCat20-21Final.pdf
Success of students in achieving institutional goals including rates of retention and graduation and other measure of student success appropriate to institutional mission. Passage rates for licensure exams, as appropriate	www.wpi.edu/offices/institutional-research/data-dashboards www.wpi.edu/offices/institutional-research/consumer-information www.wpi.edu/student-experience/career-development/outcomes
Total cost of education and net price, including availability of financial aid and typical length of study	www.wpi.edu/admissions/tuition-aid/cost-attendance www.wpi.edu/admissions/tuition-aid/types-of-aid www.wpi.edu/admissions/tuition-aid/financial-need www.wpi.edu/admissions/tuition-aid/understanding-financial-aid www.wpi.edu/offices/institutional-research/consumer-information
Expected amount of student debt upon graduation and loan payment rates	www.wpi.edu/admissions/tuition-aid/types-of-aid/loans-financing https://collegescorecard.ed.gov/school/?168421-Worcester-Polytechnic-Institute
Statement about accreditation	www.wpi.edu/about/accreditation

Please enter any explanatory notes in the box below

Explanatory note applicable to Column A: Rules and regulations for student conduct; Procedures for student appeals and complaints: Students are also subject to WPI's Title IX and Sexual Misconduct Policy, Disability Grievance Procedure, Bias Response Program, Policy on Research Conduct.

APPENDIX

- 1) Affirmation of Compliance with Federal Regulations Relating to Title IV**
- 2) E-Series Forms on Student Achievement and Success**
- 3) Most Recent Audited Financial Statements**
- 4) List of Supporting Documents Available in the Electronic Workroom**

**AFFIRMATION OF COMPLIANCE WITH
 FEDERAL REGULATIONS RELATING TO TITLE IV**

Periodically, member institutions are asked to affirm their compliance with federal requirements relating to Title IV program participation, including relevant requirements of the Higher Education Opportunity Act.

- 1. Credit Transfer Policies.** The institution’s policy on transfer of credit is publicly disclosed through its website and other relevant publications. The institution includes a statement of its criteria for transfer of credit earned at another institution of higher education along with a list of institutions with which it has articulation agreements. (NECHE Policy 95. See also *Standards for Accreditation* 4.38, 4.39 and 9.19.)

URL	www.wpi.edu/offices/registrar/policies-procedures/transfer-credit www.wpi.edu/admissions/undergraduate/apply/transfer-students/transfer-student-faqs
Print Publications	WPI’s Undergraduate and Graduate Catalogs: www.wpi.edu/academics/calendar-catalogs
Self-study Report Page Reference	p. 42

- 2. Student Complaints.** “Policies on student rights and responsibilities, including grievance procedures, are clearly stated, well publicized and readily available, and fairly and consistently administered.” (*Standards for Accreditation* 5.18, 9.8, and 9.19.)

URL	Student Code of Conduct: www.wpi.edu/offices/dean-students/code-of-conduct Academic Integrity: www.wpi.edu/about/policies/academic-integrity Notice of Non-Discrimination: www.wpi.edu/about/policies/notice-of-non-discrimination Title IX Policy and Sexual Misconduct Policy: www.wpi.edu/offices/title-ix Bias Response Program: www.wpi.edu/about/diversity-inclusion/bias-response-program Disability Grievance Procedure: www.wpi.edu/sites/default/files/DisabilityGrievance_Procedure.pdf Policy on Research Conduct: www.wpi.edu/sites/default/files/docs/About-WPI/Policies/Research_Misconduct_Policy.pdf Registrar’s Policies (including Grade Appeal and Grade Change Policy and Graduate Student Appeal of Academic Dismissal): www.wpi.edu/offices/registrar/policies-procedures
Print Publications	WPI’s Undergraduate and Graduate Catalogs : www.wpi.edu/academics/calendar-catalogs Many of the policies above are downloadable as pdfs
Self-study Report Page Reference	p. 56 , p. 126

- 3. Distance and Correspondence Education: Verification of Student Identity:** If the institution offers distance education or correspondence education, it has processes in place to establish that the student who registers in a distance education or correspondence education course or program is the same student who participates in and completes the program and receives the academic credit. The institution protects student privacy and notifies students at the time of registration or enrollment of any projected additional student charges associated with the verification of student identity. (NECHE Policy 95. See also *Standards for Accreditation* 4.48.)

Method(s) used for verification	Student identity is confirmed through a unique username and password assigned to each individual student and through an additional layer of multi-factor authentication. Additionally, courses delivered online that offer live exams use online proctoring services to authenticate student identity.
Self-study Report Page Reference	p. 44

4. FOR COMPREHENSIVE EVALUATIONS ONLY: Public Notification of an Evaluation Visit and Opportunity for Public Comment: The institution has made an appropriate and timely effort to notify the public of an upcoming comprehensive evaluation and to solicit comments. (NECHE Policy 77.)

URL	www.wpi.edu/about/accreditation/neche WPI Today, daily community newsletter: www.wpi.edu/news Also shared on social media, via <i>The Fountain</i> (WPI's electronic parent and family newsletter), and <i>The Bridge</i> (WPI's electronic alumni newsletter)
Self-study Report Page Reference	p. 126

The undersigned affirms that Worcester Polytechnic Institute meets the above federal requirements relating to Title IV program participation, including those enumerated above.

Chief Executive Officer: 

Date: 8/2/2021

March 2016
June 2020

E-SERIES FORMS: MAKING ASSESSMENT MORE EXPLICIT

OPTION E1: PART A. INVENTORY OF EDUCATIONAL EFFECTIVENESS INDICATORS

CATEGORY	(1) Where are the learning outcomes for this level/program published? (Please specify) Include URLs where appropriate.	(2) Other than GPA, what data/evidence is used to determine that graduates have achieved the stated outcomes for the degree?	(3) Who interprets the evidence? What is the process?	(4) What changes have been made as a result of using the data/evidence?	(5) Date of most recent program review
Undergraduate Programs					
Institutional Level	Catalog and on the web at https://www.wpi.edu/sites/default/files/2020/01/23/WPI_UG_Cat-2020-21-Final_WEB.pdf (Page 4 in the 2020-21 undergraduate catalog)	Assessment of student capstone work in Major Qualifying Projects and Interactive Qualifying Projects.	Faculty in academic departments, The Global School, and Undergraduate Outcomes Assessment Committee (UOAC)	Global projects for all (90% participation in 2020)	2019
Major Qualifying Project	Catalog and on the web at https://www.wpi.edu/academics/undergraduate/major-qualifying-project/learning-outcomes (Page 17 in the 2020-21 undergraduate catalog)	Reviews of student MQP reports; students and faculty surveys for learning outcomes; Project Presentation Day	Organized by academic departments and supported by the Undergraduate Outcomes Assessment Committee	Varies by department	MQP reviews on a three-year cycle; Student and Advisor Surveys under construction
Interactive Qualifying Project	Catalog and on the web at https://www.wpi.edu/academics/undergraduate/interactive-qualifying-project/outcomes (Page 18 in the 2020-21 undergraduate catalog)	Reviews of student IQP reports; student and faculty surveys for learning outcomes	Organized by the Global School and reviewed by the Undergraduate Outcomes Assessment Committee	Global projects for all; creation of the Global School	2019 for review of project reports and surveys; student and advisor surveys under construction
Humanities and Arts Capstone: Inquiry Seminar and Practicum	Catalog and on the web at https://www.wpi.edu/academics/undergraduate/humanities-arts-requirement/learning-outcomes (Page 22 in the 2020-21 undergraduate catalog)	Reviews of student work in capstone seminars and practicums; Focused reviews for different disciplines within the department	Humanities and Arts department faculty; supported by the Undergraduate Outcomes Assessment Committee	Changed structure of off-campus (summer) immersion programs	Learning outcomes and assessment plan under construction

E-SERIES FORMS: MAKING ASSESSMENT MORE EXPLICIT
OPTION E1: PART A. INVENTORY OF EDUCATIONAL EFFECTIVENESS INDICATORS

CATEGORY	(1) Where are the learning outcomes for this level/program published? (please specify) Include URLs where appropriate.	(2) Other than GPA, what data/evidence is used to determine that graduates have achieved the stated outcomes for the degree?	(3) Who interprets the evidence? What is the process?	(4) What changes have been made as a result of using the data/evidence?	(5) Date of most recent program review
B.S. in Actuarial Mathematics	Catalog and on the web at https://www.wpi.edu/academics/study/actuarial-mathematics-bs	Standard Tests; Project Presentation Day; MQP review; Actuarial Exams.	Director of Actuarial Program; Department Head	Added specialized courses for majors; Professional seminar for actuarial majors	External Review in 2016
B.S. in Aerospace Engineering	Catalog and on the web at https://www.wpi.edu/academics/departments/aerospace-engineering/accreditation	Annual Project Presentation Day; MQP Review; IQP Review; Course-based assessments mapped to outcomes	Department Head; AE Program Committee	Introduced five new courses, an expanded Major Design Experience requirement; and revised the distribution requirements for the BS degree	2020 by ABET
B.S. in Applied Physics	Catalog and on the web at https://www.wpi.edu/academics/study/applied-physics-bs	Annual Project Presentation Day; MQP Review; Course Reports	Department Program Review Committee; Department Head	Transitioned the Engineering Physics degree program to an Applied Physics degree program that added additional distribution options for students	2019
B.S. in Architectural Engineering	Catalog and on the web at https://www.wpi.edu/academics/departments/architectural-engineering/accreditation	Annual Project Presentation Day; MQP Review; IQP Review; Course-Based Assessment; Senior Exit Surveys	Program Director; Program Review Committee		2020 by ABET
B.S. in Biochemistry	Catalog and on the web at https://www.wpi.edu/academics/study/biochemistry-bs	Annual Project Presentation Day; MQP Review; Senior Exit Surveys	Department Head, Program Review Committee	Re-designed the first-year lecture/laboratory series as a holistic project-based learning experience	2018

E-SERIES FORMS: MAKING ASSESSMENT MORE EXPLICIT
OPTION E1: PART A. INVENTORY OF EDUCATIONAL EFFECTIVENESS INDICATORS

CATEGORY	(1) Where are the learning outcomes for this level/program published? (please specify) Include URLs where appropriate.	(2) Other than GPA, what data/evidence is used to determine that graduates have achieved the stated outcomes for the degree?	(3) Who interprets the evidence? What is the process?	(4) What changes have been made as a result of using the data/evidence?	(5) Date of most recent program review
B.S. in Bioinformatics and Computational Biology	Catalog and on the web at https://www.wpi.edu/academics/study/bioinformatics-computational-biology-bs	Annual Project Presentation Day; MQP Review	Director of Program	Added new introductory course and created mentoring program	
B.S. in Biology and Biotechnology	Catalog and on the web at https://www.wpi.edu/academics/study/biology-biotechnology-bs	Annual Project Presentation Day; MQP Review; Course-Based Assessment	Program Review Committee; Associate Department Head	Transitioned from traditional laboratory teaching to authentic research experience	
B.S. in Biomedical Engineering	Catalog and on the web at https://www.wpi.edu/academics/departments/biomedical-engineering/accreditation	Instructor generated course-based assessment documents with ABET outcome assessment; Capstone Design Project evaluations; Program Review Committee Transcript Review; Senior Exit Surveys	Course assessments reviewed by BME faculty sub-specialization areas 2x/yr; the BME undergraduate curriculum committee reviews these reviews annually	Changes are made every year to improve individual course delivery; all in the ABET self-study report; Major change example: design across the curriculum	2020 by ABET
B.S. in Business	Catalog and on the web at https://www.wpi.edu/academics/study/business-bs	Annual Project Presentation Day; MQP Review	Program Director and Undergraduate Program Curriculum Committee	Expanded offerings in analytics with a focus on business applications	2017 by AACSB
B.S. in Chemical Engineering	Catalog and on the web at https://www.wpi.edu/academics/study/chemical-engineering-bs	Annual Project Presentation Day; MQP Review; IQP Review; Course-Based Assessment; Senior Exit Surveys	Department Head; Undergraduate Committee	Added several new Capstone Design projects in specialty chemicals and chemical process safety	2020 by ABET
B.S. in Chemistry	Catalog and on the web at https://www.wpi.edu/academics/study/chemistry-bs	Annual Project Presentation Day; MQP Review; Senior Exit Surveys	Department Head, Program Review Committee	Re-designed the first-year lecture/laboratory series as a holistic project-based learning experience	2018

E-SERIES FORMS: MAKING ASSESSMENT MORE EXPLICIT
OPTION E1: PART A. INVENTORY OF EDUCATIONAL EFFECTIVENESS INDICATORS

CATEGORY	(1) Where are the learning outcomes for this level/program published? (please specify) Include URLs where appropriate.	(2) Other than GPA, what data/evidence is used to determine that graduates have achieved the stated outcomes for the degree?	(3) Who interprets the evidence? What is the process?	(4) What changes have been made as a result of using the data/evidence?	(5) Date of most recent program review
B.S. in Civil Engineering	Catalog and on the web at https://www.wpi.edu/academics/departments/civil-environmental-engineering/accreditation	Annual Project Presentation Day; MQP Review; IQP Review; Course-Based Assessments; Senior Exit Surveys	Department Head; CEE Curriculum Assessment Committee	Update program distribution requirements	2020 by ABET
B.S. in Computer Science	Undergraduate catalog https://www.wpi.edu/sites/default/files/2020/08/14/WPIGradCat20-21-WEB-Final.pdf (Page 61 of the 2020-21 graduate catalog)	Annual Report; Alumni Surveys; Course Mapping	External Assessment Coordinator; Department Head; Undergraduate Committee	Added new courses and changed distribution requirements	Current dept external assessment
B.S. in Data Science	Undergraduate catalog https://www.wpi.edu/sites/default/files/2020/08/14/WPIGradCat20-21-WEB-Final.pdf (Page 65 of the 2020-21 graduate catalog)	Annual Project Presentation Day; MQP Review; Course-Based Assessment	Program Director; Program Review Committee	Program recently launched in 2020	
B.S. in Economic Science	Catalog and on the web at https://www.wpi.edu/academics/study/economic-science-bs	MQP Review; Student Course Reports	Department Head; Annual Faculty Retreats		
B.S. in Electrical and Computer Engineering	Catalog and on the web at https://www.wpi.edu/academics/departments/electrical-computer-engineering/accreditation	Annual Project Presentation Day; MQP Review; IQP Review; Course-Based Assessments; Senior Exit Surveys	Department Head; Department Undergraduate Committee	Added new courses and changed distribution requirements	2020 by ABET
B.S. in Environmental and Sustainability Studies	Catalog and on the web at https://www.wpi.edu/academics/study/environmental-sustainability-studies-ba	MQP Review; IQP Review; Course-Based Assessment	Program Director		
B.S. Environmental Engineering	Catalog and on the web at https://www.wpi.edu/academics/departments/environmental-engineering/accreditation	Course-Based Assessments; MQP Review; Senior Exit Surveys; Alumni Surveys	Annually by Program Director and ABET coordinator	Course additions; Modification of courses (upcoming); Modification of laboratory class	2020 by ABET

E-SERIES FORMS: MAKING ASSESSMENT MORE EXPLICIT
OPTION E1: PART A. INVENTORY OF EDUCATIONAL EFFECTIVENESS INDICATORS

CATEGORY	(1) Where are the learning outcomes for this level/program published? (please specify) Include URLs where appropriate.	(2) Other than GPA, what data/evidence is used to determine that graduates have achieved the stated outcomes for the degree?	(3) Who interprets the evidence? What is the process?	(4) What changes have been made as a result of using the data/evidence?	(5) Date of most recent program review
B.S. Humanities and Arts	Goals defined; Outcomes under development https://www.wpi.edu/academics/undergraduate/humanities-arts-requirement/learning-outcomes	MQP Review; Program Review; Degree Audit; Reviews of HUA Capstone Work (Inquiry Seminars and Practicums)	Program Review Committee; Department Head	Courses approved for concentrations in the major were updated	2020 by ABET and 2017 by AACSB
B.S. in Industrial Engineering	Catalog and on the web at https://www.wpi.edu/academics/study/industrial-engineering-bs	Annual Project Presentation Day; MQP Review; IQP Review	Dean; Program Director; Undergraduate Program Curriculum Committee		
B.A. in Interactive Media & Game Development	Catalog and on the web at https://www.wpi.edu/academics/study/interactive-media-game-development-ba	MQP Review; Project Presentation Day; Course-Based Assessment	Program Director; IMGD Steering Committee		
B.S. in Interactive Media & Game Development	Catalog and on the web at https://www.wpi.edu/academics/study/interactive-media-game-development-bs	MQP Review; Project Presentation Day; Course-Based Assessment	Program Director; IMGD Steering Committee		
B.S. in International and Global Studies	Under development	MQP Review; Program Review; Degree Audit	Program Review Committee	List of courses approved for the program in UG catalog	In planning
B.A. in Liberal Arts and Engineering	Under development		Program Director		
B.S. in Management Engineering	Catalog and on the web at https://www.wpi.edu/academics/study/management-engineering-bs	Annual Project Presentation Day; MQP Review	Program Director; Undergraduate Program Curriculum Committee		2017 by AACSB

E-SERIES FORMS: MAKING ASSESSMENT MORE EXPLICIT
OPTION E1: PART A. INVENTORY OF EDUCATIONAL EFFECTIVENESS INDICATORS

CATEGORY	(1) Where are the learning outcomes for this level/program published? (please specify) Include URLs where appropriate.	(2) Other than GPA, what data/evidence is used to determine that graduates have achieved the stated outcomes for the degree?	(3) Who interprets the evidence? What is the process?	(4) What changes have been made as a result of using the data/evidence?	(5) Date of most recent program review
B.S. in Management Information Systems	Catalog and on the web at https://www.wpi.edu/academics/study/management-information-systems-bs	Annual Project Presentation Day; MQP Review	Program Director; Undergraduate Program Curriculum Committee	2017 by AACSB	
B.S. in Mathematical Sciences	Catalog and on the web at https://www.wpi.edu/academics/study/mathematical-sciences-bs	Standard tests in common courses; Project Presentation Day (with faculty and external reviewers); MQP Review	Associate Department Head; Service Committee; Undergraduate Committee.	Updated Mathematics Core; Added specialized courses for majors	External Review in 2016; MQP review in 2021
B.S. in Mechanical Engineering	Catalog and on the web at https://www.wpi.edu/academics/departments/mechanical-engineering/accreditation	Annual Project Presentation Day; MQP review; IQP Review; Capstone Course-Based Review; Senior Exit Surveys	Department Head, Undergraduate Committee	Additional hands-on activities; Broadened Capstone Design definition; Altered Capstone requirements	2020 by ABET
B.S. in Physics	Catalog and on the web at https://www.wpi.edu/academics/study/physics-bs	Annual Project Presentation Day; MQP Review	Department Head; Program Review Committee	Implemented several new pedagogical techniques for introductory physics course delivery based on evidence-based practices	
B.S. in Professional Writing	Goals published in catalog; outcomes under development	MQP Review; Program Review; Degree Audit.	Program Committee perform curriculum review every year; Perform a review of MQP reports every three years	Substantive curriculum revision in 2009; Hired a new director in 2020; In the process of creating an updated strategic plan	Department review conducted in 2020
B.S. in Psychological Science	Catalog and on the web at https://www.wpi.edu/academics/study/psychological-science-bs	MQP Review; Student Course Reports	Department Head; Annual Faculty Retreat		

E-SERIES FORMS: MAKING ASSESSMENT MORE EXPLICIT
OPTION E1: PART A. INVENTORY OF EDUCATIONAL EFFECTIVENESS INDICATORS

CATEGORY	(1) Where are the learning outcomes for this level/program published? (please specify) Include URLs where appropriate.	(2) Other than GPA, what data/evidence is used to determine that graduates have achieved the stated outcomes for the degree?	(3) Who interprets the evidence? What is the process?	(4) What changes have been made as a result of using the data/evidence?	(5) Date of most recent program review
B.S. in Robotics Engineering	Catalog and on the web at https://www.wpi.edu/academics/departments/robotics-engineering/accreditation	Annual Project Presentation Day; MQP Review; IQP Review; Course-Based Assessment; Senior Exit Surveys; EBI Surveys	Department Head; RBE Program Review Committee	Changed program distribution requirements; Revised course descriptions with updated recommended background; Revised core sequence in Unified Robotics; Revised Unified Robotics lab assignments; Created course <i>Social Implications of Robotics</i> ; Require MQP to go through the breadth of the design experience; Require MQP presentations on Project Presentation Day; Require MQPs to address societal issues	2020 by ABET
B.S. in Society, Technology, and Policy	Catalog and on the web at https://www.wpi.edu/academics/study/society-technology-policy-bs	MQP Review; Student Course Reports	Department Head; Annual Faculty Retreats		
Master's Programs					
M.S. in Applied Physics	Catalog and on the web at https://www.wpi.edu/sites/default/files/WPIGradCat20-21Final.pdf (Page 172 of the 20-21 catalog)	Student Annual Reports; Project Review; Thesis	Graduate Committee and Department Head annually; Milestones (thesis, project, dissertation) by committee (as based on degree program)	New program in 2020, broad set of focus areas	New program in 2020
M.S. in Business Analytics	Catalog and on the web at https://www.wpi.edu/academics/business/about/accreditation	Capstone Project	Program Director; Specialized Programs Curriculum Committee		New in 2020

E-SERIES FORMS: MAKING ASSESSMENT MORE EXPLICIT
OPTION E1: PART A. INVENTORY OF EDUCATIONAL EFFECTIVENESS INDICATORS

CATEGORY	(1) Where are the learning outcomes for this level/program published? (please specify) Include URLs where appropriate.	(2) Other than GPA, what data/evidence is used to determine that graduates have achieved the stated outcomes for the degree?	(3) Who interprets the evidence? What is the process?	(4) What changes have been made as a result of using the data/evidence?	(5) Date of most recent program review
M.S. in Biomedical Engineering	Catalog and on the web at https://www.wpi.edu/academics/departments/biomedical-engineering/accreditation	Instructor generated course-based self-assessment documents; Capstone Design Project Evaluations; Program Review Committee Transcript Review	Course assessments reviewed by BME faculty sub-specialization areas twice each year; the BME curriculum committee reviews these reviews annually	Changes are made every year to improve individual course delivery; all in the ABET self-study report; Major change example: design across the curriculum	Dept external assessment 2021
M.S. in Computer Science	Outcomes implicit in course requirements	Thesis; Presentation; Review of Supported Student Progress; Course-Based Assessment	Thesis Advisor/Reader; Graduate Committee; Course Faculty	Periodic changes in degree requirements	Dept external assessment 2021
M.S. in Data Science	Initiated process for developing and defining formal learning outcomes	Annual Project Presentation Day; Capstone Project (QOP) Evaluation; Course-Based Assessment	Program Director; Program Review Committee	Several changes to the degree structure and requirements	
M.S. in Information Technology	Catalog and on the web at https://www.wpi.edu/academics/business/about/accreditation	Capstone Project	Program Director; Specialized Program Curriculum Committee		2017 by AACSB
M.S. in Innovation and User Experience	Catalog and on the web at https://www.wpi.edu/academics/business/about/accreditation	Project work in MIS583 and MIS594	Program Director; Specialized Program Curriculum Committee		New in 2019
M.S. in Management	Catalog and on the web at https://www.wpi.edu/academics/business/about/accreditation	Course Work	Program Director; Integrated Programs Curriculum Committee		2017 by AACSB
M.S. in Marketing and Innovation	Catalog and on the web at https://www.wpi.edu/academics/business/about/accreditation	Capstone Project	Program Director; Specialized Program Curriculum Committee		2017 by AACSB

E-SERIES FORMS: MAKING ASSESSMENT MORE EXPLICIT
OPTION E1: PART A. INVENTORY OF EDUCATIONAL EFFECTIVENESS INDICATORS

CATEGORY	(1) Where are the learning outcomes for this level/program published? (please specify) Include URLs where appropriate.	(2) Other than GPA, what data/evidence is used to determine that graduates have achieved the stated outcomes for the degree?	(3) Who interprets the evidence? What is the process?	(4) What changes have been made as a result of using the data/evidence?	(5) Date of most recent program review
Master of Business Administration	Catalog and on the web at https://www.wpi.edu/academics/business/about/accreditation	Capstone Project	Program Director; Specialized Program Curriculum Committee		2017 by AACSB
M.S. in Physics	Graduate catalog https://www.wpi.edu/sites/default/files/WPIGradCat20-21Final.pdf (Page 172 of the 2020-21 graduate catalog)	Student Annual Reports; Project Review; Thesis	Graduate Committee and Department Head annually; Milestones (thesis, project, dissertation) by committee	Additional pathways to complete degree requirements (non-thesis option)	2019 review of graduate programs, resulting in broader program options in 2020.
M.S. in Physics for Educators	Graduate catalog https://www.wpi.edu/sites/default/files/WPIGradCat20-21Final.pdf (Page 172 of the 2020-21 graduate catalog)	Student Annual Reports; Project Review; Thesis	Graduate Committee and Department Head annually; Milestones (thesis, project, dissertation) by committee	Structure of course delivery	2017
M.S. in Robotics Engineering	Catalog and on the web at https://www.wpi.edu/academics/departments/robotics-engineering/accreditation	Student Course Evaluations; Faculty Course Reviews	Annually by the Department Head; Curriculum Committee		
M.S. in Supply Chain Management	Catalog and on the web at https://www.wpi.edu/academics/business/about/accreditation	Capstone Project	Program Director; Specialized Program Curriculum Committee		New in 2018
Ph.D. Programs					
Ph.D. in Business Administration	Catalog and on the web at https://www.wpi.edu/academics/business/about/accreditation	Dissertation	Dissertation Committee; Program Director; Research and PhD Curriculum Committee		2017 by AACSB

E-SERIES FORMS: MAKING ASSESSMENT MORE EXPLICIT
OPTION E1: PART A. INVENTORY OF EDUCATIONAL EFFECTIVENESS INDICATORS

CATEGORY	(1) Where are the learning outcomes for this level/program published? (please specify) Include URLs where appropriate.	(2) Other than GPA, what data/evidence is used to determine that graduates have achieved the stated outcomes for the degree?	(3) Who interprets the evidence? What is the process?	(4) What changes have been made as a result of using the data/evidence?	(5) Date of most recent program review
Ph.D. in Data Science	Initiated process for developing formal learning outcomes	Annual PhD Student Evaluation Day; PhD Milestone Assessment; Course-Based Assessments	Program Director; Graduate Coordinator; Research Advisor(s); Program Review Committee	Several changes to the degree structure and requirements	New program in 2020
Ph.D. in Applied Physics	Graduate catalog https://www.wpi.edu/sites/default/files/WPIGradCat20-21Final.pdf (Page 172 of the 2020-21 graduate catalog)	Student Annual Reports; Comprehensive Written Exam; Qualifying Exam; Dissertation	Graduate Committee and Department Head annually; Milestones (thesis, project, dissertation) by committee	New program in 2020, broad set of focus areas	New program in 2020
Ph.D. in Mechanical Engineering	Graduate catalog https://www.wpi.edu/sites/default/files/2020/08/14/WPIGradCat20-21-WEB-Final.pdf (Page 153 of the 2020-21 graduate catalog)	Qualifying Exam; Proposal (written and oral); Dissertation and Defense	Department Head; Graduate Committee.	New graduate courses in nanotechnology, solar cells, soft robotics, optical fibers, and other advanced topics, were added.	
Ph.D. in Physics	Graduate catalog https://www.wpi.edu/sites/default/files/2020/08/14/WPIGradCat20-21-WEB-Final.pdf (Page 172 of the 2020-21 graduate catalog)	Student Annual Reports; Comprehensive Written Exam; Qualifying Exam; Dissertation	Graduate Committee and Department Head annually; Milestones (thesis, project, dissertation) by committee	New program milestones	2018 and 2019, Graduate Committee and Department
Ph.D. in Robotics Engineering	Catalog and on the web at https://www.wpi.edu/sites/default/files/WPIGradCat20-21Final.pdf	Student Course Evaluations; Faculty Course Reviews; Comprehensive Written Exam; Qualifying Exam; Dissertation	Annually by the Department Head; RBE Program Committee; Curriculum Committee		

E-SERIES FORMS: MAKING ASSESSMENT MORE EXPLICIT

OPTION E1: PART B. INVENTORY OF SPECIALIZED AND PROGRAM ACCREDITATION

(1) Professional, specialized, State, or programmatic accreditations currently held by the institution (by agency or program name).	(2) Date of most recent accreditation action by each listed agency.	(3) List key issues for continuing accreditation identified in accreditation action letter or report.	(4) Key performance indicators as required by agency or selected by program (licensure, board, or bar pass rates; employment rates, etc.)	(5) Date and nature of next scheduled review.
Aerospace Engineering	ABET 2020	No shortcomings; Concern regarding telecommunications coverage in courses	ABET Criteria 1-7	2026 for Regular Review
Architectural Engineering	ABET 2020	Concerns expressed regarding instructor assessment of depth of coverage in courses	ABET Criteria 1-7	2026 for Regular Review
Biochemistry	ASBMB			
Biomedical Engineering	ABET 2020	No shortcomings	ABET Criteria 1-7	2026 for Regular Review
Business Administration	AACSB 2018		Learning Outcomes	2023 for Regular Review
Chemical Engineering	ABET 2020	No shortcomings	ABET Criteria 1-7	2026 for Regular Review
Chemistry	ACS 2021			
Civil Engineering	ABET 2020	Concerns regarding continuous improvement plans and program criteria; Specialized faculty qualifications requiring Professional Engineer status	ABET Criteria 1-7	2026 for Regular Review
Electrical and Computer Engineering	ABET 2020	Clarification of educational objectives and improved continuous improvement plan	ABET Criteria 1-7	2026 for Regular Review
Environmental Engineering	ABET 2020	Need for increased hands-on and laboratory experience in environmental focus areas	ABET Criteria 1-7	2026 for Regular Review

E-SERIES FORMS: MAKING ASSESSMENT MORE EXPLICIT

OPTION E1: PART B. INVENTORY OF SPECIALIZED AND PROGRAM ACCREDITATION

(1) Professional, specialized, State, or programmatic accreditations currently held by the institution (by agency or program name).	(2) Date of most recent accreditation action by each listed agency.	(3) List key issues for continuing accreditation identified in accreditation action letter or report.	(4) Key performance indicators as required by agency or selected by program (licensure, board, or bar pass rates; employment rates, etc.)	(5) Date and nature of next scheduled review.
Industrial Engineering	ABET 2020 AACSB 2018	Request for improved continuous improvement plan	ABET Criteria 1-7	2026 for Regular Review
Information Technology	AACSB		Learning Outcomes	2023 for Regular Review
Management/Business	AACSB 2018		Learning Outcomes	2023 for Regular Review
Management Engineering	AACSB 2018		Learning Outcomes	2023 for Regular Review
Marketing & Innovation	AACSB 2018		Learning Outcomes	2023 for Regular Review
Management Information Systems	AACSB 2018		Learning Outcomes	2023 for Regular Review
Mechanical Engineering	ABET 2020	Concerns regarding sufficient number of faculty and institutional support	ABET Criteria 1-7	2026 for Regular Review
Operational Analytics & Management	AACSB 2018		Learning Outcomes	2023 for Regular Review
Robotics Engineering	ABET 2020	Request improved continuous improvement plan	ABET Criteria 1-7	2026 for Regular Review

MOST RECENT AUDITED FINANCIAL STATEMENTS

Worcester Polytechnic Institute

**Consolidated Financial Statements
June 30, 2020 and 2019**



Report of Independent Auditors

To the Board of Trustees of
Worcester Polytechnic Institute

Report on the Consolidated Financial Statements

We have audited the accompanying consolidated financial statements of Worcester Polytechnic Institute and its subsidiaries (the "University"), which comprise the consolidated statements of financial position as of June 30, 2020 and 2019, and the related consolidated statements of activities and of cash flows for the years then ended, and the related notes to the financial statements.

Management's Responsibility for the Consolidated Financial Statements

Management is responsible for the preparation and fair presentation of the consolidated financial statements in accordance with accounting principles generally accepted in the United States of America; this includes the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of consolidated financial statements that are free from material misstatement, whether due to fraud or error.

Auditors' Responsibility

Our responsibility is to express an opinion on the consolidated financial statements based on our audits. We conducted our audits in accordance with auditing standards generally accepted in the United States of America. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the consolidated financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the consolidated financial statements. The procedures selected depend on our judgment, including the assessment of the risks of material misstatement of the consolidated financial statements, whether due to fraud or error. In making those risk assessments, we consider internal control relevant to the University's preparation and fair presentation of the consolidated financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the University's internal control. Accordingly, we express no such opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the consolidated financial statements. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

PricewaterhouseCoopers LLP, 101 Seaport Boulevard, Suite 500, Boston, MA 02210
T: (617) 530 5000, F: (617) 530 5001, www.pwc.com/us



Opinion

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the financial position of Worcester Polytechnic Institute and its subsidiaries as of June 30, 2020 and 2019, and their changes in their net assets and their cash flows for the years then ended in accordance with accounting principles generally accepted in the United States of America.

Emphasis of Matter

As discussed in Note 2 to the consolidated financial statements, the University changed the manner in which it accounts for leases in 2020. Our opinion is not modified with respect to this matter.

PricewaterhouseCoopers LLP

Boston, Massachusetts
November 2, 2020

Worcester Polytechnic Institute
Consolidated Statements of Financial Position
June 30, 2020 and 2019

<i>(in thousands)</i>	2020	2019
Assets		
Cash and cash equivalents	\$ 45,848	\$ 39,646
Accounts receivable, net	12,515	12,260
Contributions receivable, net	23,741	9,124
Funds held under bond agreements	92,185	378
Prepaid expenses and other assets	7,713	7,494
Student loans receivable, net	15,717	17,110
Beneficial interest in trusts	14,869	17,061
Investments	518,260	551,282
Land, buildings and equipment, net	433,529	370,538
Total assets	<u>\$ 1,164,377</u>	<u>\$ 1,024,893</u>
Liabilities		
Accounts payable and accrued liabilities	\$ 39,140	\$ 32,633
Deposits and deferred revenue	14,743	10,117
Lease liabilities	16,945	-
Liabilities under split-interest agreements	7,141	7,861
Funds held for others	4,787	4,290
Asset retirement obligations	1,336	1,831
Refundable government loan funds	9,624	9,492
Bonds and notes payable	408,886	278,150
Interest rate agreements	9,954	7,799
Total liabilities	<u>512,556</u>	<u>352,173</u>
Net assets		
Without donor restrictions	299,833	322,876
With donor restrictions		
Time or purpose	126,924	128,976
Perpetual	225,064	220,868
Total net assets	<u>651,821</u>	<u>672,720</u>
Total liabilities and net assets	<u>\$ 1,164,377</u>	<u>\$ 1,024,893</u>

The accompanying notes are an integral part of these consolidated financial statements.

Worcester Polytechnic Institute
Consolidated Statement of Activities
Year Ended June 30, 2020

<i>(in thousands)</i>	Without Donor Restrictions	With Donor Restrictions	Total
Operating revenues			
Tuition and fees	\$ 184,606	\$ -	\$ 184,606
Other educational activities	2,825	-	2,825
Contributions	4,617	15,458	20,075
Contract and exchange transactions	37,663	-	37,663
Investment income on endowment and similar funds	4,149	96	4,245
Net realized gains on endowment used for operations	9,836	9,270	19,106
Other investment income	859	917	1,776
Sales and services of auxiliary enterprises	25,213	-	25,213
Other	6,481	-	6,481
Total revenues	<u>276,249</u>	<u>25,741</u>	<u>301,990</u>
Net assets released from restriction	<u>14,107</u>	<u>(14,107)</u>	<u>-</u>
Total revenues and other support	<u>290,356</u>	<u>11,634</u>	<u>301,990</u>
Operating expenses			
Instruction and department research	130,486	-	130,486
Sponsored research and other sponsored programs	32,802	-	32,802
External relations	13,066	-	13,066
Institution and academic support	57,378	-	57,378
Student services	26,283	-	26,283
Auxiliary enterprises	29,185	-	29,185
Total operating expenses before early retirement incentives	<u>289,200</u>	<u>-</u>	<u>289,200</u>
Early retirement incentives	<u>5,130</u>	<u>-</u>	<u>5,130</u>
Total operating expenses	<u>294,330</u>	<u>-</u>	<u>294,330</u>
Change in net assets from operating activities	<u>(3,974)</u>	<u>11,634</u>	<u>7,660</u>
Nonoperating			
Net realized and unrealized losses on investments	(1,964)	(7,736)	(9,700)
Net realized gains on endowment used for operations	(9,836)	(9,270)	(19,106)
Net unrealized losses on beneficial interest in trusts	-	(1,853)	(1,853)
Change in value of split-interest agreements	-	142	142
Contributions	-	9,560	9,560
Net realized and unrealized losses on interest rate agreements	(3,193)	-	(3,193)
Loss on disposal of land, buildings and equipment	(4,409)	-	(4,409)
Change in net assets from nonoperating activities	<u>(19,402)</u>	<u>(9,157)</u>	<u>(28,559)</u>
Net assets released from restriction	<u>333</u>	<u>(333)</u>	<u>-</u>
Total change in assets from nonoperating activities	<u>(19,069)</u>	<u>(9,490)</u>	<u>(28,559)</u>
Total change in net assets	<u>(23,043)</u>	<u>2,144</u>	<u>(20,899)</u>
Net assets			
Beginning of year	<u>322,876</u>	<u>349,844</u>	<u>672,720</u>
End of year	<u>\$ 299,833</u>	<u>\$ 351,988</u>	<u>\$ 651,821</u>

The accompanying notes are an integral part of these consolidated financial statements.

Worcester Polytechnic Institute
Consolidated Statement of Activities
Year Ended June 30, 2019

<i>(in thousands)</i>	Without Donor Restrictions	With Donor Restrictions	Total
Operating revenues			
Tuition and fees	\$ 179,722	\$ -	\$ 179,722
Other educational activities	4,040	-	4,040
Contributions	4,524	3,452	7,976
Contract and exchange transactions	37,127	-	37,127
Investment income on endowment and similar funds	4,740	58	4,798
Net realized gains on endowment used for operations	8,735	9,231	17,966
Other investment income	1,570	753	2,323
Sales and services of auxiliary enterprises	32,846	-	32,846
Other	5,389	-	5,389
Total revenues	<u>278,693</u>	<u>13,494</u>	<u>292,187</u>
Net assets released from restriction	13,098	(13,098)	-
Total revenues and other support	<u>291,791</u>	<u>396</u>	<u>292,187</u>
Operating expenses			
Instruction and department research	131,278	-	131,278
Sponsored research and other sponsored programs	28,637	2,500	31,137
External relations	12,514	-	12,514
Institution and academic support	55,804	298	56,102
Student services	25,747	-	25,747
Auxiliary enterprises	31,732	-	31,732
Total operating expenses	<u>285,712</u>	<u>2,798</u>	<u>288,510</u>
Change in net assets from operating activities	<u>6,079</u>	<u>(2,402)</u>	<u>3,677</u>
Nonoperating			
Net realized and unrealized gains/(losses) on investments	10,717	8,001	18,718
Net realized gains on endowment used for operations	(8,735)	(9,231)	(17,966)
Net unrealized gains on beneficial interest in trusts	-	354	354
Change in value of split-interest agreements	(37)	(194)	(231)
Contributions	-	9,873	9,873
Net realized and unrealized losses on interest rate agreements	(2,831)	-	(2,831)
Loss on extinguishment of debt	-	-	-
Change in net assets from nonoperating activities	<u>(886)</u>	<u>8,803</u>	<u>7,917</u>
Net assets released from restriction	10,675	(10,675)	-
Total Change in assets from nonoperating activities	<u>9,789</u>	<u>(1,872)</u>	<u>7,917</u>
Total change in net asset	<u>15,868</u>	<u>(4,274)</u>	<u>11,594</u>
Net assets			
Beginning of year	<u>307,008</u>	<u>354,118</u>	<u>661,126</u>
End of year	<u>\$ 322,876</u>	<u>\$ 349,844</u>	<u>\$ 672,720</u>

The accompanying notes are an integral part of these consolidated financial statements.

Worcester Polytechnic Institute

Consolidated Statements of Cash Flows

Years Ended June 30, 2020 and 2019

<i>(in thousands)</i>	2020	2019
Cash flows from operating activities		
Change in net assets	\$ (20,899)	\$ 11,594
Adjustments to reconcile change in net assets to net cash provided by operating activities		
Depreciation, amortization, and accretion	26,245	23,791
Provision for uncollectible receivables	1,219	709
Loss on disposals of land, buildings, and equipment	4,409	103
Net realized and unrealized losses (gains) on investments	10,084	(17,266)
Net unrealized gains on interest rate agreements	2,296	1,991
Contributions other than cash	(502)	(5)
Contributions restricted for long-term investment	(9,560)	(9,970)
Proceeds from sale of donated securities	1,487	1,404
Changes in assets and liabilities		
Accounts receivable	(675)	(5,019)
Contributions receivable	(15,391)	(1,411)
Prepaid expenses and other assets	(220)	20
Accounts payable and accrued liabilities	7,001	(1,983)
Deposits and deferred revenue	4,626	(2,936)
Operating Lease Liabilities	(1,460)	-
Split-interest agreements	(720)	(623)
Funds held for others	497	113
Asset retirement obligations	(496)	(218)
Refundable government loan funds	132	133
Total adjustments	<u>28,972</u>	<u>(11,167)</u>
Net cash provided by operating activities	<u>8,073</u>	<u>427</u>
Cash flows from investing activities		
Proceeds from sales and maturities of investments	68,619	81,686
Purchase of investments	(52,560)	(72,001)
Purchase of land, buildings, and equipment	(68,171)	(44,669)
Use of funds held under bond agreements	-	3,222
Disbursement of loans to students	(2,428)	(2,473)
Repayment of loans from students	3,798	3,718
Net cash used in investing activities	<u>(50,742)</u>	<u>(30,517)</u>
Cash flows from financing activities		
Contributions restricted for long-term investment	9,560	9,970
Deferred financing costs	(921)	-
Realized loss on interest rate agreements	(141)	(141)
Proceeds from long-term debt	137,360	1,960
Repayment of long-term debt	(4,802)	(4,399)
Net cash provided by financing activities	<u>141,056</u>	<u>7,390</u>
Net increase (decrease) in cash, cash equivalents and restricted cash	98,387	(22,700)
Cash, cash equivalents, and restricted cash		
Beginning of year	39,646	62,346
End of year	<u>\$ 138,033</u>	<u>\$ 39,646</u>
Supplemental disclosures of cash flow information		
Interest paid	\$ 10,772	\$ 10,946
Contributed securities	1,489	1,411
Gift in kind	214	195
Purchases of buildings and equipment included in accounts payable Leased equipment	5,842	5,267
Leased equipment	1,671	1,408
Noncash capital leases	2,675	-

The accompanying notes are an integral part of these consolidated financial statements.

Worcester Polytechnic Institute

Notes to Consolidated Financial Statements

June 30, 2020 and 2019

1. Organization

Worcester Polytechnic Institute (the “University”), founded in 1865, is the nation’s third oldest private technological university. Approximately 6,400 undergraduate and graduate students attend the University annually. The University is located in Worcester, Massachusetts and serves a diverse student body from almost every state and over 80 foreign countries.

2. Summary of Significant Accounting Policies

Basis of Financial Statement Presentation

The accompanying consolidated financial statements are prepared on the accrual basis of accounting with net assets and revenues, expenses, gains and losses classified based on the existence or absence of donor-imposed restrictions. Accordingly, net assets of the University and changes therein are classified and reported as follows:

Net Assets With Donor Restrictions

Net assets subject to donor-imposed stipulations include assets to be maintained permanently by the University. Generally, the donors of these assets permit the University to use all or part of the income earned on related investments for general or specific purposes. Also included are net assets whose use is restricted by state law or subject to donor-imposed stipulations that can be fulfilled by actions of the University pursuant to these stipulations or that expire by the passage of time.

Net Assets Without Donor Restrictions

Net assets not subject to explicit donor-imposed stipulations. Net assets without donor restrictions may be designated for specific purposes by action of the Board of Trustees or may otherwise be limited by contractual agreements with outside parties.

Consolidation

The accompanying consolidated financial statements include the accounts of the University and its wholly owned or controlled subsidiaries described below. Intercompany accounts and transactions have been eliminated.

Washburn Park, Inc. (“Washburn”)

Washburn is a not-for-profit corporation that owns and operates a parking garage and a life sciences and bioengineering facility located in the Gateway Park area of Worcester. Washburn also owns land used for the construction of Faraday Hall, a residence hall completed in August 2014.

Gateway Park, LLC (“Gateway”)

Gateway owns land located in the Gateway Park area of Worcester.

Lancaster Island, LLC (“Lancaster”)

Lancaster owns land located in the Gateway Park area of Worcester and is the lessee of a parcel of land being used for student parking.

ASSISTments Foundation, Inc. (“TAF”)

TAF is a not-for-profit corporation that is a Type 1 Supporting Organization to the University that supports the ASSISTments program at the University.

Worcester Polytechnic Institute

Notes to Consolidated Financial Statements

June 30, 2020 and 2019

Classifications

Revenues are reported as increases in net assets without donor restrictions unless use of the related assets is limited by donor-imposed restrictions or by law. Expenses are reported as decreases in net assets without donor restrictions. Gains and losses on investments and other assets or liabilities are reported as increases or decreases in net assets without donor restrictions unless their use is restricted by explicit donor stipulation or by law. Expirations of temporary restrictions on net assets (that is, the donor-stipulated purpose has been fulfilled and/or the stipulated time period has elapsed) are reported as net assets released from restrictions between the applicable classes of net assets.

Operating and Nonoperating Activities

In the consolidated statements of activities, the University has defined its primary activities between operating and nonoperating. Operating activities consist primarily of activities supporting the educational mission and purpose of the University. Nonoperating activities consist primarily of unspent appreciation on endowment, gains or losses on beneficial interest in trusts, change in value of split-interest agreements, net contributions for endowment and capital use, and gains or losses on interest rate agreements.

Use of Estimates in the Preparation of Financial Statements

The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. The University's significant estimates include the valuation of its investments, the estimated net realizable value of receivables for contributions, gifts, pledges, student loans, student accounts and other receivables, the estimated useful lives of buildings and equipment, and its liabilities for its asset retirement obligations, self-insured medical claims, and split-interest agreements. Actual results could differ from those estimates.

Cash and Cash Equivalents

For the purposes of reporting cash flows, the University considers all short-term highly liquid investments to be cash equivalents. Cash equivalents consist of time deposits and short-term investments with maturities at the date of purchase of ninety days or less, stated at cost, which approximates fair value. Certain balances meeting the definition of cash and cash equivalents are classified as designated cash and investments as a result of the University's intent to segregate funds from cash available for current operations.

The University's banking activity, including cash and cash equivalents not classified as investments, is maintained with one regional bank and exceeds federal insurance limits. It is the University's policy to monitor the bank's financial strength on an ongoing basis.

Worcester Polytechnic Institute

Notes to Consolidated Financial Statements

June 30, 2020 and 2019

Contributions

Contributions, including unconditional promises to give, are recognized as revenues in the period received. Contributions subject to donor-imposed stipulations that are met in the same reporting period are reported as unrestricted support. Promises to give that are scheduled to be received after the fiscal year-end are shown as increases in net assets with donor restrictions and are reclassified to net assets without donor restrictions when the purpose or time restrictions are met. Promises to give subject to donor-imposed stipulations that the corpus be maintained permanently are recognized as increases in net assets with donor restrictions. Conditional promises to give are not recognized until they become unconditional, that is when the conditions on which they depend are substantially met. Contributions of assets other than cash are recorded at their estimated fair value at the date of the gift. Contributions that are expected to be collected after one year are recorded at the present value of estimated future cash flows. The discount rates used range from approximately 0.4% to 2.6%. Amortization of the discount is recorded as additional contribution revenue in the applicable net asset class.

The carrying amount of contributions receivable approximates fair value as such amounts are recorded net of an allowance for uncollectible accounts and a discount to their present value. The allowance for uncollectible contributions receivable is based upon management's judgment including such factors as prior collection history, type of contribution, and nature of fundraising activity.

The University reports contributions of land, buildings, or equipment as without donor restrictions support unless the donor places restrictions on their use. Contributions of cash or other assets that must be used to acquire long-lived assets are reported as without donor restrictions support provided the long-lived assets are placed in service in the same reporting period, otherwise, the contributions are reported as net assets with donor restrictions support until the assets are acquired and placed in service and then, such amounts are reclassified to net assets without donor restrictions.

Deferred Financing Costs

Included in bonds and notes payables are deferred financing costs that are being amortized over the life of the related bonds.

For the years ended June 30, 2020 and 2019, deferred financing costs, net totaled approximately \$3,127,000 and \$2,308,000 respectively. Amortization expense for the years ended June 30, 2020 and 2019 was approximately \$101,000 and \$83,000, respectively. The estimated amortization expense for deferred financing costs for the next five years is approximately \$107,000 annually.

Beneficial Interest in Trusts

The University is the beneficiary of certain perpetual trusts and charitable remainder trusts held and administered by third-party trustees. Under the terms of these agreements, the University has the irrevocable right to its share of the income earned on the trust assets. The use of the income may be restricted by the donor. The estimated fair value of trust assets are recognized as assets and contribution revenue when reported to the University.

Worcester Polytechnic Institute

Notes to Consolidated Financial Statements

June 30, 2020 and 2019

Investments

Investments are reported at fair value. Fair value is a market-based measurement based on assumptions used to determine the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. As a basis for considering assumptions, the University prioritizes inputs using three levels, based on the markets in which the investments trade and the reliability of the assumptions used to determine fair value.

- Level 1 Valuation is based on quoted prices for identical investments in active markets. Market price data is generally obtained from relevant exchange or dealer markets.
- Level 2 Valuation is based on observable inputs other than Level 1 prices, such as quoted prices for similar assets or liabilities; quoted prices in markets that are not active; or other inputs that are observable or can be corroborated by observable market data for substantially similar assets or liabilities.
- Level 3 Valuation is based on unobservable inputs that are supported by little or no market activity and that are significant to the fair value of the assets or liabilities. Level 3 assets and liabilities include investments whose value is determined using pricing models, discounted cash flow methodologies, or similar techniques, as well as instruments for which the determination of fair value requires significant management judgment or estimation.

Fair values for certain investments held are based on net asset value (NAV) of such investments as determined by the respective external investment managers, including general partners, if market values are not readily ascertainable. These valuations are based on estimates involving assumptions and valuation techniques used by the respective investment managers.

Fair value is best determined based on quoted market prices. In cases where quoted market prices are not available, fair values are based on estimates using present value or other valuation techniques. Those techniques are significantly affected by the assumptions used, including the discount rate and estimates of future cash flows. Accordingly, the fair value estimates may not be realized in an immediate settlement of the investment.

Investments are comprised of the assets of the University's endowment and similar funds, and split-interest agreements. Endowment funds are subject to the restrictions of gift instruments requiring that the principal be invested in perpetuity and that only income be utilized. Funds functioning as endowment, also known as quasi-endowment funds, have been established by the Board of Trustees for the same purposes as endowment funds. However, any portion of the funds functioning as endowment may be expended with the approval of the Board of Trustees.

Assets of the endowment and similar funds are pooled on a fair value basis with each individual fund subscribing to or disposing of units on the basis of the fair value per unit at the beginning of the quarterly period within which the transactions take place. Endowment income is distributed based on the number of units subscribed to at the end of each month. In addition, the University maintains separately invested funds as stipulated by donors.

Gains or losses on investments are reported in the consolidated statements of activities as increases or decreases in net assets without donor restrictions unless their use is restricted by explicit donor stipulations or by law. Investment income is recorded in net assets without donor restrictions unless its use is restricted by explicit donor stipulations.

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Land, Buildings and Equipment

Land, buildings and equipment are recorded at cost at the date of acquisition or, if received as a gift, at the estimated fair value at the date of the gift. When assets are retired or otherwise disposed of, the cost and related accumulated depreciation are removed from the accounts, and any resulting gain or loss is recorded. Expenditures for repairs and maintenance are charged to expense as incurred.

Finance leases are recorded at their present value at the inception of the lease. Leases for property and equipment are amortized on the straight-line basis over the shorter period of the lease term or the estimated useful life of the equipment. Amortization expense related to leases is included in depreciation in the consolidated statement of activities.

Depreciation expense is computed on a straight-line basis over the estimated useful lives. Estimated useful lives are periodically reviewed and, when appropriate, changes are made prospectively. When certain events or changes in operating conditions occur, asset lives may be adjusted and an impairment assessment may be performed on the recoverability of the carrying amounts.

Useful lives are as follows:

Land improvements	10 to 20 Years
Buildings and improvements	10 to 40 Years
Equipment	3 to 10 Years

Deposits and Deferred Revenue

Deposits and deferred revenue represent revenues received in advance of services to be rendered and are primarily composed of revenue for student tuition and educational fees received in advance and advance payments on sponsored research programs.

Split-Interest Agreements

The University's split-interest agreements with donors are included in investments and consist of charitable gift annuities, charitable lead trusts, charitable remainder trusts, and pooled income arrangements. Assets are invested by the University or third-party trustees and payments are made to beneficiaries in accordance with the respective agreements. At the end of each agreement's term, amounts are distributed to the University or other beneficiaries. Annual distributions to beneficiaries may be for a specified dollar amount or a percentage of the trust's fair value. Upon receipt, gifts requiring the University or trustee to pay donors a specified periodic amount are recorded at fair value with corresponding estimated liabilities for future amounts payable to other beneficiaries, where applicable. The liabilities associated with these gifts are adjusted during the term of these gift instruments. The University is aware of certain split-interest arrangements in which it has been named as beneficiary and has adopted a policy that until such amounts are estimable and probable, such amounts are not recognized in the financial statements. The present value of payments to beneficiaries under split-interest arrangements is calculated using discount rates in effect at the date of the gift; these rates range from approximately 1.2% to 11.2%.

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Asset Retirement Obligations

An asset retirement obligation (“ARO”) is a legal obligation associated with the retirement of long-lived assets. These liabilities are initially recorded at fair value and the related asset retirement costs are capitalized by increasing the carrying amount of the related assets by the same amount as the liability. Asset retirement costs are subsequently depreciated over the useful lives of the related assets. Subsequent to initial recognition, the University records period-to-period changes in the ARO liability resulting from the passage of time or revisions to either the timing or the amount of the original estimate of undiscounted cash flows. The University derecognizes ARO liabilities when the related obligations are settled.

Tax-Exempt Status

The University is a tax-exempt organization as described in Section 501 (c)(3) of the Internal Revenue Code (the “Code”) and is generally exempt from income taxes pursuant to Section 501 (a) of the Code.

Sponsored Research

The University receives sponsored program funding from various governmental and corporate sources. The funding may represent a reciprocal transaction in exchange for an equivalent benefit in return, or it may be a nonreciprocal transaction in which the resources provided are for the benefit of the University, the funding organization’s mission, or the public at large.

Revenues from exchange transactions are recognized as performance obligations are satisfied, which in most cases are as related costs are incurred.

Revenues from nonexchange transactions (contributions) may be subject to conditions, in the form of both a barrier to entitlement and a refund of amounts paid. Revenues from conditional nonexchange transactions are recognized when the barrier is satisfied.

In 2020 and 2019, sponsored programs revenue earned from governmental sources total \$28,245,000 and \$30,003,000, respectively. Indirect costs recovered on federally sponsored programs are based on predetermined reimbursement rates, which are stated as a percentage and distributed based on the modified total direct costs incurred. The University negotiates its federal indirect rate with its cognizant federal agency. Indirect costs recovered on all other grants and contracts are based on rates negotiated with the respective sponsors. Funds received for sponsored research activity are subject to audit. Based upon information currently available, management believes that any liability resulting from such audits will not materially affect the financial position or operations of the University.

Tuition and Fee Revenue

The University recognizes revenue from student tuition and fees within the fiscal year in which educational services are provided. Institutional aid, in the form of scholarships and grants-in-aid, includes amounts funded by the endowment, research funds, and gifts, and reduces the published price of tuition for students receiving such aid. As such, institutional aid is referred to as a tuition discount and represents the difference between the stated charge for tuition and fees and the amount that is billed to the student and/or third parties making payments on behalf of the student. Financial aid provided to students was \$96,602,000 in 2020 and \$90,159,000 in 2019.

The University offers a summer term that spans two reporting periods. Payments of tuition and housing for summer term are recognized as performance obligations are met. Because the academic term spans two reporting periods, a portion of the payments are included in deferred revenue at June 30, 2020 and 2019.

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Auxiliary Services Revenue

Auxiliary services exist to furnish goods or services to students, faculty, staff, or incidentally to the general public, and charges a fee directly related to, although not necessarily equal to, the cost of the goods or services.

Auxiliary services revenue includes revenues from contracts with customers to provide student housing and dining facilities.

Payments for these services are due approximately one week prior to the start of the academic term for undergraduate students and on the first of each month for graduate students. Dining plans are not offered during the summer terms. Performance obligations for housing and dining services are delivered over the academic terms. Consequently, revenue from housing and dining services is recognized ratably as services are tendered.

Implementation of Accounting Standards

On July 1, 2019 the University adopted ASU 2016-02, *Leases*. ASU 2016-02 requires recognition of rights and obligations arising from lease contracts, including existing and new arrangements, as assets and liabilities on the balance sheet. The University adopted the new standard using the current-period adjustment method. All leases were recorded as of July 1, 2019 and no amounts were recorded in the comparative periods. The University also elected available practical expedients. The University recognized lease assets of \$15,729,000 and operating lease liabilities of \$16,656,000 as of the adoption date.

In August 2017, the FASB issued ASU 2017-12, *Targeted Improvements to Accounting for Hedging Activities*. ASU 2017-12 aims to improve the financial reporting of hedging relationships to better portray the economic results of an entity's risk management activities in its financial statements. ASU 2017-12 is effective for annual reporting periods beginning after December 15, 2019. The University is currently evaluating the effect of adoption to the financial statements.

In August 2017, the FASB issued ASU 2018-13, *Disclosure Framework-Changes to the Disclosure Requirements for Fair Value Measurement*. ASU 2018-13 modifies the disclosure requirements related to investments held at fair value. ASU 2018-13 is effective for annual reporting periods beginning after December 15, 2019. The University is currently evaluating the effect of adoption to the financial statements.

3. Accounts Receivable

Accounts receivable consist of the following at June 30, 2020 and 2019 (in thousands):

	2020	2019
Sponsored research	\$ 8,455	\$ 10,095
Student receivables	3,295	2,397
Other receivables	2,221	804
	<u>13,971</u>	<u>13,296</u>
Less: Allowance for doubtful accounts	<u>(1,456)</u>	<u>(1,036)</u>
	<u>\$ 12,515</u>	<u>\$ 12,260</u>

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4. Contributions Receivable

Unconditional promises are expected to be received in the following periods at June 30, 2020 and 2019 (in thousands):

	2020	2019
In one year or less	\$ 5,811	\$ 3,554
Between one and five years	<u>20,363</u>	<u>6,674</u>
	26,174	10,228
Less:		
Discount to present value	(1,226)	(608)
Allowance for doubtful contributions	<u>(1,203)</u>	<u>(496)</u>
	<u>\$ 23,745</u>	<u>\$ 9,124</u>

As of June 30, 2020 and 2019, the University has approximately \$100,200,000 and \$61,172,000, respectively, of conditional promises to give that are not recognized as assets in the accompanying consolidated statements of financial position.

5. Student Loans Receivable

The University makes uncollateralized loans to students based on financial need. Student loans are funded through Federal government loan programs or institutional resources. At June 30, 2020 and 2019, student loans represented 1.4% and 1.7% of total assets, respectively.

Student loans receivable consist of the following at June 30, 2020 and 2019 (in thousands):

	2020			2019		
	Federal	Institutional	Total	Federal	Institutional	Total
Student loans receivable	\$ 6,615	\$ 9,529	16,144	8,525	8,988	17,513
Less: Allowance for doubtful accounts						
Beginning of year	(150)	(253)	(403)	(150)	(246)	(396)
Decrease(increases)	-	(24)	(24)	-	(85)	(85)
Write-offs	-	-	-	-	78	78
End of year	<u>(150)</u>	<u>(277)</u>	<u>(427)</u>	<u>(150)</u>	<u>(253)</u>	<u>(403)</u>
Student loans receivable, net	<u>6,465</u>	<u>9,252</u>	<u>15,717</u>	<u>8,375</u>	<u>8,735</u>	<u>17,110</u>

The University participates in the Perkins federal revolving loan program. The availability of funds for loans under the program is dependent on reimbursements to the pool from repayments on outstanding loans. Funds advanced by the Federal government and their share of student loan activity of \$9,624,000 and \$9,492,000 at June 30, 2020 and 2019 are ultimately refundable to the government and are classified as liabilities in the consolidated statements of financial position. Outstanding loans cancelled under the program result in a reduction of the funds available for loan.

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The following amounts were past due under student loan programs at June 30, 2020 and 2019 (in thousands):

	1-60 days	60-90 days	90+ days	Total Past Due
June 30 2020	\$ 6	\$ 1	\$ 923	\$ 930
June 30 2019	\$ 8	\$ 1	\$ 849	\$ 858

Allowances for doubtful accounts are established based on prior collection experience and current economic factors which, in management's judgment, could influence the ability of loan recipients to repay the amounts per the loan terms. Institutional loan balances are written off only when they are deemed to be permanently uncollectible.

6. Beneficial Interest in Trusts

Beneficial interest in trusts are carried at fair value using discounted present value and other similar methodologies. The following table summarizes the changes in these trusts during the years ended June 30, 2020 and 2019 (in thousands):

	2020	2019
Fair value, beginning of year	\$ 17,061	\$ 18,295
Net unrealized gains and (losses)	(1,853)	354
Contributions	-	-
Distributions, net	(339)	(1,588)
Fair value, end of year	<u>\$ 14,869</u>	<u>\$ 17,061</u>

7. Investments

Investments at June 30, 2020 are as follows (comparative totals are included for 2019) (in thousands):

	2020			2019 Total
	Endowment and Similar Funds	Split-Interest Agreements	Total	
Cash and cash equivalents	\$ 2,742	\$ 223	\$ 2,965	\$ 5,207
Equity securities	158,014	12,788	170,802	179,049
Fixed income securities	70,318	2,832	73,150	71,670
Alternative investments				
Equity funds	131,900	-	131,900	145,580
Fixed income funds	51,043	-	51,043	55,681
Private equity funds	47,260	-	47,260	49,130
Real estate	41,139	-	41,139	44,965
Total investments	<u>\$ 502,416</u>	<u>\$ 15,843</u>	<u>\$ 518,259</u>	<u>\$ 551,282</u>

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As described in Note 2, investments are recorded at fair value. The following tables summarize the fair values of the University's investments at June 30, 2020 and 2019 (in thousands):

	2020				
	Quoted Prices in Active Markets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)	NAV Practical Expedient	Total
Cash and cash equivalents	\$ 2,965	\$ -	\$ -	\$ -	\$ 2,965
Equity securities	170,802	-	-	-	170,802
Fixed income securities	73,150	-	-	-	73,150
Alternative investments					
Equity funds	-	-	-	131,900	131,900
Fixed income funds	-	-	-	51,043	51,043
Private equity funds	-	-	1,087	46,173	47,260
Real estate	-	-	16,260	24,879	41,139
Total investments	\$ 246,917	\$ -	\$ 17,347	\$ 253,995	\$ 518,259

	2019				
	Quoted Prices in Active Markets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)	NAV Practical Expedient	Total
Cash and cash equivalents	\$ 5,207	\$ -	\$ -	\$ -	\$ 5,207
Equity securities	179,049	-	-	-	179,049
Fixed income securities	71,670	-	-	-	71,670
Alternative investments					
Equity funds	-	-	-	145,580	145,580
Fixed income funds	-	-	-	55,681	55,681
Private equity funds	-	-	580	48,550	49,130
Real estate	-	-	24,397	20,568	44,965
Total investments	\$ 255,926	\$ -	\$ 24,977	\$ 270,379	\$ 551,282

Fair values of equity, fixed income and commodity securities are generally based on published market values. The University invests in hedge funds, private equity, and real estate investments through various limited partnerships and similar vehicles. Hedge funds utilize a variety of investment strategies incorporating marketable securities and, in some cases, derivative instruments, all of which are reported at estimated fair value by the fund managers. Private equity funds consist of long-term private investments and have been valued based on estimates provided by the general partners of the investment vehicles. Investments in limited partnerships and limited liability companies (generally referred to as "limited partnerships") for which readily ascertainable market values are not available are reported at estimated fair value as determined by Management or at the investment net asset value ("NAV") as a practical expedient. Investments in limited partnerships are generally valued based upon the most recent NAV or capital account information available from the general partner of the investment limited partnership, taking into consideration, where applicable, other information determined to be a reliable indicator of fair value. These factors include rights and obligations, restrictions or illiquidity on such interest, potential clawbacks, and the fair value of the limited partnership's investment portfolio or other assets and liabilities. The values assigned to investments in limited partnership are based upon available information and do not necessarily represent amounts which might ultimately be realized. Because of the inherent uncertainty of valuation, those estimated fair values may differ significantly from the values

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that would have been realized had a ready market for the investments existed and those differences could be material.

Real estate consists mainly of direct real estate holdings and investments in privately held entities. The fair values of the real estate investments in privately held entities have been valued based on the NAV provided by the fund managers of these investment vehicles. The fair values of direct real estate holdings have been prepared giving consideration to periodic independent external appraisals, as well as the income, cost and sales comparison approaches of estimating property value. The income approach estimates an income stream for a property (typically 10 years) and discounts this income plus a reversion (presumed sale) into a present value at a risk adjusted rate. A second technique is the direct capitalization analysis. Direct capitalization involves capitalizing a property's first year, or stabilized net operating income into a value estimate. Yield rates and growth assumptions utilized in both approaches are derived from market transactions as well as other financial and industry data. The cost approach estimates the replacement cost of the building less physical depreciation plus the land value. Generally, this approach provides a check on the value derived using the income approach. The sales comparison approach compares recent transactions to the appraised property. Adjustments are made for dissimilarities which typically provide a range of value. The income capitalization and sales comparison approach were used to value the direct real estate investments. The capitalization rates, sales price per acre of comparable properties, and the comparability adjustments are considered to be significant unobservable inputs to these valuations. These rates and adjustments vary and are based on the location, type and nature of each property, and current and anticipated market conditions. Appraisals for any direct real estate holding were prepared by independent external appraisers. Management believes the appraisals approximate fair value for real estate holdings at June 30, 2020 and 2019.

The following table summarizes the valuation methods and quantitative information about the significant unobservable inputs used in the fair value measurement of Level 3 direct real estate holdings at June 30, 2020 and 2019 not valued at NAV (in thousands):

Real Estate Investment	2020	2019	Valuation Technique	Unobservable Input	Range
Commercial real estate, Worcester, MA	\$ -	\$ 7,700	Income capitalization	Capitalization Rate	5.39% - 9.56%
Commercial real estate, Florida	3,813	4,250	Income capitalization	Capitalization Rate	8.0% - 14.0%
Leased land, Worcester, MA	5,250	5,250	Income capitalization	Capitalization Rate	3.96% - 6.1%
Parking garage, Worcester, MA	3,475	3,475	Income capitalization	Capitalization Rate	8.25%
Undeveloped land, Worcester, MA	1,740	1,740	Sales comparison	Price per acre	\$0.7M - \$1.4M
				Comparability adjustments	-20% - 30%
Undeveloped land, Worcester, MA	1,600	1,600	Sales comparison	Price per acre	\$0.7M - \$1.4M
				Comparability adjustments	-5% - + 45%
Residential real estate, US	382	382	Sales comparison	Price per square foot	\$365K - \$405K
	<u>\$ 16,260</u>	<u>\$ 24,397</u>			

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Alternative investments consist of noncontrolling, limited marketability stock holdings and investments in limited partnerships. The fair values of investments in limited partnerships have been valued based on the NAV provided by the fund managers of these investment vehicles and reviewed by management. The following tables summarize key provisions for the University's alternative investments valued at NAV as of June 30, 2020 and 2019 (in thousands):

2020						
Asset Class	Strategy	Fair Value	Remaining Life	Unfunded Commitments	Redemption Terms	Redemption Restrictions
Absolute Return - Market Neutral	Global equity and fixed income funds in market neutral categories	\$ 72,069	No limit	\$ -	Redemption terms range from quarterly with 60 to 90 days notice to annually with 45 to 90 days notice.	Lock -up provisions range from none to redemptions limited to 1/3 of the value annually.
Private Equity	Venture capital and buyout in the US and global markets	\$ 46,173	up to 10 years	40,678	Private equity structure with no ability to redeem.	Not redeemable
Directional Hedge	Global long/short equity funds	\$ 100,323	No limit	-	Redemption terms range from quarterly with 60 days notice to every five years with 90 days notice.	No lock-up provisions
Emerging Markets Equity	Primarily in longonly emerging makets equity	\$ 10,551	No limit	-	Redemption terms range from 10 business days in advance of valuation date to monthly redemptions with 7 days notice.	Ranges from no additional restrictions to partial redemptions allowed but may require full redemption if capital is below \$1M.
Real Estate	US real estate	\$ 24,879	up to 6 years	22,827	Private equity structure with no ability to redeem.	Not redeemable
		<u>\$ 253,995</u>		<u>\$ 63,505</u>		

2019						
Asset Class	Strategy	Fair Value	Remaining Life	Unfunded Commitments	Redemption Terms	Redemption Restrictions
Absolute Return - Market Neutral	Global equity and fixed income funds in market neutral categories	\$ 95,389	No limit	\$ -	Redemption terms range from quarterly with 60 to 90 days notice to annually with 45 to 90 days notice.	Lock -up provisions range from none to redemptions limited to 1/3 of the value annually.
Private Equity	Venture capital and buyout in the US and global markets	48,550	up to 11 years	38,059	Private equity structure with no ability to redeem.	Not redeemable
Directional Hedge	Global long/short equity funds	94,595	No limit	-	Redemption terms are quarterly with 60 days notice.	No lock-up provisions
Emerging Markets Equity	Primarily in longonly emerging makets equity	11,277	No limit	-	Redemption terms range from 10 business days in advance of valuation date to monthly redemptions with 7 days notice.	Ranges from no additional restrictions to partial redemptions allowed but may require full redemption if capital is below \$1M.
Real Estate	US real estate	20,568	up to 7 years	21,950	Private equity structure with no ability to redeem.	Not redeemable
		<u>\$ 270,379</u>		<u>\$ 60,009</u>		

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The following table summarizes the changes in the Level 3 investments carried at fair value during the years ended June 30, 2020 and 2019 (in thousands):

	Equity Funds	Fixed Income Funds	Private Equity Funds	Real Estate	Total
Fair value, June 30, 2018	\$ -	\$ -	\$ 1,859	\$ 26,748	\$ 28,607
Transfers out	-	-	-	-	-
Net realized and unrealized gains	-	-	(36)	(2,351)	(2,387)
Purchases	-	-	-	-	-
Sales and settlements	-	-	(1,243)	-	(1,243)
Fair value, June 30, 2019	-	-	580	24,397	24,977
Transfers out	-	-	-	(8,405)	(8,405)
Net realized and unrealized gains	-	-	-	268	268
Purchases	-	-	507	-	507
Sales and settlements	-	-	-	-	-
Fair value, June 30, 2020	\$ -	\$ -	\$ 1,087	\$ 16,260	\$ 17,347

In the consolidated statements of activities for the years ended June 30, 2020 and 2019, net realized and unrealized gains and losses on Level 3 investments are included in nonoperating net realized and unrealized gains and losses on investments.

Endowment Income and Spending

In addition to current yield (interest, dividends, and net rental income), the University has interpreted state law to allow for the utilization of capital appreciation on permanently restricted endowment funds unless explicit donor stipulations specify how net appreciation must be used. Accordingly, the University segregates capital appreciation between that which can be used for current operations and that which is attributable to permanently restricted endowment funds. For financial reporting purposes, current yield and capital appreciation attributed to permanently restricted endowment funds are considered restricted until appropriated for use, and the historic dollar value of such funds is considered permanently restricted.

The University has adopted the Uniform Prudent Management of Institutional Funds Act (“UPMIFA”) statute. UPMIFA provides guidance for investment management; enumerates guidelines in prudent investing; and, eliminates the concept of “historic dollar value” for donor-restricted endowments. Accordingly, the University has not limited appropriation of underwater funds to current yield.

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The University has adopted investment and spending policies for its endowment and similar funds that attempt to provide a predictable stream of funding for its programs. To satisfy its long-term rate-of-return objectives, the University relies on a total return approach in which investment returns are achieved through both capital appreciation (realized and unrealized gains) and current yield. To achieve its long-term objectives within prudent risk parameters, the University targets a diversified asset allocation as follows:

Asset Allocation Policy	Target %
Global equity	45
Private equity	10
Flexible capital	20
Fixed income	10
Real assets	15

The University observes a spending rule with respect to total return (interest, dividends, and appreciation) on investments of the endowment and similar funds. Under the spending rule, the University appropriated 4.7% of its endowment and similar funds' average unit fair value for the previous twelve quarters, from the beginning of the fiscal year, for the years ended June 30, 2020 and 2019, respectively.

The spending rule distributions for fiscal years 2020 and 2019, respectively, were \$0.286 and \$0.283 per time weighted unit, comprised of, respectively, \$0.039 and \$0.059 of income and \$0.244 and \$0.224 of distributions from current and accumulated net gains. At June 30, 2020 there were a total of 83,256,493, units in the pooled endowment and similar funds, each having a fair value of \$6.003 of the total units, were owned by endowment funds 48,353,457 and 34,903,036 were owned by internally designated funds. At June 30, 2019 there were a total of 82,404,049 units in the pooled endowment and similar funds, each having a fair value of \$6.359 of the total units, 47,592,804 were owned by endowment funds and 34,811,245 were owned by internally designated funds.

A summary of the fair value per unit and the income per time-weighted unit for the pooled investments held as of June 30, 2020 and in each of the prior four years is as follows:

	Income Per Time- Weighted Unit	Fair Value Per Unit
2020	\$ 0.039	\$ 6.003
2019	0.059	6.359
2018	0.061	6.338
2017	0.056	6.202
2016	0.058	5.868
2015	0.056	6.158

To the extent that accumulated realized and unrealized losses are in excess of accumulated gains for permanently restricted endowment funds, they are reported as decreases in net assets with donor restrictions. As a result of market declines, the fair value of certain permanently restricted endowment funds of \$67,795,000 is less than the historic dollar value of such funds of \$70,498,000 ("underwater funds") equaling approximately \$2,703,000 and \$405,000 at June 30, 2020 and 2019 respectively. The University is under no legal obligation to fund the deficiency.

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Endowment and Similar Funds

The endowment and similar funds' net asset composition as of June 30, 2020 and 2019 and the changes for the years then ended are as follows (in thousands):

	2020		
	Without Donor Restrictions	With Donor Restrictions	Total
Donor restricted	\$ -	\$ 295,652	\$ 295,652
Quasi-endowment	188,715	-	188,715
	<u>\$ 188,715</u>	<u>\$ 295,652</u>	<u>\$ 484,367</u>
Balance, June 30, 2019	\$ 199,666	\$ 308,854	\$ 508,520
Investment return	(1,730)	(7,620)	(9,350)
Contributions	615	3,687	4,302
Appropriated for expenditure	(9,836)	(9,269)	(19,105)
Balance, June 30, 2020	\$ 188,715	\$ 295,652	\$ 484,367

	2019		
	Without Donor Restrictions	With Donor Restrictions	Total
Donor restricted	\$ -	\$ 308,854	\$ 308,854
Quasi-endowment	199,666	-	199,666
	<u>\$ 199,666</u>	<u>\$ 308,854</u>	<u>\$ 508,520</u>
Balance, June 30, 2018	\$ 195,479	\$ 304,792	\$ 500,271
Investment return	13,824	7,824	21,648
Contributions	3,838	5,528	9,366
Appropriated for expenditure	(13,475)	(9,290)	(22,765)
Balance, June 30, 2019	\$ 199,666	\$ 308,854	\$ 508,520

Split-Interest Agreements

Investments include the following split-interest agreements at June 30, 2020 and 2019 (in thousands):

	2020	2019
Charitable remainder trusts	\$ 7,716	\$ 7,683
Charitable gift annuities	6,997	8,132
Pooled income funds	1,130	1,208
	<u>\$ 15,843</u>	<u>\$ 17,023</u>

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8. Land, Buildings and Equipment

Land, buildings and equipment, net, consist of the following at June 30, 2020 and 2019 (in thousands):

	2020	2019
Land and land improvements	\$ 28,739	\$ 28,700
Buildings and improvements	504,264	493,900
Equipment	112,360	106,093
Long term Lease Assets	18,404	-
	<u>663,767</u>	<u>628,693</u>
Less: Accumulated depreciation	<u>(309,736)</u>	<u>(282,589)</u>
	354,031	346,104
Construction-in-progress	79,498	24,434
	<u>\$ 433,529</u>	<u>\$ 370,538</u>

Depreciation expense charged to operations was approximately \$27,580,000 and \$24,299,000 for the years ended June 30, 2020 and 2019, respectively. Net interest cost capitalized was approximately \$4,766,000 and \$595,000 for the years ended June 30, 2020 and 2019, respectively.

9. Leases

As discussed in Note 2, on July 1, 2019, the University adopted new guidance for the accounting and reporting of leases. The University has leases primarily for real estate and office space, as well as equipment. The University determines if an arrangement is a lease at inception of the contract. When evaluating contracts for embedded leases, the University exercises judgement to determine if there is an explicit or implicit identified asset in the contract and if the University controls the use of that asset. Embedded leases are immaterial to the consolidated financial statements.

Certain real estate leases have renewal options and the lease term includes options to extend or terminate the lease when it is reasonably certain that the University will exercise that option.

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Lease expense for lease payments is recognized on a straight-line basis over the term of the lease. Lease assets and liabilities are recognized based on the present value of lease payments over the lease term. The majority of the University's leases do not have a readily determinable implicit discount rate and in those cases the University uses its incremental borrowing rate to calculate the present value of lease payments. As a practical expedient, the University has made an accounting policy election for all asset classes not to separate lease components from nonlease components in the event that the agreement contains both. The University includes both lease and nonlease components for purposes of calculating the right-of-use asset and related lease liability. For finance leases, interest expense on the lease liability is recognized using the effective interest method and amortization of the right-to-use asset is recognized on a straight-line basis over the shorter of the estimated useful life of the asset or the lease term. The table below presents certain information related to the lease costs for leases.

	2020
Finance lease cost	
Amortization of leased assets	\$ 167
Interest on lease liabilities	52
Operating lease cost	3,218
Short-term and variable lease costs	836
Total lease cost	<u>\$ 4,273</u>

Prior to the adoption of the new lease standard, operating lease rent expense was \$4,146,000 for the year ended June 30, 2019.

Supplemental financial position information related to operating and finance leases as of June 30, 2020 is as follows:

	Classification on the Statement of Net Position	2020
Assets		
Operating lease assets	Land, buildings and equipment, net	\$ 13,092
Finance lease assets	Land, buildings and equipment, net	2,480
Total lease assets		<u>\$ 15,572</u>
Liabilities		
Operating leases	Operating Lease Liabilities	\$ 14,209
Finance leases	Operating Lease Liabilities	2,736
Total lease liabilities		<u>\$ 16,945</u>
Weighted-average remaining lease term		
Operating leases		6.3 years
Finance leases		7.5 years
Weighted-average discount rate		
Operating leases		3.76%
Finance leases		3.87%

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The table below presents supplemental cash flow information related to leases:

	2020
Cash paid for amounts included in the measurement of lease liabilities	
Operating cash flows for operating leases	\$ 3,018
Operating cash flows for finance leases	-
	<u>\$ 3,018</u>

Future minimum lease payments under operating leases at June 30, 2020 is as follows:

2021	\$ 3,325
2022	3,552
2023	2,982
2024	2,268
2025	2,295
Thereafter	<u>4,721</u>
Total minimum lease payments	19,143
Less: Imputed interest	<u>(2,198)</u>
Total lease liabilities	<u>\$ 16,945</u>

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10. Bonds and Notes Payable

Bonds and notes payable consist of the following (in thousands) at June 30, 2020 and 2019:

Purpose and Definition	Maturity Date	Interest Rate %	Original Issue	Amount Due Within One Year	Balance, June 30, 2020	Balance, June 30, 2019
Bonds payable						
MDFFA						
2008 Series A (2)	9/1/2035	Variable	54,815	\$ 2,235	\$ 38,275	\$ 40,485
MDFFA						
2012 Series (3)	9/1/2050	4.0-5.0	42,540	-	43,198	43,220
MDFFA						
2014 Series (2)	9/1/2029	3.10	2,782	194	3,690	3,880
MDFFA						
2016 Series (4)	9/1/2052	3.0-5.0	49,030	-	48,374	48,540
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2016 Series (2)	9/1/2056	4.338	56,905	-	56,905	56,905
MDFFA						
2017A Series (5)	9/1/2047	3.0-5.0	14,435	400	15,936	16,394
MDFFA						
2017B Series (6)	9/1/2045	5.0	52,990	-	61,079	61,401
MDFFA						
2019 Series (6)	9/1/2059	4.0-5.0	113,640	-	135,053	-
Uncollateralized notes						
TD Bank	7/1/2023	Various	7,122	356	4,689	5,045
Capital lease obligations						
	Various	Various		1,656	4,814	4,588
				4,841	412,013	280,458
Less: Deferred financing costs, net of amortization						
					(3,127)	(2,308)
Total bonds and notes payable				\$ 4,841	\$ 408,886	\$ 278,150

- (1) The bonds, issued at par with no discount or premium, represent a general obligation of the University.
- (2) The bonds represent a general obligation of the University. The balances at June 30, 2019 and 2020 include a premium of approximately \$680,000 and \$658,000 respectively.
- (3) The bonds represent a general obligation of the University. The balance at June 30, 2019 and 2020 includes a premium of approximately \$5,505,000 and \$5,339,000, respectively.
- (4) The bonds represent a general obligation of the University. The balance at June 30, 2019 and 2020 includes a premium of approximately \$2,334,000 and \$2,251,000, respectively.
- (5) The bonds represent a general obligation of the University. The balance at June 30, 2019 and 2020 includes a premium of approximately \$8,411,000 and \$8,089,000, respectively.
- (6) The bonds represent a general obligation of the University. The balance at June 30, 2020 includes a premium of approximately \$21,414,000

In compliance with the University's various bond indentures, funds held under bond agreements at June 30, 2020 and 2019 include investments of approximately \$92,185,000 and \$378,000, respectively, held for construction and debt service reserves.

Scheduled aggregate principal repayments on bonds and notes payable for each of the next five fiscal years and thereafter are as follows (in thousands):

2021	\$ 4,842
2022	4,529
2023	4,384
2024	7,222
2025	2,878
Thereafter	350,406
Total cash payments	374,261
Premium	37,752
	\$ 412,013

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In September 2019, the University borrowed \$113,640,000 in the form of MDFA Revenue Bonds Series 2019 (tax-exempt). The proceeds from these bonds will be used to finance a portion of the 5-Year Institutional Plan, including development and construction of a new approximate 100,000 square foot academic building to be located on the University's main campus; renovations, upgrades, repairs and improvements to various University facilities; and construction of a new approximate 385-bed student residence hall and renovation of approximately 54 student apartments, located at a site near the main campus and currently owned by the University.

The MDFA 2019 Bonds are fixed rate bonds payable in annual installments with principal payments ranging from \$1,015,000 to \$20,090,000 beginning September 1, 2030, and interest ranging from 4.0% to 5.0%. The final maturity is September 1, 2059.

In October 2017, the University borrowed \$14,435,000 in the form of Massachusetts Development Finance Agency ("MDFA") Revenue Bonds Series 2017 (tax-exempt). The proceeds from these bonds were used to current refund the University's outstanding MDFA Series 2007 bonds and to pay certain costs of issuance.

The refunding resulted in a gain of approximately \$624,000 that has been included in the accompanying consolidated statement of activities. The MDFA 2017 Bonds are fixed rate bonds payable in annual installments with principal payments ranging from \$325,000 to \$695,000 beginning September 1, 2018, and interest ranging from 3.0% to 5.0%. The final maturity is September 1, 2047.

In December 2017, the University borrowed \$52,990,000 in the form of Massachusetts Development Finance Agency ("MDFA") Revenue Bonds Series 2017B (tax-exempt) used to advance refund a prior issuance.

The refunding resulted in a loss of approximately \$4,808,000 that has been included in the accompanying consolidated statement of activities. The MDFA 2017B Bonds are fixed rate bonds payable in annual installments with principal payments ranging from \$710,000 to \$6,665,000 beginning September 1, 2034, and interest of 5.0%. The final maturity is September 1, 2045.

In June 2016, the University borrowed \$49,030,000 in the form of MDFA Revenue Bonds Series 2016 (tax-exempt) (the "MDFA 2016 Bonds") and \$56,905,000 in University taxable bonds (the "WPI 2016 Bonds.") The proceeds from these bonds were used to advance refund a portion of the MDFA Series 2007 bonds and to pay certain costs of issuance. The remaining proceeds will be used to finance the development, design, and construction and equipping of the Foisie Innovation Studio and an approximate 140-bed student residence, and various other capital renovations, deferred maintenance, and facilities improvements.

The MDFA 2016 Bonds are fixed rate bonds payable in annual installments with principal payments ranging from \$790,000 to \$11,180,000 beginning September 1, 2027, and interest ranging from 3.0% to 5.0%. The final maturity is September 1, 2052. The WPI 2016 Bonds are fixed rate bonds payable in annual installments with principal payments ranging from \$4,370,000 to \$14,000,000 beginning September 1, 2052, with interest at 4.34%. The final maturity is September 1, 2056.

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In August 2014, the University borrowed \$4,622,000 in the form of MDFA Revenue Bond Series 2014 private placement “draw-down bonds” (the “2014 Bonds”) to finance renovations, repairs and improvements to existing facilities. The “draw-down bonds” comprise three term bonds in the initial par amounts of \$2,782,000 (Term Bond A), \$1,440,000 (Term Bond B), and \$400,000 (Term Bond C) to be drawn on or before September 1, 2014, 2015, and 2016, respectively. The 2014 Bonds are payable in monthly installments of principal plus interest and mature September 1, 2029. Interest is set at the time of draw-down at either a variable rate (0.6975 of the sum of 125 basis points and LIBOR) or a fixed rate (0.6975 of the sum of 125 basis points plus the Federal Home Loan Bank Rate). As of June 30, 2017, the University borrowed \$2,782,000 (Term Bond A) with interest payable at a fixed rate of 3.10%, \$1,440,000 (Term Bond B) with interest payable at a fixed rate of 3.01%, and \$400,000 (Term Bond C) with interest payable at a fixed rate of 2.50%. Principal payments for Term Bond A range from \$8,084 to \$12,228 per month beginning October 1, 2014 through August 1, 2029 with a final installment of \$989,887 due September 1, 2029. Principal payments for Term Bond B range from \$4,466 to \$6,558 per month beginning October 1, 2015 through August 1, 2029 with a final installment of \$530,892 due September 1, 2029. Principal payments for Term Bond C range from \$1,327 to \$1,892 per month beginning October 1, 2016 through August 1, 2029 with a final installment of \$153,170 due September 1, 2029.

In August 2013, the University refinanced borrowings of \$7,122,000 in the form of two uncollateralized notes payable to TD Bank. The proceeds from the original borrowings in 2010 were used to refinance the debt assumed for the acquisition of the remaining interest in Gateway and Washburn. The borrowings consist of two notes payable with balloon payments due in 2023. Monthly installments of principal totaling \$29,675 are paid based on a 20 year amortization with interest at 1.5% plus LIBOR, approximately 1.67% and 3.94% at June 30, 2020, and 2019, respectively.

In October 2012, the University borrowed \$42,540,000 in the form of MDFA Revenue Bond Series 2012 (the “2012 Bonds”). The proceeds from the issue were used to finance the development, construction, furnishing, and equipping of an approximately 250-bed-apartment-style residence hall and other renovations, repairs, and improvements to campus facilities. The 2012 Bonds are fixed rate bonds payable in annual installments with principal payments ranging from \$5,975,000 to \$10,515,000 beginning September 1, 2046, and interest ranging from 4.0% to 5.0%. The final maturity is September 1, 2050.

In April 2008, the University borrowed \$54,815,000 in the form of MDFA Variable Rate Demand Revenue Bonds Series 2008A (tax-exempt) and 2008B (federally taxable), (the “2008 Bonds”). The proceeds from the issues were used to refund previous bond issuances and to pay the costs of issuance. The 2008 Bonds are payable in semiannual installments with principal payments ranging from \$360,000 to \$2,915,000, with a final maturity of September 1, 2035. As of June 30, 2017 the 2008B Bonds had been retired. Interest on the 2008A Bonds is at a variable rate which is reset on a weekly basis. The interest rates at June 30, 2020 and 2019 for the 2008A Bonds were 0.14% and 1.92%, respectively. The interest rate swap agreements entered into as an integral part of the 2008A Bonds remain in effect to economically hedge the interest rate risks associated with the 2008 Bonds (refer to Note 10).

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Payment of the principal of, the purchase price of, and interest on each series of the 2008 Bonds, when due, is collateralized by irrevocable direct pay letters of credit by TD Bank that expires in April 2023. The letters of credit include certain financial and nonfinancial covenants.

The 2008 Bonds can bear interest at a daily, weekly, or monthly variable rate mode or at a fixed rate mode. Bonds in the variable rate mode are subject to tender at the election of the bondholders. In the event that the University receives notice of any optional tender of its bonds, or if these bonds become subject to mandatory tender, the purchase price of the bonds will be paid from the remarketing of such bonds. However, if the remarketing proceeds are insufficient, the University will be obligated to purchase the bonds tendered by drawing on the letters of credit. Such funds drawn on the letters of credit must be repaid in full within 180 days or converted to a 5 year term loan with quarterly payments commencing in the 15th month following the conversion. If this were to occur, principal amounts on the 2008 Bonds due over the next five years and thereafter would be \$0, \$4,451,000, \$8,901,000 and \$13,352,000.

The University also has a \$50,000,000 bank revolving line of credit. The line of credit bears interest at an adjusted LIBOR rate plus 1.5% per annum on outstanding amounts and .18% of the available line of credit. There were no amounts outstanding at June 30, 2020 and 2019.

11. Interest Rate Agreements

The University has entered into several interest rate swap agreements used to economically hedge the interest rate risk associated with certain of its variable rate debt. The following summarizes the terms for each of these agreements as of June 30, 2020 and 2019 (dollars in thousands):

	<u>Series 2008 A</u>	
	<u>Deutsche Bank AG</u>	<u>Barclays Bank PLC</u>
Trade/effective date	Nov. 3, 2008	Nov. 3, 2008
Initial notional amount	\$ 14,100	\$ 34,200
Termination date	Oct. 1, 2033	Sept. 1, 2035
Rate paid by University	4.650 %	3.71%
Rate paid by Counterparty	71% of one-month LIBOR	67% of one-month LIBOR when LIBOR is > 4.00% SIFMA Municipal Swap Index when LIBOR is < 4.00%

	<u>Series 2008 A</u>		
	<u>Deutsche Bank AG</u>	<u>Barclays Bank PLC</u>	<u>Total, Net</u>
Fair Value liability			
June 30, 2020	\$ 3,196	\$ 6,758	\$ 9,954
June 30, 2019	\$ 2,617	\$ 5,182	\$ 7,799

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The net unrealized gain that was recognized for the interest rate swap agreements for the years ended June 30, 2020 and 2019 was approximately \$2,155,000 and \$1,849,000, respectively, and has been recorded in net realized and unrealized losses on interest rate agreements on the accompanying consolidated statements of activities. At June 30, 2020 and 2019, the fair value liability for interest rate swap agreements totaled \$9,954,000 and \$7,799,000, respectively.

The interest rate swap agreements contain provisions requiring collateral postings should the fair value liability of the University exceed certain amounts based on the University's long term credit ratings. The collateral posting provision for the agreement with Deutsche Bank AG is triggered should the fair value liability exceed \$40 million and the University's long term credit rating remains at A1/A+. The collateral posting provision for the two agreements with Barclays Bank PLC is triggered should the combined fair value liability exceed \$40 million and the University's long term credit rating declines to A2/A. At its current ratings level of A1/A, no amount of fair value liability will trigger a posting requirement for the Barclays Bank PLC agreements. The provisions with both counterparties provide that the liability threshold decreases if the University's long term credit ratings decline. At June 30, 2020, the University is not required to post collateral to its counterparties.

12. Retirement Plan

The University participates in a defined contribution retirement plan for substantially all of its employees. Employees may elect to invest in various accounts with the Teachers' Insurance and Annuity Association of America ("TIAA"), Fidelity Investments, or a combination of both. Contributions were approximately \$11,077,000 and \$10,506,000 for the years ended June 30, 2020 and 2019, respectively. Contributions are based upon a percentage of the employees' compensation.

13. Functional Expenses

Expenses are presented by functional classification. Each functional classification includes all expenses related to the underlying operations by natural classification. The costs of operation and maintenance of plant, depreciation, and interest expense have been allocated across all functional expense categories to reflect the full cost of those activities.

Costs are allocated using the following methods: Expense for the depreciation, administration, supervision, operation, maintenance, preservation, and protection of the institution's physical plant are allocated based on square footage. Interest expense is allocated based on usage of debt-financed space.

The following summarizes the allocation of functional expenses as of June 30, 2020 and 2019 (dollars in thousands):

	2020						
	Instruction and Research	Sponsored Research	Student Services	Auxiliary Enterprises	External Relations	Institution and Academic Support	Total
Wages and benefits	\$ 102,796	\$ 19,614	\$ 11,703	\$ 4,954	\$ 10,248	\$ 36,684	\$ 185,999
Operating expenses	17,824	11,370	6,706	11,307	2,639	18,658	68,504
Depreciation	7,237	1,562	4,970	8,154	138	1,809	23,870
Interest expense	2,629	256	2,904	4,770	41	227	10,827
Total Operating Expenses before early retirement incentives	\$ 130,486	\$ 32,802	\$ 26,283	\$ 29,185	\$ 13,066	\$ 57,378	\$ 289,200
Early retirement incentives							5,130
Total operating expenses after early retirement incentives							\$ 294,330

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	2019						Total
	Instruction and Research	Sponsored Research	Student Services	Auxiliary Enterprises	External Relations	Institution and Academic Support	
Wages and benefits	\$ 99,937	\$ 17,788	\$ 11,471	\$ 4,820	\$ 9,068	\$ 34,277	\$ 177,361
Operating expenses	22,413	11,998	6,170	14,142	3,305	19,546	77,574
Depreciation	6,836	1,162	5,257	8,110	127	2,094	23,586
Interest expense	2,092	189	2,849	4,660	14	185	9,989
	<u>\$ 131,278</u>	<u>\$ 31,137</u>	<u>\$ 25,747</u>	<u>\$ 31,732</u>	<u>\$ 12,514</u>	<u>\$ 56,102</u>	<u>\$ 288,510</u>

External relations expenditures include approximately \$8,061,000 and \$7,289,000 of fundraising expenses for the years ended June 30, 2020 and 2019, respectively.

In response to the economic uncertainty of COVID-19, for the fiscal year ended June 30, 2020, the University instituted a voluntary early retirement incentive plan for employees meeting certain age and service requirements. Fifty-eight employees accepted the program, which included termination effective June 30, 2020. \$5,130,000 related to the voluntary early retirement incentive plan is included in the Statement of Activities and in Accounts Payables and Accrued Liabilities in the Statement of Financial Position. There are no plans to offer further early retirement incentive plans at this time.

14. Availability of Resources

The University regularly monitors liquidity required to meet its operating needs and other contractual commitments. When reviewing available resources required to meet its expenditures over a 12-month period, the University considers all expenditures related to its ongoing activities.

In addition to the financial assets available to meet expenditures over the next 12 months, the University operates with a balanced budget and anticipates collecting sufficient revenue to cover expenditures not covered by donor-restricted resources. The University has generated operating cash flows for the fiscal years ended June 30, 2020 and 2019.

The following summarizes the financial assets available to meet its expenditures, as of June 30, 2020:

	Resources Available at 6/30/20	Resources Appropriated by the Board and Available in FY 2020	Resources not Available Within 12 Mmonths	Total
Financial assets available within 12 months				
Cash and cash equivalents	\$ 45,848	\$ -	\$ -	\$ 45,848
Accounts receivable, net	12,515	-	-	12,515
Contributions (unrestricted) due in 1 year or less available for expenditures	5,811	-	-	5,811
Forecasted payout of donor-restricted endowments	-	-	13,896	13,896
Forecasted payout on board designated endowments	-	-	8,870	8,870
Investments not subject to donor restrictions or board designations	593	-	-	593
Total financial assets available within 12 months	64,767	22,766	-	87,533
Financial assets not available for expenditures within 12 months				
Cash, cash equivalents and investments	-	-	624,721	624,721
Contributions not due within one year	-	-	17,930	17,930
Student loan receivables, net	-	-	15,717	15,717
Liquidity resources				
Bank line of credit (no balance outstanding as of June 30, 2020)	50,000	-	-	50,000
Total financial assets and other liquidity resources	<u>\$ 114,767</u>	<u>\$ 22,766</u>	<u>\$ 658,368</u>	<u>\$ 795,901</u>

Included in financial assets not available for expenditure at June 30, 2020, the University had \$188,715,000 of board-designated endowments that, with the board's approval, could be made available for expenditures.

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15. Liquidity

Of the University's Investments, 47% are redeemable within 30 days, 30% may be redeemed either at future specified redemption dates or currently by incurring a penalty, and 23% are in real estate, private equities, and other private investments. Constraints that limit the University's ability to withdraw capital after such investments are made may limit the amount available for withdrawal at a given redemption date which could limit the University's ability to respond quickly to changes in market conditions.

16. Net Assets

Net assets consist of the following at June 30, 2020 and 2019 (in thousands):

	2020		
	Without Donor Restrictions	With Donor Restrictions	Total
Endowment funds			
Long-term investment (quasi - endowment)	\$ 188,715	\$ -	\$ 188,715
Original principal	-	211,694	211,694
Unspent income and appreciation			
Scholarship support	-	42,534	42,534
Faculty support	-	11,307	11,307
Program support	-	30,117	30,117
Total endowment funds	<u>188,715</u>	<u>295,652</u>	<u>484,367</u>
Split-interest agreements and perpetual trusts	1,766	21,450	23,216
Student loan funds	13,215	4,162	17,377
Gifts and other unexpended revenues			
Acquisition of building and equipment	-	7,667	7,667
Instruction, research and institutional support	-	23,057	23,057
Undesignated	<u>96,137</u>	<u>-</u>	<u>96,137</u>
	<u>\$ 299,833</u>	<u>\$ 351,988</u>	<u>\$ 651,821</u>

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	2019		
	Without Donor Restrictions	With Donor Restrictions	Total
Endowment funds			
Long-term investment (quasi - endowment)	\$ 199,666	\$ -	\$ 199,666
Original principal	-	200,022	200,022
Unspent income and appreciation			
Scholarship support	-	64,911	64,911
Faculty support	-	13,302	13,302
Program support	-	30,619	30,619
Total endowment funds	<u>199,666</u>	<u>308,854</u>	<u>508,520</u>
Split-interest agreements and perpetual trusts	1,558	24,216	25,774
Student loan funds	13,855	4,072	17,927
Gifts and other unexpended revenues			
Acquisition of building and equipment	-	7,807	7,807
Instruction, research and institutional support	-	4,895	4,895
Undesignated	<u>107,797</u>	<u>-</u>	<u>107,797</u>
	<u>\$ 322,876</u>	<u>\$ 349,844</u>	<u>\$ 672,720</u>

17. Related Parties

Alumni Association of Worcester Polytechnic Institute (“Alumni Association”)

The Alumni Association, a separate 501(c)(3) organization, invests the majority of its funds in the University’s endowment. At June 30, 2020 and 2019, funds held for others in the consolidated statements of financial position include Alumni Association assets of \$2,981,000 and \$2,929,000, respectively.

18. Commitments and Contingencies

Construction Contracts

For the years ended June 30, 2020 and 2019, the University had contracted for various renovations and construction projects across campus totaling approximately \$67,209,000 and \$49,414,000 respectively.

Investments

The University is obligated under certain limited partnership agreements and other alternative investment arrangements to advance additional funding periodically up to specified levels. At June 30, 2020 and 2019, the University had unfunded commitments of approximately \$63,505,000 and \$60,009,000, respectively, that can be called through fiscal year 2030. These commitments will be funded from the University’s existing cash and investments.

Operating Leases

The University is obligated under noncancelable operating leases for office space and storage facilities. The future minimum rental commitments for the next five years under these agreements as of June 30, 2020, are approximately as follows (in thousands):

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Guarantees

The University has guaranteed commercial loans with an outstanding amount of approximately \$1,776,000 to seven fraternities. These loans are collateralized by real property owned by the fraternities.

Uncertain Tax Positions

The University is generally exempt from federal and state income taxes. Management annually reviews for uncertain tax positions along with any related interest and penalties and believes that the University has no uncertain tax positions that would have a material adverse effect, individually or in the aggregate, upon the University's consolidated statements of financial position, or the related consolidated statements of activities, or cash flows.

Sponsored Research

The University's sponsored research program and indirect cost recovery are subject to audit by the respective sponsoring federal agency as provided for in federally sponsored research regulations. Management believes that any such audit will not have a material adverse effect, individually or in the aggregate, upon the University's consolidated statements of financial position, or the related consolidated statements of activities, or cash flows.

Self-insured Medical Claims

The University is self-insured for medical claims and is a member of a captive insurer providing stop-loss insurance to cover plan expenses in excess of certain limits. Management believes insurance claims that have occurred as of June 30, 2020 and 2019 but not yet reported or paid have been adequately reserved.

Other Commitments and Contingencies

In May 2009, the University entered into a payment in lieu of taxes ("PILOT") agreement with the City of Worcester. The 25 year agreement provides for the University to pay approximately \$450,000 annually in voluntary payments, increasing 2.5% annually. The agreement calls for the City of Worcester to use these amounts to support the operations of the Worcester Public Library and for the implementation of the master plan to renovate Institute Park. In April 2015, the PILOT agreement was amended to increase the voluntary payment by an additional \$130,000 annually, also increasing 2.5% annually.

The University is also involved in various legal actions arising in the normal course of its activities. Although the ultimate outcome is not determinable at this time, management, after taking into consideration advice of legal counsel believes that the resolution of these pending matters will not have a material adverse effect, individually or in the aggregate, upon the University's consolidated statements of financial position, or the related consolidated statements of activities, or cash flows.

19. Subsequent Events

Management has evaluated subsequent events for the period after June 30, 2020 through November 2, 2020, the date the financial statements were issued, and determined that there have been no subsequent events that would require recognition in the financial statements or disclosure in the notes of the financial statements.

List of Supporting Documents Available in the Electronic Workroom

Standard One: Mission and Purposes

- Acts of Incorporation
- Arts & Sciences Impact Report
- Gordon Library Mission and Priorities
- Mission and Values Meeting Highlights, February 2020
- School of Business Mission
- Student Government Association Mission
- Strategic Planning Process, September 2014
- Student Affairs Core Values and Strategic Plan
- Undergraduate Catalog
- WPI Mission and Values (with Board of Trustees feedback)
- WPI Mission Statement (and related content)
- WPI Draft Mission Statement, 2021
- WPI Plan

Standard Two: Planning and Evaluation

- 5 Year Capital Plan
- 5 Year Financial Plan
- AACSB Accreditation Reports, 2017; reviewer feedback from 2012
- ABET Engineering Accreditation Self-Studies, 2020
- Academic Affairs Implementation Plan Goals
- Academic Calendars
- Academic Space Assessment, Trustees Presentation, 2017
- Advancement Philanthropy and Campaign Materials, 2015 and 2021 Campaigns
- Alumni Survey Data, 2017-2019
- Arts & Sciences Program Reviews
- Business Continuity Plan
- Business School Implementation Plan Goals
- Call for Volunteers for Strategic Plan Committees
- Campus Master Plan Addendum, 2014
- Capital Budget Summary, FY 2022
- Career Destination Outcomes Report, 2020
- DEI Strategic Framework
- Dining 5-Year Plan
- Electrical and Computer Engineering Proposal to Review ECE Program Educational Outcome #2
- Enrolled Student Survey Results
- Enterprise Transformation SharePoint Site
- Faculty Meeting Global School, 2018
- Gender Inclusive Restrooms Project Announcement
- Gordon Library Capital Plan
- Graduate Studies Implementation Plan Goals
- Hygiene Products Announcement
- MQP Notes, 2016-2019
- Office of Vice Provost for Research Implementation Plan Goals
- Progress of ABET Learning Outcomes Assessment
- Project Inclusion
- Project Inclusion Year 1-3 Report
- Strategic Plan (draft) 2021
- Strategic Plan 2015
- Strategic Plan Tracking—Cross Cutting Enablers, July 2019
- Student Affairs Core Values and Strategic Plan

- Student Affairs Departmental Goals, 2016, 2017, 2018, 2019
- Student Affairs End of the Year Reports
- Study Space App Announcement
- Study Space Committee Announcement
- Sustainability Plan, 2020-2025
- Sustainability Plans and Annual Reports, 2010-2020
- Sustainable Inclusive Excellence Action Plan Guide
- Sustainable Inclusive Excellence Pre-Reading Materials
- Trustee White Papers for 5 Year Planning, 2018
- Trustee Plenary—Strategic Plan Consideration—Educational Accessibility, 2021
- Trustee Plenary—Trends to Consider, 2021
- Undergraduate Studies Implementation Plan Goals
- WPI Plan Alumni Interviews
- WPI Strategic Plan Impact Report
- WPI Strategic Plan Tracking, July 2019
- WPI/Chartwells Vision Plan for Dining Services

Standard Three: Organization and Governance

- Alumni Association Website
- Board Membership and Affiliation Website
- Bylaws (2012, 2014, 2015, 2016, 2018, 2019, 2021) and Corporation Charter
- Bylaws and Governance Working Group Website
- Bylaws of the Corporation
- Documentation of Board Development, 2018, 2019, 2020, 2021
- Employee Handbook
- Executive and Board Meeting Agendas, 2011-2021
- Faculty Governance Website
- Faculty Handbook
- Graduate Student Government Website
- Institutional Policy and Procedures
- Job Descriptions for Principal Administrators
- Leadership Development and Executive Compensation Committee Charter and Bylaws
- WPI Organizational Charts
- Student Government Association Website
- Trustee Committee Charters
- Trustee Committee Goals, 2019, 2020
- Trustee Committee Rosters, 2010-2021
- Trustee Meeting Minutes, organized by committee and by year, 2011-2021
- Trustee Membership and Affiliation, 2011-2021
- Trustee Self Assessments 2013, 2015, 2019
- Trustee Skill Index, 2015, 2017, 2021

Standard Four: The Academic Program

- AACSB Accreditation Reports, 2017; reviewer feedback from 2012
- ABET Engineering Accreditation Self-Studies, 2020
- Academic Calendars
- Arts & Sciences Program Reviews
- CAP and CGSR Motion for Online Course Reports
- Course Report Summaries for Department Heads
- Faculty Meeting Global School Proposal, 2018
- Sample Course Evaluation
- Student Course Report Data
- Task Force on Online Course Reports
- Transfer Credit Policies and Processes

Undergraduate Documents

- Academic Standing Policy
- Committee on Academic Operations Annual Report
- Committee on Academic Operations Website
- Committee on Academic Policy Annual Report
- Committee on Academic Policy Website
- eProjects Website
- Global Project Centers, 2019-2020
- Goals of the Humanities and Arts Requirement
- IQP Learning Outcomes
- List of New Programs Since Last Review
- List of Program Deletions Since Last Review
- Major Tracking Sheets
- MQP Learning Outcomes
- Sample Syllabi
- Undergraduate Catalog Website
- Undergraduate Catalogs, 2012- 2021
- Undergraduate Institutional Learning Outcomes

Graduate Materials

- CGSR New Grad Course Proposal Form
- CGSR New Graduate Program Proposal Form
- CGSR Removal of Grad Course Proposal Form
- CGSR Revision of Grad Course Description Form
- CH555 Motion – CGSR Motion to Make CH555 a Permanent Course (Example)
- Committee on Graduate Studies and Research - Motion Templates and Past Minutes
- Committee on Graduate Studies and Research (CGSR) Annual Report Example
- Cybersecurity Master Program – CGSR Motion to Approve New Grad Program Example
- Data Science (DS) Graduate Qualifying Project (GQP) Final Poster Example
- Data Science GQP Information and Assessment Details
- ECE MS Plan of Study (Example of plan of study template for a master's program)
- ECE PhD Plan of Study (Example of plan of study template for a PhD program)
- Faculty Handbook
- Graduate Catalogs, 2008-2021
- Graduate Course Catalog, 2020-2021
- Graduate Internship Policies
- MBA Redesign – CGSR Motion to Approve Redesign of MBA Program
- MOT20-006 – Interactive Media and Game Design (IMGD) MFA Degree Program CGSR Motion
- MOT20-016 – CGSR Motion to Approve Mew Grad Program, MS in Business Analytics
- MSBA Syllabus – Example Grad Syllabus from BUS 2070 Course
- Policy Information on Remote Work for Grad Research and Teaching Assistants and Fellows
- Robotics Engineering (RBE) Graduate Admission Policies and Criteria, 2019
- SPEAK Test Results – English Language Fluency Assessment and Scoring Rubric
- UMass Medical School (UMMS) – WPI MOU Agreement on Joint PhD Program
- UMMS-WPI Signed Agreement on Joint PhD Program
- WPI Graduate International Admission Information
- WPI Graduate Professional Development Programs
- WPI Graduate Programs Webpage
- WPI Graduate Research and Innovation Exchange (GRIE) – Annual Graduate Research Symposium
- WPI Graduate Student Appeal of Academic Standing Form
- WPI Graduate Student Parental Leave Policy
- WPI Graduate Three Minute Thesis (3MT) Competition
- WPI Graduate Travel Award
- WPI PhD Global Research Experience Award

- WPI Research Annual Report Example
- WPI School of Business Accreditation Information

Standard Five: Students

- 5 Year Financial Plan for Enrollment
- Academic Integrity Website
- Admissions Print Recruitment Materials
- Admitted Student Questionnaire, 2016 – 2018
- ATI (American Talent Initiative) Data, 2019
- Davis Foundation SWEET Grant Report, 2020
- Davis International Scholars Program
- Debt Dashboard, 2010-2021
- Enrolled Student Survey Summary Data, 2019
- ESS Data Presentation – Engineering
- ESS Trustees Presentation Focusing on Non-Majority Student Experience 2021
- Faculty Academic Integrity Report, 2020
- Fall 2020 Student Affairs Dashboards
- Graduate Admissions Recruitment Plan, 2020-2021
- I'm Concerned About a Student Form
- IIE Open Doors Data, 2020
- Institutional Research Data Dashboards
- International Admissions Website
- NCES College Navigator Data for Retention and Graduation, Outcomes, and Default Rates
- New Student Orientation Schedule, 2019, 2020
- Noel Levitz Student Satisfaction Data, 2010-2016
- Non-Enrolling Undergrads Dashboard, 2010-2020
- Pre-Collegiate Outreach Annual Reports, 2017-2020
- Presentation to Faculty re: Test Blind Admissions, 2021
- Residential Services Occupancy Data, 2010-2020
- Robotics Engineering Processes and Criteria for Graduate Student Admission Decision, 2019
- SPEAK Test Results – English Language Fluency Assessment and Scoring Rubric
- Student Affairs Dashboards 2019, 2020
- Student Affairs Strategic Plan and Assessment Plans, 2016-2020
- Student Affairs Year End Reports
- Student Aid & Financial Literacy Annual Report, 2018 – 2019
- TechSync Student Organization Portal
- Undergraduate Admissions Annual Reports, 2017 – 2020
- Undergraduate Admissions Annual Reports, 2018, 2019, 2020
- WPI Code of Conduct

Standard Six: Teaching, Learning, and Scholarship

- AACSB Accreditation Reports, 2017; reviewer feedback from 2012
- ABET Engineering Accreditation Self-Studies, 2020
- Academic Advising Website
- Academic Technology Center Website
- Appendix B of Humanities and Arts Committee on Research and Travel Funding Report, 2019
- Arts & Sciences Program Reviews
- Arts & Sciences Annual Report
- Bylaws/Governance Working Group Report, May 2019
- CAP and CGSR Motion for Online Course Reports
- COACHE Survey Sata, 2014, 2017, 2020
- Committee on Financial and Administrative Policy Faculty Compensation Study Presentation, October 2017
- Committee on Financial and Administrative Policy Gender Salary Distribution Report, February 2018
- Committee on Governance TTT/NTT Credits Delivered Presentation, 2018, 2019, 2020

- Committee on Information Technology Policy Annual Report, May 2020
- Course Evaluation Sample
- Course Report Summaries for Department Heads
- Course Report System: Oscar
- Course Report Data
- Davis Foundation SWEET Grant Report, 2020
- Diversity Advocate Workshop
- Electrical and Computer Engineering Proposal to Review ECE Program Educational Outcome # 2
- Faculty Activity Model Interdisciplinary Activities Reports, 2020, 2021
- Faculty Handbook
- Faculty Governance Website
- Faculty Individual Annual Report Sample
- Faculty Meeting Global School Proposal, 2018
- Faculty Search Resource Guide
- Gordon Library Website
- Humanities and Arts Committee on Research and Travel Funding Summary Report, 2019
- Innovation & Entrepreneurship Report, 2020
- Innovation & Entrepreneurship Website
- IT Scientific and Engineering Support and Training, 2016-2019
- Library Information Literacy Outcomes
- Morgan Teaching and Learning Center Annual Reports, 2011-2017
- Morgan Teaching and Learning Center Faculty Development Activities, 2017-2021
- Morgan Teaching and Learning Center Website
- Research Impact Report, 2019
- Sponsored Programs Comparison. 2010-2020
- Sponsored Research Annual Report, 2020
- Sponsored Research Dollars Growth Over Past Decade, 2018
- Taskforce on Improving Academic Advising, 2017
- Taskforce on Online Course Reports

Standard Seven: Institutional Resources

- 5 Year Capital Plan
- 5 Year Institutional Financial Plan
- 5 Year Progress to Goal Comparison Presented to Campaign Executive Committee, 2021
- Academic Space Assessment, Trustees Presentation, 2017
- Admitted Student Questionnaire, 2016, 2017, 2018
- Arts Gifts Policy, 2015
- Beyond These Towers WPI Campaign Prospectus, 2021
- Board of Trustees Advancement Committee Charter, 2021
- Board of Trustees Audit Committee Charter, 2021
- Board of Trustees Budget & Finance Committee Charter, 2021
- Board of Trustees Economic Impact Committee Charter, 2021
- Board of Trustees Facilities & Infrastructure Committee Charter, 2021
- Board of Trustees Investment Committee Charter, 2021
- Business Continuity Plan
- Campus Master Plan Addendum, 2014
- Capital Budget Summary, FY 2022
- Compliance Training and Other Specific Training
- Comprehensive Campaign Progress Presented to Campaign Executive Committee, 2021
- Computer Systems Purchasing Policy
- CyberSecurity Plan
- CyberSecurity Program
- Diversity Advocate Training
- Employee Handbook

- Enterprise Transformation Process Update Presentation
- Enterprise Transformation SharePoint Site
- Faculty Handbook
- Faculty Individual Annual Report Sample
- Final If Campaign Commitment by Giving Level, 2015
- Final If Campaign Summary Shared with Advancement Committee, 2015
- Financial Statements, Fiscal Year 2012 to Fiscal Year 2020
- Flexible and Remote Work Policy documents
- FY 21 Forecast/FY22 Approved Budget
- FY 22 Budget Process Management Council Agenda
- Gift Acceptance Policies, 2019
- Gordon Library Capital Plan
- Gordon Library Capital Projects Plan
- IPEDS HR Files, 2016-2021
- IT Scientific and Engineering Support and Training, 2016-2019
- Library Annual Reports, 2017-2019
- Library Faculty and Student Survey, 2018
- Library Faculty Survey Report, 2019
- Library MISO Survey Findings, 2013
- Library Student Survey Summary, 2019
- Morgan Center for Teaching and Learning Annual Reports
- Morgan Center for Teaching and Learning Website
- Non-Enrolling Undergraduate Dashboard
- Performance Management Steps, Form, and Guidance Documents, 2021
- Philanthropic Campaign Overview Presented to Campaign Executive Committee, 2021
- Relevant Trustee Minutes (by committee), 2011-2021
- Sample Quarterly Budget Review
- Sponsored Programs Comparison, 2010 to 2020
- Student Aid and Financial Literacy Annual Report, 2019
- Student Debt Dashboard
- Trustees Debt Policy Calculated Ratios, 2019 and 2020
- Union Contract Samples, Facilities and Campus Police
- University Policy for Naming Opportunities, 2018
- WPI Debt Policy, 2019
- WPI Final Internal Audit AP Procurement Audit Report
- WPI Forward Priorities and Timeline, 2021
- WPI Investment Policy, 2019
- WPI School of Business Accreditation Website
- WPI Terms and Conditions

Standard Eight: Educational Effectiveness

- AACSB Accreditation Reports, 2017; reviewer feedback from 2012
- ABET Engineering Accreditation Self-Studies, 2020
- Advisor Report on IQP Learning, 2014
- Advisor Report on MQP Learning, 2014
- Alumni Survey Data, 2017-2019
- Arts & Sciences Program Reviews
- Biology & Biotechnology MQP Assessment, 2017
- Biology & Biotechnology MQP Summary Report, 2017
- CAP and CGSR Motion for Online Course Reports
- Career Development Center Post Graduation Reports, 2015-2020
- Career Outcomes and Salary Data
- Career Outlook

- Course Report Summaries for Department Heads
- Course Report System: Oscar
- Electrical and Computer Engineering ABET Self Study, 2020 (note MQP data)
- Enrolled Student Survey Results
- Enrolled Student Survey Summary, 2019
- ESS Data Presentation Example Engineering
- ESS Trustees Presentation Focusing on Non-Majority Student Experience, 2021
- Gender Differences in the Long-Term Impacts of Project-Based Learning, ASEE, 2013
- Global Learning Motion to Faculty Governance, 2018
- Global Learning Outcome Report
- Great Problem Seminar Student Impact, 2014 Data
- Great Problems Seminar Cumulative GPS Learning Outcomes Data
- Great Problems Seminar Learning Outcomes
- Great Problems Seminar Report Assessment Data, 2019
- Humanities and Arts External Review, 2016
- Humanities and Arts Learning Goals
- Humanities and Arts Project Assessment, 2014
- Humanities and Arts Projects Abroad Assessment, 2017, 2018
- Humanities and Arts Faculty Retreat Documentation, 2017
- Humanities and Arts Revised HUA Outcomes, 2013
- Inquiry Seminar/Humanities Capstone Exit Survey
- Institutional Research Data Dashboards Retention, Enrollment, Grad Rates
- Institute-Wide Questions for Summer MQP Reviews
- IQP and ABET Learning Outcomes
- IQP Centers vs. On-Campus IQPs, 2013-2016
- IQP Project Report Review Data 2013, 2016, 2019
- IQP Review Excerpts
- IT Proposal for Post Project Evaluation 2019
- Job Placement Data
- Long Term Impacts of Learning in Science and Engineering, ASEE, 2013
- Mathematical Sciences MQP Review, 2015
- Memo to CAP—Advisor Reports on IQP and MQP Learning, 2014
- MQP and WPI Learning Outcomes, 2016-2019
- MQP Notes 2013-2016
- MQP Notes 2013-2016 Short
- MQP Notes 2015-2018
- NCES College Navigator Data for Retention and Graduation Outcome and Default Rates
- Noel Levitz Student Satisfaction Data, 2010-2016
- NSSE data, 2016
- Proposal for IQP and MQP Learning ULO Surveys, 2014
- Residential Services Occupancy Dashboard
- Retention and Graduation Rates
- Sample Course Evaluation
- Student Affairs Dashboards, 2019, 2020
- Student Course Report Data
- Study of Doctoral Students
- Task Force on Online Course Reports
- Undergraduate Learning Outcomes in Undergraduate Catalog
- Undergraduate Outcomes Assessment Committee (UOAC) Minutes, 2019-2021,
- Undergraduate Outcomes Assessment Committee (UOAC) Annual Report, 2012-2021
- UOAC Assessment Plan for Institutional Learning Outcomes
- UOAC Memo to CAP Re: Student MQP Report Assessment 2013

- UOAC Report to Faculty Governance Re: Learning Outcome #8
- Wabash Charts: GPS vs non-GPS, 2008-2012
- WPI Plan Alumni Interviews
- Writing and Research in HUA

Standard Nine: Integrity, Transparency, and Public Disclosure

- About WPI
- Academic Calendar & Catalogs
- Academic Integrity
- Academic Dishonesty Resolution Process
- Academic Standing
- Academic Programs
- Acceptable Use Policy
- Accreditation
- Administrative Policy Group
- Alumni Awards
- Awards
- Background Check Policy
- Bias Response Program
- Bursar Refund Policy
- Call for Comment on Accreditation (multiple sources)
- Career Outcomes & Salary Data
- Career Outlook
- Careers
- Centers and Institutes
- Coming to Campus
- Consumer Information
- Copyright Policy
- Corporate and Professional Education
- Cost of Attendance
- Course Schedules
- Data Dashboards
- Degrees and Certificates
- Determining Financial Need
- Digital Accessibility Policy
- Disability Grievance Procedure
- Diversity & Inclusion
- Employee Handbook
- Employment Information
- Facts & Figures
- Faculty Awards
- Faculty Directory
- Faculty Handbook
- Faculty/Exempt Staff Conflict of Interest Policy
- Family Educational Rights and Privacy Act (FERPA)
- Financial Statements
- George C. Gordon Library
- Getting Involved
- Grade Appeal & Grade Change Policy
- Grade System
- Graduate Admissions
- Graduate Student Appeal of Academic Dismissal
- Graduate Student Resources

- Graduation Checklist
- Intellectual Property Policy
- Interactive Qualifying Project Learning Outcomes
- Internships
- IT Policies Standards and Procedures
- Loans & Financing Options
- Major Tracking Sheets
- Major Qualifying Project Learning Outcomes
- Mission & Vision
- Morgan Teaching & Learning Center
- National Center for Education Statistics (College Navigator) Expenses
- National Center for Education Statistics (College Navigator) Program of Study
- Net Price Calculator
- Notice of Nondiscrimination
- Office of Accessibility Services
- Ombudsperson
- Participation of Minors in WPI Programs Policy
- Policies and Procedures
- Privacy Policy
- Process for Outcomes Assessment
- Project Center Directory
- Project Grading
- Project Opportunities
- Project-Based Curriculum
- Registrar
- Research
- Research Misconduct Policy
- Returning from Leave of Absence
- Sexual Misconduct and Title IX Policy
- Student Code of Conduct
- Student Development and Counseling Center
- The Student Experience
- The WPI Plan
- Transfer Student FAQs
- Trustees
- Tuition & Financial Aid
- Tuition and Fees
- Types of Aid
- Undergraduate Admissions
- Understanding Financial Aid
- University Leadership
- Who to Contact
- Withdrawal or Leave of Absence
- WPI Bylaws Amended



Institutional Self Study

New England Commission for Higher Education

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