# GREAT MINDS MULTIPLIED

Worcester Polytechnic Institute is one of the nation's premier technology-focused universities. Project-based learning is the core of WPI's curriculum. Students enhance their strong understanding of the fundamentals of their respective fields through hands-on, real-world project and research experiences. In the process, they master critical thinking, learn to work in teams, fine-tune written and oral communication skills, and connect their education to local and global issues.
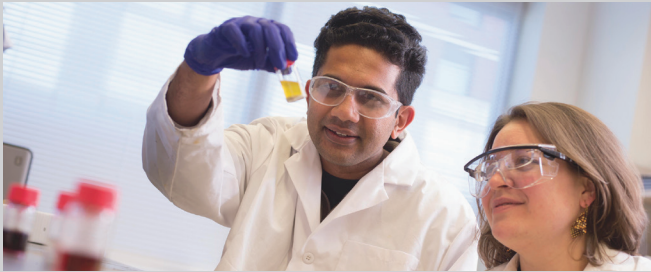
" I had an excellent time at the WPI Career Fair. I met a number of exceptional WPI students eager to discuss, in full-detail, their MQP work and other research activities. My company chooses to employ WPI students because WPI produces high caliber students who acclimate well into an industry environment. "

—Brooke Czapkowski, Pfizer

## WPI PROJECT-BASED LEARNING IMPROVES GRADUATES' ABILITIES TO:

- develop ideas and solve problems
- speak and write clearly and effectively
- gain knowledge to inform future plans
- manage projects
- excel as both team players and leaders
- use current technology
- think globally and be culturally aware

SOURCE: WPI Alumni Survey

ATTRIBUTES EMPLOYERS SEEK ON A CANDIDATES RESUME:

- Ability to work on a team (82.9%)
- Problem-solving skills (82.9%)
- Written communication to people inside and outside the organizaion (80.3%)
- Leadership (72.6%)
- Strong work etchic (68.4%)

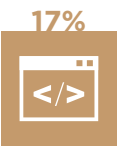*SOURCE: National Association of Colleges and Employers Job Outlook 2018*
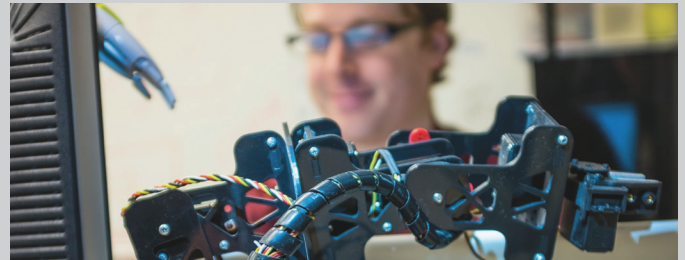
GREAT MINDS AT THE READY
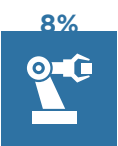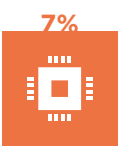
TOP MAJORS

Undergraduate Programs (Full-time)

18%	17%	10%	8%	7%
Mechanical Engineering	Computer Science	Biomedical Engineering	Robotics Engineering	Electrical & Computer Engineering

Graduate Programs
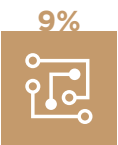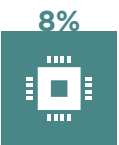
9%	9%	8%	8%	7%
Robotics Engineering	Data Science	Electrical & Computer Engineering	Mechanical Engineering	Computer Science

STUDENT BODY

6,894
Total Students

4,761
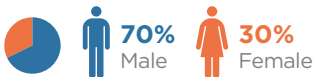Undergraduate Students

60% Male **40%** Female

2,133
Graduate Students

70% Male **30%** Female

For detailed information on the WPI student body, see **wpi.edu/+datadashboards**.

DID YOU KNOW?

LEADERSHIP DEVELOPMENT

WPI students are well-rounded leaders and explorers who partake in more than 200 clubs, organizations, and professional associations.

Representative Professional Associations

- **American Society for Mechanical Engineers**
- **Biomedical Engineering Society**
- **National Society of Black Engineers**
- **Society of Hispanic Professional Engineers**
- **Society of Women Engineers**
- **Women in Computer Science**

Students are also involved in honor societies, athletic teams, community service clubs, fraternities and sororities, music and theatre groups, and more.

MAJORS AND PROGRAMS

WPI offers 64 majors and programs in engineering, science, social science, humanities and arts, and business.

Pioneering Interdisciplinary Programs

- **Bioinformatics and Computational Biology**
- **Cybersecurity**
- **Data Science**
- **Interactive Media & Game Development**
- **Robotics Engineering**

For a full listing of departments and programs, see **wpi.edu/+programs**.

GREAT MINDS SOLVE PROBLEMS

Students solve real-world problems and perform meaningful research from their first days on campus. Undergraduates complete at least two substantive, term-long projects, focused on solving real-world problems. At the same time, graduate students are breaking ground on cutting-edge research in state-of-the-art campus laboratories and centers.

4 TIMES
GRADUATE STUDENT INNOVATIONS LICENSED AT **4 TIMES** THE RATE OF OTHER MAJOR RESEARCH UNIVERSITIES

50+
PROJECT CENTERS ON **SIX** CONTINENTS (AY18-19)

80%
OF THE 2019 GRADUATING CLASS COMPLETED AT LEAST ONE OFF-CAMPUS PROJECT 2018-19

INTERACTIVE QUALIFYING PROJECT (IQP)

Small teams of students from different majors address a specific problem for a sponsoring agency that connects science and technology with social issues and human need—oftentimes completed off campus at a global project center.

MAJOR QUALIFYING PROJECT (MQP)

Through this capstone research experience, students prove their ability to translate theory into practice in their major field. They define a problem, immerse themselves in understanding every aspect, and develop a novel solution. These projects are often sponsored by industry partners, including:

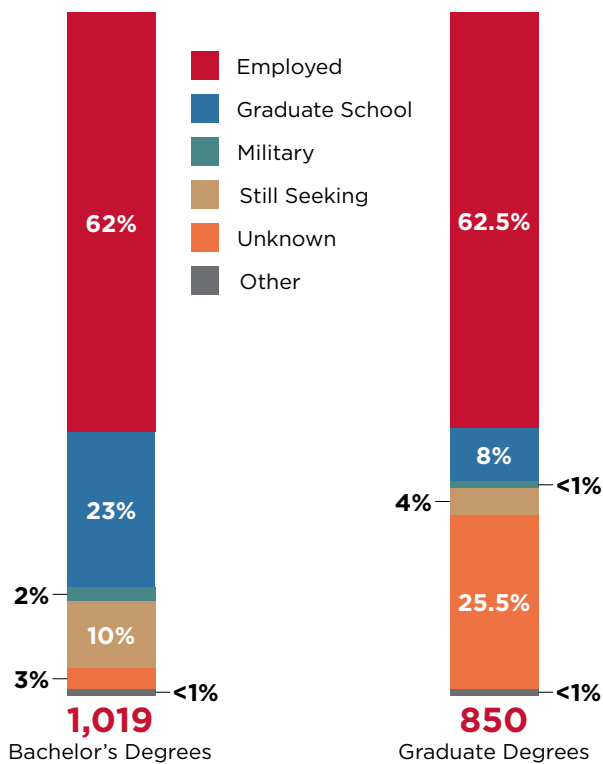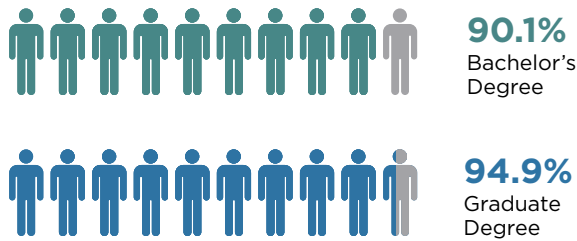|	
AbbVie, Inc	iRobot Corporation
Amadeus North America	Juniper Networks
Amazon Robotics	MIT Lincoln Laboratory
Barclays	NVIDIA
Boston Scientific	Pfizer
General Electric	UMass Medical

SUMMER INTERNSHIPS AND CO-OPS

Each year hundreds of WPI students participate in internships and co-op positions to explore career options, gain real-world experiences, and earn income. Employers relish the opportunity to work with new talent while identifying best fits for future full-time hires.

GREAT MINDS SUCCEED
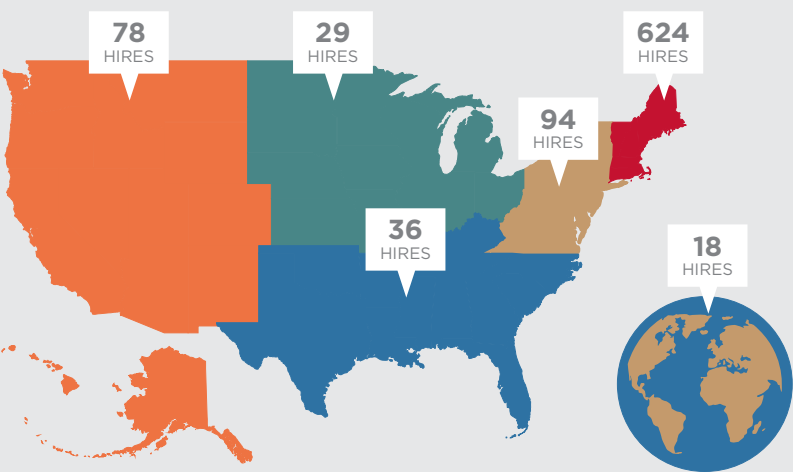
FIRST DESTINATIONS
CLASS OF 2019

Employed
Graduate School
Military
Still Seeking
Unknown
Other

Bachelor's Degrees bar:
- 62% Employed
- 23% Graduate School
- 2% Military
- 10% Still Seeking
- 3% Unknown
- <1% Other

1,019
Bachelor's Degrees

Graduate Degrees bar:
- 62.5% Employed
- 8% Graduate School
- <1% Military
- 4% Still Seeking
- 25.5% Unknown
- <1% Other

850
Graduate Degrees

POST GRADUATION SUCCESS*
CLASS OF 2019

90.1% Bachelor's Degree

94.9% Graduate Degree

For detailed statistics on the post-graduation outcomes of WPI students, visit **wpi.edu/+gradreport**.

*NOTE: Students obtaining employment, starting graduate school, or entering the military within six months of graduation (90% knowledge rate)

GLOBAL IMPACT
CLASS OF 2019

78 HIRES

29 HIRES

624 HIRES

94 HIRES

36 HIRES

18 HIRES

9 HIRES

49 HIRES

458 HIRES

76 HIRES

16 HIRES

"The west coast was appealing to me during my job search because of the wide range of opportunities available—from start-ups to the tech giants.

—Nathanael Thorn '12

WPI graduates are highly sought after by employers locally and around the globe. Many continue to make an impact and build local connections in New England, while others venture to communities throughout the world.
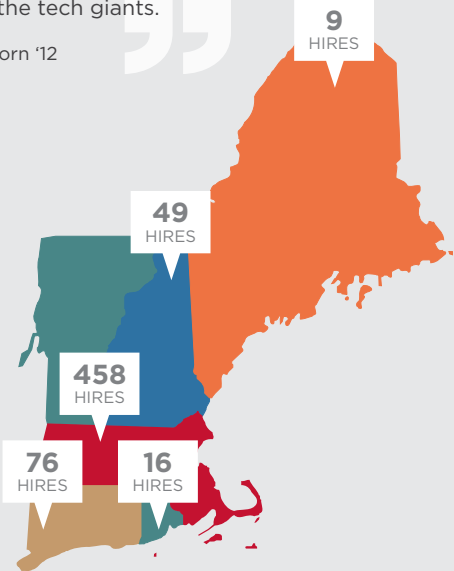
PARTNER WITH CAREER DEVELOPMENT CENTER

To find out more information on partnering with the WPI Career Development Center, including a complete list of the services we provide our employer partners, please visit us at **wpi.edu/+hireWPI** or contact a CDC staff member at **cdc@wpi.edu**. Some of the activities designed to help enhance your recruiting strategy include:

JOB POSTINGS

Recruit WPI talent for full-time, part-time, internship, co-op, and research (i.e. fellowships, REU's) opportunities by posting positions on our online job posting and recruitment platform.

CAREER FAIRS AND CAREER EXPOS

Participate in our annual Fall, Spring, and virtual Career Fairs or a career expo focused on a specific academic discipline.

HOST A CORPORATE INFORMATION SESSION OR INFORMATIONAL TABLE

Provide general information about your organization and the opportunities available by coming to campus to interact with a wide range of WPI talent.

ON-CAMPUS INTERVIEWS

On-campus interviewing utilizing the corporate interview suite at the Career Development Center is available throughout the academic year.

STUDENT RESUME DATABASE

View resumes of current students and recent alumni or search by major, class year, and keyword to find your best candidate pool.

EMPLOYER IN-RESIDENCE

Join the WPI CDC staff to assist us with student appointments, including resume critiques. A company will be featured as our employer in-residence for the day and meet with students 1:1.

NETWORKING EVENTS

Spend an evening interacting with students, alumni, and other professionals to exchange information, share advice, and develop contacts.

EDUCATIONAL PROGRAMS

Participate in a range of educational programs for students such as mock interviews or elevator pitch critiques.

CAREER RELATED PRESENTATIONS AND PANELS

Participate in a panel or present on topics such as Interviewing Skills, How to Work a Career Fair, Summer Internship Job Search and others.

COMPANY TOURS

Corporate tours are a great way to introduce students to your organization. The Career Development Center will work with companies, faculty and student organizations to arrange a tour.

CDC STAFF CONSULTATION VISITS

Meet with a CDC staff member on-campus, at WPI Seaport, or on-site to discuss a partnership strategy for your organization.

MARKETING

Advertise information about your organization through our social media platforms or on campus, such as our student newspaper *The Towers*.

SPONSOR AN ACADEMIC PROJECT

Work closely with WPI faculty and students on a Major Qualifying Project. To learn more, contact the Director of Corporate Relations at 508-831-5260.

OFFICE SPONSORSHIPS

For maximum visibility to WPI students, consider campus and office sponsorships. To learn more, contact the Director of Corporate Relations at 508-831-5260.

CORPORATE SPONSORED PROJECTS OVERVIEW

WPI's distinctive project-based approach transforms bright students into thoughtful, action-oriented problem solvers who hit the ground running. Sponsor a project to engage the fresh perspective and technical skills of a dedicated student team, guided by top-notch faculty, to tackle pressing business challenges. Partners from the private sector, governments, and non-profit organizations are integral partners in providing a real-world educational experience for WPI students.

Our record shows that research and ideas presented by WPI students translate into tangible solutions for project sponsors. You'll have access to WPI alumni and students who understand the fundamentals of their chosen fields, work effectively in teams, think creatively, and have the skills and confidence to dive right in.

FREQUENTLY ASKED QUESTIONS

What benefits do project sponsors receive?

Project sponsors gain solutions to problems through student work and faculty advising of the project. Additionally, sponsors gain a unique opportunity to screen future talent and build relationships with faculty advisors that benefit the organization over time. Faculty gain exposure to industry problems providing more valuable material for the curriculum and enabling a WPI education to become more effective. At the end of the project, the sponsoring organization receives a report (and sometimes analytics, designs/prototypes, etc) of the work completed.

What is required for a sponsored project to launch?

Sponsored projects require a project concept from the sponsoring organization and a commitment to mentor and support the students. In order to launch a project, WPI must have a faculty advisor and interested students willing to partner with the organization and complete the project. A formal agreement is required to establish the parameters of the partnership between the organization and WPI. An agreement and project pitch are typically discussed six to eight months in advance of a project beginning. Some projects become sequential and build on each other over time.

Does the sponsored project program have fees?

Yes, for each sponsored project there is a financial commitment. In providing support to the WPI Projects Program and the program objectives, sponsoring organizations provide a negotiated project fee. There may also be materials and travel related expenses depending on the project structure and needs. Sponsoring organizations interested in having a discussion about projects and fees may contact a member of the WPI Corporate Engagement team.

What type of project is appropriate to provide as a sponsor?

WPI strongly advocates for non-mission critical projects that will benefit an organization's work, but will not interfere with mission-critical work. By nature, projects are an academic exercise and students and faculty require flexibility to explore concepts and solve the problems presented. The initial project pitch from a company takes the form of an "abstract" with 1-2 paragraphs outlining the problem or project parameters.

The faculty and sponsor work together to scope the project and create benchmarks for the students with the work leading to a final presentation. Some sponsored projects are targeted for undergraduate experiences **(Major Qualifying Projects/ MQP's)** and some sponsored projects are targeted at graduate-level students **(Graduate Qualifying Projects / GQP's)**. The WPI Sponsored Project Administration Team can work with organizations to find the best level and best academic programs available to address the sponsored proposal.

I potentially have sensitive information included as part of the project, how does WPI manage this?

The WPI Corporate Engagement Team is familiar with these concerns. We work with organizations to understand these sensitivities prior to the projects moving forward. When the project details are agreed to, WPI's General Council's office works with each sponsoring organization to prepare the necessary agreement and forms for each project. WPI's agreement contains provisions that address confidentiality, intellectual property and the publication/presentation of the project work.

Who can I contact about getting involved with sponsored projects?

If you are interested in a discussion regarding sponsored projects, please contact David Ortendahl, Executive Director of Corporate Relations via email (**dbo@wpi.edu** / 508-831-5831).

2019 ENROLLMENT AND SALARY STATS

UNDERGRADUATE

FULL-TIME DEGREE SEEKING UNDERGRADUATE ENROLLMENT, FALL 2019

	ENROLLMENT	CLASS OF 2019*	2019 AVG. STARTING SALARY**
Actuarial Mathematics	50	16	$70,000
Aerospace Engineering	262	63	$70,535
Applied / Engineering Physics	8	1	n/a
Architectural Engineering	67	15	$66,333
Biochemistry	78	23	$45,198
Bioinformatics & Computational Biology	26	10	$64,100
Biology / Biotechnology	153	42	$49,891
Biomedical Engineering	473	128	$63,985
Business / Management	23	5	n/a
Chemical Engineering	294	97	$69,632
Chemistry	36	6	n/a
Civil Engineering	169	55	$64,047
Computer Science	789	237	$88,750
Economic Science	3	2	n/a
Electrical & Computer Engineering	334	112	$76,935
Environmental & Sustainability Studies	7	2	n/a
Environmental Engineering	45	14	$61,813
Humanities & Arts	0	0	n/a
Industrial Engineering	90	40	$74,182
Interactive Media & Game Development	94	32	$72,350
Interdisciplinary	3	0	n/a
Management Engineering	67	26	$69,582
Management Information Systems	23	11	$68,667
Mathematical Sciences	85	25	$80,750
Mechanical Engineering	814	280	$68,229
Physics	66	16	$81,907
Professional Writing	3	2	$65,506
Psychological Science	9	5	n/a
Robotics Engineering	367	129	$77,849
Society, Technology, & Policy	4	1	n/a
To Be Declared	136	1	n/a
TOTAL	**4,578**	**1,396**	**$72,072**

Students with a double major counted in both disciplines
*** n/a indicates insufficient data to calculate average salary*

Career Development Center
Project Center
508-831-5260 | cdc@wpi.edu
wpi.edu/+hireWPI

WPI | Career Development Center

2019 ENROLLMENT AND SALARY STATS

GRADUATE

FULL-TIME AND PART-TIME DEGREE SEEKING GRADUATE ENROLLMENT, FALL 2019

	MASTERS		PHD
	TOTAL	2019 AVG. STARTING SALARY*	TOTAL
Aerospace Engineering	28	$81,833	8
Applied Mathematics	5	n/a	-
Applied Statistics	19	n/a	-
Biochemistry	3	n/a	8
Bioinformatics & Computational Biology	6	n/a	9
Biology / Biotechnology	52	n/a	17
Biomedical Engineering	27	$71,490	26
Bioscience Administration	27	n/a	-
Business Administration	-	n/a	20
Chemical Engineering	13	n/a	21
Chemistry	3	n/a	11
Civil Engineering	9	$76,769	17
Computer Science	83	$97,731	52
Construction Project Management	12	n/a	-
Data Science	129	$88,561	46
Electrical & Computer Engineering	127	$90,600	39
Environmental Engineering	16	$72,335	-
Financial Mathematics	12	n/a	-
Fire Protection Engineering	48	$77,462	7
Information Technology	57	$79,400	-
Innovation with UX	12	n/a	-
Interactive Media & Game Development	32	n/a	-
Interdisciplinary	3	n/a	4
Joint PhD (UMMS/WPI)	-	n/a	1
Learning Sciences & Technology	2	n/a	10
Management	13	n/a	-
Manufacturing Engineering	16	n/a	7
Marketing & Innovation	22	$51,613	-
Master of Business Administration (MBA)	119	$90,250	-
Materials Process Engineering	7	n/a	-
Materials Science & Engineering	37	$71,667	38
Mathematical Sciences	-	n/a	26
Mathematics for Educators	30	n/a	-
Mechanical Engineering	125	$80,820	32
Operations, Analytics & Management	25	$61,507	-
Physics	5	n/a	19
Physics for Educators	2	n/a	-
Power Systems Engineering	55	$103,368	-
Power Systems Management	21	n/a	-
Robotics Engineering	142	$100,101	40
Social Science	-	n/a	5
Statistics	-	n/a	3
Supply Chain Management	12	n/a	-
System Dynamics	4	n/a	2
Systems Engineering	95	$108,857	6
TOTAL	**1,455**	**84,957**	**474**

* n/a indicates insufficient data to calculate average salary

The average starting salary for students graduating with a Ph.D. degree in 2019 was **$101,769**.

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INTERNSHIP AND CO-OP INFORMATION

UNDERGRADUATE
The average hourly wage for undergraduate summer interns in 2019 was **$20.90**

MAJOR	AVG. HOURLY WAGE
Actuarial Mathematics	$20.73
Aerospace Engineering	$20.02
Architectural Engineering	$17.62
Biochemistry	$18.67
Bioinformatics & Comp Bio	$22.10
Biology & Biotechnology	$17.04
Biomedical Engineering	$17.27
Chemical Engineering	$20.50
Civil Engineering	$16.90
Computer Science	$25.39
Electrical & Computer Engineering	$22.01
Environmental Engineering	$19.96
Industrial Engineering	$23.80
Management Engineering	$19.96
Mathematical Sciences	$18.67
Mechanical Engineering	$18.62
Management Information Systems	$20.50
Robotics Engineering	$22.20

GRADUATE
The average hourly wage for graduate summer interns in 2019 was **$21.10** for masters and Ph.D.

MAJOR	AVG. HOURLY WAGE
Chemical Engineering**	$19.00
Civil Engineering**	$16.33
Computer Science*	$32.07
Data Science	$34.67
Electrical & Computer Engineering**	$21.02
Fire Protection Engineering	$17.84
Information Technology*	$25.17
Robotics Engineering*	$24.24

*2016 Data, ** 2015 Data*

FREQUENTLY ASKED QUESTIONS

What is a co-op program?

Co-op (Cooperative Education) is an undergraduate, non-credit, paid, work experience that complements and reinforces classroom learning while allowing students to maintain full time student status. Co-op increases awareness of the day-to-day operations of industry and exposes students to professional standards and the methods used to accomplish objectives in a business environment.

How does the co-op program at Worcester Polytechnic Institute (WPI) work?

WPI defines co-op as a 4-8 month full-time and paid working experience, which typically runs between January-August or May-December. Students pursue these opportunities on their own and the application process works similarly to that of a full-time or summer internship position.

Who is eligible to participate in co-op?

Undergraduate students across all disciplines with classes to come back to after completing their co-op are eligible to participate, as are graduate students in some programs.

Additionally, the co-op program is open to both domestic and international students.

What is the average salary a student receives for a co-op experience?

The average salary for a co-op position varies depending on discipline and length. For a more detailed breakout of co-op/internship wages by major, please visit **wpi.edu/+gradreport**.

What is the best way to advertise the opportunity and when is the best time to recruit for these positions?

The best place to advertise your opportunities is on WPI's online job board system, Handshake. It is used by WPI students and alumni to find full-time, part-time, internship, and co-op opportunities. To post these positions, go to **wpi.joinhandshake.com**. Once you register for a Handshake account, to to the jobs tab and select "add new" to upload a position. We see companies recruiting for co-op positions anywhere from 1-6 months in advance and recommend starting as early as possible.

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