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# **About WPI**

# **WPI Mission and Values**

#### WPI's Mission

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

### **Our Values**

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

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

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

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

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

(Adopted by the Board of Trustees, October 29, 2021)

# The Two Towers Tradition: The Second Century

WPI, the nation's third oldest private technological university, was established in 1865 by the New England industrialists John Boynton, Ichabod Washburn, and their associates. Boynton and Washburn endowed the first two buildings on campus, as academic classrooms and practical shops. Boynton Hall and the Washburn Shops — renovated today into state-of-the-art facilities — still preserve their distinctive original towers. These "Two Towers" represent WPI's continued commitment to academic excellence through real-life project experience that synthesizes classroom learning.

The "Two Towers" tradition of academic achievement and practical application is reflected in WPI's motto, "Lehr und Kunst" or "Theory and Practice."

WPI has awarded graduate degrees since 1898, adding new programs regularly in response to the developing needs of the professional world. WPI is among the top 50 science colleges in the nation in terms of the percentage of undergraduates who receive doctorates. Presently, WPI offers the master's degree in 31 disciplines and the doctorate in 15.

The current student body of over 4,000 men and women includes about 1,100 full- and part-time graduate students. Currently, students attend WPI from almost every state and over 70 foreign nations.



# WPI's Commitment to Pluralism

Pluralism, as a social condition, means that several distinct ethnic, religious, and racial communities live side by side, have equitable access to resources, are willing to affirm each other's dignity, are ready to benefit from each other's experiences, and are quick to acknowledge each other's contributions to the common welfare. Recognizing the importance of pluralism to creativity, innovation, and excellence, WPI is dedicated to creating an atmosphere that encourages diversity in all aspects of campus life–from academics, to residence hall living, to social interactions among students, faculty, and staff. The Institute recognizes the special obligation of promoting a multicultural community based on mutual respect and tolerance. This commitment is part of WPI's institutional plan for encouraging pluralism and increasing diversity, a plan that proclaims the importance of having students understand and appreciate other cultures, and prepares them fully to pursue rewarding careers in an increasingly global economy. (Concepts endorsed by the WPI Faculty on April 21, 1994)



# **Undergraduate Education**

# A Statement of Values for Undergraduate Education at WPI

- 1. WPI's programs shall emphasize fundamental concepts, knowledge, and skill, and ensure that students are able to apply them within the context of their major disciplines.
- 2. WPI's programs shall emphasize the development of students as effective thinkers and communicators, able to use evidence to present their ideas with logic, clarity, and persuasion.
- 3. Programmatic breadth in general, and balance between technical and humanistic components in particular, are the hallmarks of a WPI undergraduate education. In addition to educating students in their major discipline, WPI's programs shall provide students with a broad preparation for fulfilling lives as responsible professionals and informed citizens.
- 4. Grounded in project and course experiences, a WPI education shall provide a firm foundation for life-long learning in a variety of fields. WPI programs shall emphasize inquiry-based learning and open-ended problem solving. Students shall bear a considerable responsibility for learning outside of the classroom.
- 5. WPI's programs shall be sufficiently flexible so as to allow students significant choice in and responsibility for planning their courses of study. Faculty, via the central teaching tasks of project and academic advising, shall ensure that student learning experiences encourage critical reflection, decision making, and personal growth.
- 6. WPI's programs shall emphasize the scientific, technical, societal, and humanistic contexts in which knowledge is applied and constructed. Education activities shall challenge students to make connections between disciplines, to consider multiple viewpoints, and to appreciate the consequences of their actions. The curriculum shall prominently feature integrative and interdisciplinary activities.
- 7. WPI's learning environment and educational activities shall balance personal responsibility and individual accountability with cooperation, collaboration and mutual respect. Members of the community shall be encouraged to value academic integrity, and to become conscious of the value that such integrity confers to themselves and to the community.
- 8. WPI shall be committed to assessment and improvement of student learning.

# **WPI Undergraduate Learning Outcomes**

Graduates of WPI will:

- 1. have a base of knowledge in mathematics, science, and humanistic studies.
- 2. have mastered fundamental concepts and methods in their principal areas of study.
- 3. understand and employ current technological tools.
- 4. be effective in oral, written and visual communication.
- 5. function effectively both individually and on teams.
- 6. be able to identify, analyze, and solve problems creatively through sustained critical investigation.
- 7. be able to make connections between disciplines and to integrate information from multiple sources.
- 8. 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.
- 9. be aware of personal, societal, and professional ethical standards.
- 10. have the skills, diligence, and commitment to excellence needed to engage in lifelong learning.

# The WPI Plan

In 1970 WPI adopted a revolutionary new undergraduate program known as the WPI Plan. The Plan replaced the traditional rigidly-prescribed curriculum — typical of conventional engineering and science education — with a flexible, exciting, and academically challenging program aimed at helping students to learn how to learn. The Plan continues the "Two Tower" tradition by synthesizing classroom experience in projects that solve realworld problems. The WPI project program prepares graduates for their future professional lives by helping

them learn how to identify, investigate and report on open-ended problems. Alumni indicate that project experiences also prepare them uniquely well for managing team efforts, and for communicating both in oral and written forms according to professional standards.

All WPI students complete two major projects in addition to requirements in general education and in their major fields. The Major Qualifying Project (or MQP) challenges students to solve research and design problems typical of those encountered in their professional discipline. The Interactive Qualifying Project (or IQP) presents an issue at the intersection of science, technology, and culture, and emphasizes the need to learn about how technology affects societal values and structures. Students also achieve intellectual breadth through degree requirements in the social sciences and humanities and arts. In addition, students achieve some depth within the Humanities and Arts by completing an Inquiry Seminar or Practicum on a theme emerging from a self-selected series of courses. Taken together, these activities emphasize that professionals must learn not only to create technology, but also to assess and manage the social and human consequences of that technology.

# About the Catalog

# **Currency of Information**

The information contained in this Undergraduate Catalog is not a complete statement of all the policies, practices, rules and regulations of Worcester Polytechnic Institute. Any statement made in this publication is for current informational purposes only and is subject to change by the governing body of WPI or its duly authorized representatives. Certain policies, rules and regulations are not published in this publication but are promulgated directly by the appropriate department. Members of the WPI community are expected to abide by the current policies, practices, rules and regulations of the college, even though they may not be contained in this publication or may not be consistent with the information contained in this publication, whether due to a properly authorized change or to a printing error.

Changes, deletions, and additions authorized by the governing body of WPI, after the printing of this catalog, are posted on WPI's web page at <a href="www.wpi.edu/">www.wpi.edu/</a> as a supplement to the undergraduate catalog, and includes the effective date of the action.

# **About Course Descriptions**

### **Course Categories**

For purposes of planning programs of study, courses at WPI are divided into three categories

#### Category I (Cat. I)

These courses cover core material of interest to large numbers of students. Category I courses are offered at least once a year.

#### Category II (Cat. II)

Category II courses are offered at least every other year

#### Category III (Cat. III)

Category III courses are offered at the discretion of the department/program.

# Background

#### Recommended

The course will build on material in the recommended course. Instructors can assume that the student is knowledgeable of the material from the recommended course or from other experiences.

#### Suggested

The material from this course would be helpful to the student, but it is not assumed background.

#### WRITING-INTENSIVE (WI) COURSE SECTIONS

Some sections of WPI courses may be labeled as "WI" in the course schedules. These sections will:

- Assign writing to teach course content and disciplinary forms of communication and reasoning;
- Provide explicit instruction in and feedback on students' written work: and
- · Specify and require standards for ethical writing practices.

### Catalog and Schedule

The catalog and course schedule can be found online at <a href="https://www.wpi.edu/academics/calendar-catalogs">https://www.wpi.edu/academics/calendar-catalogs</a> and <a href="https://courselistings.wpi.edu">https://courselistings.wpi.edu</a>.

### **Course Numbering**

Each course at WPI is designated by a prefix identifying the subject area followed by a four digit number. The first digit is coded as follows:

- 1 Courses for which first-year students will receive priority in registration. Upper class students may register on a space-available basis.
- 2 Basic level courses.
- 3 Advanced level undergraduate courses for which no graduate credit is given. (This restriction may be waived at the discretion of the degree department.)
- 4 Advanced level undergraduate courses for which graduate credit may also be given.
- 5 Graduate courses.

The last three digits may be used by the departments to indicate subject areas. Many graduate courses are also available to undergraduates.

#### 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.

# Accreditation

# Accreditation

Worcester Polytechnic Institute is accredited by the New England Commission of Higher Education (formerly the Commission on Institutions of Higher Education of the New England Association of Schools and Colleges, Inc.).

Accreditation of an institution of higher education by the Commission indicates that it meets or exceeds criteria for the assessment of institutional quality periodically applied though a peer review process. An accredited college or university is one which has available the necessary resources to achieve its stated purposes through appropriate educational programs, is substantially doing so, and gives reasonable evidence that it will continue to do so in the foreseeable future. Institutional integrity is also addressed through accreditation.

Accreditation by the Commission is not partial but applies to the institution as a whole. As such, it is not a guarantee of every course or program offered, or the competence of individual graduates. Rather, it provides reasonable assurance about the quality of opportunities available to students who attend the institution.

Inquiries regarding the accreditation status by the Commission should be directed to the administrative staff of the institution (gr-Accreditation@wpi.edu).

The aerospace engineering, architectural engineering, biomedical engineering, chemical engineering, civil engineering, electrical and computer engineering, environmental engineering, industrial engineering, and mechanical engineering programs are accredited by the Engineering Accreditation Commission of ABET, <a href="http://www.abet.org">http://www.abet.org</a>.

The Chemistry and Biochemistry Department and its program at WPI are approved by the American Chemical Society for a major in chemistry or biochemistry. Those chemistry majors who complete a program satisfying the guidelines established by the American Chemical Society are certified to that organization as having received an undergraduate professional education in chemistry or biochemistry.

The undergraduate and graduate business offerings in The Business School are accredited by AACSB International, the Association to Advance Collegiate Schools of Business. AACSB International is a not-for-profit organization consisting of more than 900 educational organizations and corporations. Its mission is excellence in management education in colleges and universities. Headquartered in Tampa, Florida, AACSB International is the premier accrediting agency and service organization for business schools.

# **Professionally Accredited Programs**

WPI is accredited as an institution by the New England Commission of Higher Education. In addition, the aerospace engineering, architectural engineering, biomedical engineering, chemical engineering, civil engineering, electrical and computer engineering, environmental engineering, industrial engineering, mechanical engineering, and robotics engineering programs are accredited by the Engineering Accreditation Commission of ABET, <a href="http://www.abet.org">http://www.abet.org</a>. The Chemistry and Biochemistry Department and its program are approved by the American Chemical Society and the American Society for Biochemistry and Molecular Biology. The bachelor's and master's degree programs offered by The Business School are accredited by AACSB International — The Association to Advance Collegiate Schools of Business.

# **Policies & Practices**

# **Notice of Nondiscriminatory Policy as to Students**

It is the policy of Worcester Polytechnic Institute that each qualified individual, regardless of race, color, sex, religion, sexual orientation, national origin, age as defined by law, or handicap, shall have equal opportunity in education, employment or services of Worcester Polytechnic Institute. It is the policy of WPI to follow U.S. federal government eligibility guidelines in the administration of its institutional financial aid program.

# **Student Responsibilities for Ethical and Professional Conduct**

WPI expects all its students to demonstrate the highest sense of honor in respecting academic and professional traditions such as acknowledging the borrowing or use of other people's ideas. Willful violations (like plagiarism) of such academic traditions or of legal restrictions (like those regarding copyright) will be considered violations of the "Campus Code" as described in the Student Planner.

WPI education is strongly committed to project-based learning, to providing students with access to state-of-the-art technology, and to working with professionals, on and off campus. Therefore, when students are exposed to proprietarial and/or confidential information, they must accept responsibilities appropriate to their preparation for life-long careers in which codes of ethics govern professional conduct.

Facilities such as the off-campus projects, employment sites, and on-campus laboratories permit students to gain experience with techniques at the forefront of industrial and research development. With this access

comes the added responsibility of safeguarding students of any agreements they sign regarding conditions or restrictions for access to certain equipment or information will also be considered a violation of the "Student Code of Conduct".

Record of any penalties assigned by the WPI Campus Judicial System which result from violation of standards of ethical conduct will become a permanent part of that student's disciplinary record.

### **Student Absence Due to Religious Beliefs**

Section 2B, Chapter 151C of the General Laws of the Commonwealth of Massachusetts: "Any student in an educational or vocational training institution, other than a religious or denominational educational or vocational training institution, who is unable, because of his/her religious beliefs, to attend classes or to participate in any examination, study, or work requirement on a particular day shall be excused from any such examination or study or work requirement, and shall be provided with an opportunity to make up such examination, study, or work requirement which he/she may have missed because of such absence on any particular day; provided, however, that such makeup examination or work shall not create an unreasonable burden upon such school. No fees or any kind shall be charged by the institution for making available to the said student such opportunity. No adverse or prejudicial effects shall result to any students because of his/her availing himself/herself of the provisions of this section."

### Policy for Institutional Charges and Refunds for Students Called to Military Action

WPI recognizes the obligations of our students who are called to active duty by the U.S. Military. To support these students WPI has established this policy to facilitate their transition from, and back to active student status.

Such students shall receive 100% refund for the uncompleted term(s) of the semester at the date of the notice. If such student has a loan obligation to WPI they will be granted an in-school deferment status during the period of active duty service, not to exceed a total of three years.

To initiate the process to be classified "On leave for military service" the student must indicate, in writing, that he/she is requesting school deferment status while being called to active duty. A copy of the official call to active duty notice from the military must be included with this request and be submitted to the Registrar's Office.

# **WPI Directions**

# **Driving to WPI**

#### From the East:

Take Mass. Turnpike (I-90) to Exit 11A (I-495). Proceed north to I-290, then west into Worcester. Take Exit 18, turn right at end of ramp, then an immediate right before next traffic light. At next light, proceed straight through, bearing to the right on Salisbury St. At the WPI sign, turn left onto Boynton St., then right onto Institute Rd., then right onto West St. Visitor parking is on the left after footbridge.

#### From the North:

Take I-495 south to I-290. Follow directions as from east.

#### From the South and West:

Take Mass. Turnpike (I-90) to Exit 10 (Auburn). Proceed east on I-290 into Worcester. Take Exit 17, turn left at end of ramp, follow Rte. 9 west through Lincoln Sq., straight onto Highland St., then right at light onto West St. and through first intersection. Visitor parking is on the left after footbridge.

# Admissions, Expenses, Financial Aid, and Housing

### Admission to WPI

WPI recruits, selects, and enrolls first year and transfer students who are the best match for our dynamic and distinctive educational offerings. Our admissions professionals review all students holistically taking into account each student's qualitative and quantitative materials within their specific context.

Selection for admission to WPI is based upon many factors including, but not limited to, academic preparation, grades, trends in academic performance, the personal essay, recommendations, co-curricular and extracurricular activities. Candidates are allowed to submit supplemental material that they believe is relevant to the admissions committee's evaluation of their application.

### **Visiting**

WPI offers in-person and virtual opportunities for students to explore campus, and engage with students and faculty including:

Daily information sessions & tours (weekdays & select Saturdays) Virtual online campus tour Fall Open Houses (for prospective & applying students) Accepted Student Days (for accepted students)

Visit <u>www.wpi.edu/+visit</u> for more information or to register for visit or event.

#### **Admissions Office Hours**

The admissions office is open Monday – Friday 8:30am–5:00pm throughout the academic year. Summer hours (mid-May through the end of August) are 8:00am–4:00pm.

#### **Contact Information**

Phone: (508) 831-5286 Email: admissions@wpi.edu

### **Admissions Requirements**

The basic academic requirements for first-time first-year applicants include:

- Four years of English
- Four years of math (including pre-calculus)
- · Two years of lab science
- Other application requirements for the evaluation process include:
  - Official high school transcript
  - Recommendations from a teacher and a School or College counselor
  - A personal essay
  - Early Decision Agreement (for candidates who select the Early Decision application plan)

WPI is a test blind university. SAT and ACT scores will not be considered in the admission process.

International students whose first language is not English are required to submit TOEFL, IELTS or Duolingo scores.

## **Applying to WPI**

WPI is a member of the Common Application, and the Common Application is the exclusive method by which first year candidates apply to WPI. All first year candidates must complete their application no later than February 1 for consideration.

#### Application deadlines\*:

Early Action: November 1
Early Decision I: November 1
Early Action Round II: January 5
Early Decision II: January 5
Regular Decision: February 1

#### Notification deadlines\*:

Early Action: late January
Early Decision I: mid December
Early Decision II: mid February
Early Action Round II: late February
Regular Decision: late March

\*Dates are subject to change. Visit <u>www.wpi.edu/admissions/undergraduate</u> for the most up-to-date information regarding deadline and notification dates.

#### **Financial Aid**

Students applying for financial aid must check the appropriate box on the application for admission to be considered for financial aid. Financial aid candidates should submit the College Scholarship Service (CSS) Profile Application and the Free Application for Federal Student Aid (FAFSA), which are available online at <a href="https://www.cssprofile.org">www.cssprofile.org</a> and <a href="https://www.studentaid.gov">www.studentaid.gov</a>. For all admission applicants, these forms should reach the WPI Office of Student Aid & Financial Literacy by the same deadline dates listed above for Admission applications. Financial Aid is available for U.S. citizens and/or permanent residents of the U.S. A limited amount of needbased financial aid is available for International Students. In order to apply for need-based assistance, international students must complete the international CSS Profile online at <a href="https://www.cssprofile.org">www.cssprofile.org</a>.

#### **Notification**

All candidates for admission will receive an online acknowledgment of the receipt of their application. Admissions decisions are available exclusively through WPI's online portal and are not mailed to applicants. Decisions will be available to all applicants no later than April 1.

#### **Decision to Matriculate**

Accepted first year candidates must inform the college by 11:59 PM on May 1 of their decision to matriculate and submitting a \$500 non-refundable tuition deposit. Students admitted under an Early Decision plan will have 30 days to submit their \$500 non-refundable enrollment tuition deposit. Any deposits mailed in must be postmarked on or before May 1. WPI reserves the right to return deposits received after this date.

#### Admissions Terms and Conditions

Please note that WPI's offer of admission and your subsequent matriculation at WPI is contingent upon the following terms and conditions.

Matriculation for the purposes of these terms and conditions is defined as the earlier of a student's arrival on campus or WPI's first day of classes for the term/semester.

WPI reserves the right to revoke your offer of admission any time prior to your matriculation at WPI if:

- · You do not graduate or do not receive a diploma at the end of the academic year.
- You have misrepresented any part of your admissions application, including but not limited to any behavioral or disciplinary issues and academic dishonesty.
- · You experience a drop in grade performance during the remainder of the academic year.
- Information that comes to the attention of WPI that is deemed unacceptable by WPI.

#### **Transfer Students**

WPI welcomes applications from full- and part-time transfer students from accredited two- and four-year institutions. WPI looks for candidates with demonstrated strength in math, science, and computer or engineering coursework; transfer admission to WPI is highly competitive. WPI's minimum academic requirement for transfer admissions consideration is that candidates be enrolled in or recently completed precalculus and one college-level laboratory sciences at the time of submitting an application. However, please note it is the preference of the WPI admissions committee that the candidate complete calculus 1 and two college-level laboratory sciences at the time of submitting an application. While not required, successful transfer candidates have typically completed at least one full year of college (post high school graduation) by the time of intended enrollment, and have earned grades of Bs or better. Transfer candidates must be in good academic and disciplinary standing at all institutions in which they have been an enrolled student.

Applicants should be aware of the accelerated pace of WPI's academic calendar, which consists of four, seven-week terms instead of two semesters. A full-time course load is defined as three courses per term with classes meeting four or five days per week, while a part-time course load may not exceed three total courses per semester. A minimum of 8 units of work (or 72 credits) is the residency requirement for all students. Additionally, candidates should be aware that undergraduate classes are only offered during the day.

#### **Transfer Admissions & Financial Aid**

The WPI Transfer Application is available online at <a href="www.wpi.edu/+transfer">www.wpi.edu/+transfer</a>. The fall entrance application deadline is May 15 with the review process typically beginning in late March each year. The spring entrance application deadline is November 15 with the review process beginning as soon as possible in October. Students are notified of an admissions decision on a rolling basis. Accepted transfer students for the spring semester will be required to enroll by December 15. Accepted transfer students for the fall semester will be required to enroll by June 30.

In addition to submitting the WPI Transfer Application, transfer applicants should provide their official college transcripts for each post-secondary institution attended, a final official high school transcript with proof of graduation, and one letter of recommendation. Students offered admission and enrolling should be aware that the WPI Conduct Record Release Form will be required prior to matriculation from any prior colleges/universities attended. International transfer applicants must also submit English translations and course-by-course evaluations from a current NACES member for all non-US transcripts, proof of English Language Proficiency, and Proof of Financial Ability (if accepted to WPI) demonstrating funding for the total cost of education and living expenses (an I-20 will not be issued without this form).

Additional detailed information about the transfer application process as well as a link to the WPI Transfer Application can be found at <a href="https://www.wpi.edu/\*transfer">www.wpi.edu/\*transfer</a>.

Transfer students may be eligible for need-based scholarship and loan funds from a variety of sources including WPI, the federal government, and some state government agencies. Need-based financial assistance is not available for part-time candidates or for international (non-U.S. citizen) transfer students. More information about the need-based aid process as well as transfer scholarship opportunities are available at <a href="https://www.wpi.edu/+finaid">www.wpi.edu/+finaid</a>.

# **Transfer Agreements & Transfer Credit**

WPI currently holds formal articulation agreements with specified programs of studies at Quinsigamond Community College (QCC) in Worcester, MA. However, WPI will grant appropriate transfer credit from any accredited two-year or four-year institution.

WPI will offer a transfer credit evaluation post admission to the university for transfer students, and after the May 1 enrollment deadline for incoming first year students (typically beginning in mid-May). Admitted transfer students and enrolled first year students should follow the WPI transfer credit guidelines, policy and procedure available at <a href="www.wpi.edu/+transfercredit">www.wpi.edu/+transfercredit</a>. This site also includes a list of transfer equivalencies to date based on previously requested course reviews. The Transfer Admissions team coordinates the process with WPI faculty who evaluate the coursework to determine credit eligibility. Each academic department at WPI reviews courses under their program, and provides a decision to the Transfer Admissions team. Admissions communicates any credit review updates to the student, the WPI Registrar's Office and to WPI Academic Advising. In general, courses that are the academic equivalent of a WPI course with a grade of a C or better will be considered for

transfer credit, with many academic departments requiring a B or better. College-level and lab-based chemistry and biology, calculus, calculus-based physics with lab, engineering science, and many social science and humanities and arts courses are typically considered eligible for transfer credit. For most coursework to be eligible for a transfer credit review, the coursework must be completed on a college campus taught by college instructors. Some online coursework may be eligible and is determined as part of the official course review process by evaluators. Early college, early entrance programs, or college coursework provided in partnership with a college or university but offered at the high school taught by high school teachers are not eligible for credit at WPI, with the exception of Project Lead The Way (PLTW). Online coursework is also typically not eligible, but is reviewed on a case-by-case basis. Additional courses that are not transferable include precalculus, non-calculus based physics or engineering science, and computer courses in BASIC.

#### **Humanities & Arts Requirement for Transfer Students**

As part of the WPI Plan, all WPI students must complete the Humanities and Arts Requirement. As such, all transfer students should review their humanities and arts coursework accepted for transfer credit at WPI and plan with the Humanities and Arts Department's coordinator for transfer students to determine next steps towards the completion of the HUA Requirement. All transfer students entering WPI with fewer than two units of humanities and arts credit must complete thematically related work in humanities and arts. This will include an inquiry seminar or practicum to the extent that the overall humanities and arts credit totals two units. The HUA Requirement is considered fulfilled for transfer students who have completed the equivalent of two units of humanities and arts work prior to their matriculation at WPI. A Completion of Degree Requirement form (or CDR) must be submitted once the HUA Requirement has been satisfied. This form can obtained through the WPI Registrar's Office, and will be completed by the Humanities and Arts Department coordinator for transfer students. For those transfer students who have satisfied the HUA Requirement based on work completed at their previous institution(s) and who submit the approved CDR form to the WPI Registrar's Office will have this information posted to their student account. This process normally takes place prior to or during the first term of full-time enrollment at WPI.

#### **International Students**

The presence of international students serves as a means of strengthening the knowledge and understanding of foreign countries and cultures and is highly encouraged and supported at WPI. Programs and support services for international students and exchange programs are given high priority. As an institution of higher learning, WPI is dedicated to international education.

International (non-immigrant) applicants must provide proof of English language proficiency. English language proficiency may be demonstrated by the official results of:

- TOEFL (Test of English as a Second Language)- recommended score of 90 with no sub-score below 20
- IELTS (International English Language Testing System) recommended score of 7.0 or higher with no band below 6.5
- Duolingo recommended score of 125
- · Pearson's Test of English recommended score of 61

# Financial Aid

WPI is committed to assisting students and their parents in finding ways to finance the cost of a WPI education through financial aid assistance and private financing options. Central to WPI's program is the concept of financial need. This concept is based on the assumption that parents and students together accept the responsibility for educational expenses to the extent they are able. Over 97% of full-time WPI undergraduates are receiving financial help from federal, state, and/or institutional resources (includes need and merit based aid). A combination of grants, loans and/or work study assistance from federal, state and WPI funding are allocated to students who demonstrate financial need. The proportion of grant, or "gift" assistance, versus loan and work, may be determined by the college on the following criteria: the magnitude of the financial need, the student's academic performance, and the availability of funds.

### Application Procedures – Prospective Students

Students are required to file the Free Application for Federal Student Aid (FAFSA) and the CSS (College Scholarship Service) Profile Application. In the case of separation or divorce, the student's noncustodial parent must also complete a CSS Profile. Students list WPI's school code under the section on each form where it designates which schools are to receive the form. In addition, students whose financial aid applications are selected for verification\* are required to submit additional documentation for themselves and their parents, if considered dependent. Generally, tax filers are required to either successfully utilize the IRS's Data Retrieval Tool on the FAFSA or submit a copy of their tax return transcript. Non tax filers are required to submit a copy of their W-2 statements as well as a non-filer statement from the IRS.

\*Please visit www.wpi.edu/+faverification for more information on the verification process.

#### EARLY ACTION AND EARLY DECISION APPLICATION FOR FINANCIAL AID

Applicants must indicate on their admission application they are applying for financial aid. For those students applying for early action admission, the CSS Profile Application (and CSS Profile from Noncustodial parent, if applicable) can be submitted as early as October 1st, but no later than the posted Admission application deadlines. The FAFSA and the CSS Profile Application are available online at www.cssprofile.org.

Successful candidates for early action admission will be notified of financial aid eligibility on a rolling basis. Applicants will then have from the date of their aid eligibility letter until the candidates' common reply date, May 1st, to either accept or decline the aid offered.

To learn more about early decision, please visit this webpage.

The Early Decision I deadline is **November 1**, with a notification date of **December 15**.

The Early Decision II deadline is January 15, with a notification date of February 15.

Early Decision is ideal for students who know that WPI is their first choice, and, after careful research and consideration of all factors (residential, academic, social, and financial), are prepared to enroll at WPI if accepted.

#### REGULAR DECISION APPLICATION FOR FINANCIAL AID

Applicants must indicate on their admission application they are applying for financial aid. Successful candidates for admission will be notified of a financial aid decision in April if a complete financial aid application has been submitted. Applicants will then have from the date of the financial aid decision until the candidates' common reply date, May 1st, to either accept or decline the aid offered.

To ensure a complete review, the WPI Office of Student Aid & Financial Literacy must receive the FAFSA and the CSS Profile Application by February 15th. Applications completed after this date will be reviewed subject to available funding. The Office of Student Aid & Financial Literacy encourages students to complete the FAFSA and the CSS Profile Application (and CSS Profile from Noncustodial parent, if applicable), when the FAFSA and CSS Profile Application open October 1st to ensure that WPI's filing deadline of February 15th is met.

#### UPPERCLASS APPLICATION FOR FINANCIAL AID

Upperclass students who receive need based financial aid must reapply for financial aid every year by completing the FAFSA. In a few cases, some upperclass students will also be required to submit the CSS Profile Application in addition to these requirements. Typically, upperclass students who will need to complete the CSS Profile Application are those whose parents are recently separated or divorced, students who are re-admitted to WPI, students whose custodial and noncustodial parents have changed since the prior academic year, and students who did not apply for need based financial aid in the prior academic year. The WPI Office of Student Aid & Financial Literacy reserves the right to request that a CSS Profile Application be completed by any upperclass student applying for need based financial aid.

Filing information on the FAFSA (and CSS Profile Application, if necessary) is due by March 31st each year. In addition, students whose financial aid applications are selected for verification\* are required to submit additional

documentation for themselves and their parents, if considered dependent. Generally, tax filers are required to either successfully utilize the IRS's Data Retrieval Tool on the FAFSA or submit a copy of their tax return transcript. Non tax filers are required to submit a copy of their W-2 statements as well as a non-filer statement from the IRS. The complete application provides consideration for grants, scholarships, loans and federal oncampus employment for the following academic year. Students and their parent(s) are expected to obtain and submit all requested forms in a timely manner for each year of planned enrollment. If any of the required forms are submitted late, there will be a delay in the student receiving an aid offer and there may be a reduction in his/her grant or scholarship eligibility for the year in which he/she is applying for need based financial assistance. The amount of financial aid upperclass students receive will depend on their academic performance from the prior academic year, their family's demonstrated financial need which is determined from the FAFSA, and the CSS Profile Application, if required.

\*Please visit www.wpi.edu/+faverification for more information on the verification process.

#### TRANSFER STUDENTS

Transfer students may apply for financial aid eligibility beginning with their first term of matriculation and must indicate interest in financial aid on the admission application. Please note that financial aid is not available for part-time or international (non-U.S. citizen) transfer students. Transfer aid applications will be reviewed based on the same documentation required for first year applicants and are packaged on a funds available basis. The FAFSA and CSS Profile (and CSS Profile from Noncustodial parent, if applicable) are due by May 15. In addition, students whose financial aid applications are selected for verification\* are required to submit additional documentation for themselves and their parents, if considered dependent. Generally, tax filers are required to either successfully utilize the IRS's Data Retrieval Tool on the FAFSA or submit a copy of their tax return transcript. Non tax filers are required to submit a copy of their W-2 statements as well as a non-filer statement from the IRS.

\*Please visit www.wpi.edu/+faverification for more information on the verification process.

### Forms of Aid

#### **FEDERAL PELL GRANTS**

Federal Pell Grants are awarded to high-need students from low, and lower, middle-income families. For the 2022-2023 academic year (July 1, 2022, through June 30, 2023) the maximum Federal Pell Grant will be \$6,895. The amount an individual student may receive depends on a number of factors (including the Expected Family Contribution, cost of attendance and enrollment status).

#### FEDERAL SUPPLEMENTAL EDUCATIONAL OPPORTUNITY GRANTS (FSEOG)

The Federal Supplemental Educational Opportunity Grant is a Federal grant awarded to low income, undergraduate degree-seeking students who are also Federal Pell Grant recipients. Award amounts range per academic year and will not exceed \$4,000 per year. Awards are based on the availability of funds. The funding is provided to WPI from the federal government. This grant is for one year only and is not guaranteed in subsequent years. Funding is limited.

#### FEDERAL DIRECT STUDENT LOAN

For information on loans, including the Federal Direct Loan programs, WPI institutional loans, and private education loans available to families please visit our website (https://www.wpi.edu/admissions/tuition-aid/types-of-aid/loans-financing).

#### FEDERAL WORK STUDY PROGRAM

For more information on Federal Work Study (FWS), please visit this website (https://www.wpi.edu/admissions/tuition-aid/types-of-aid/federal-work-study-program). Awarded students will be sent additional information by the Office of Student Aid & Financial Literacy to their WPI email address about working on campus shortly before each academic year begins. Federal Work Study is not available in the summer terms. Obtaining a

FWS position (and completing the required community service earnings), either on-or off-campus, is the responsibility of the student. There is a minimum requirement of earnings that must be achieved each academic year - which is one of the requirements for retaining funding in the subsequent academic year.

#### STATE SCHOLARSHIP PROGRAMS

The MASSGrant is awarded to Massachusetts residents whose combined family contribution falls within state-determined parameters. Students must file the FAFSA by the state-designated deadline and follow all state program procedures to apply.

Massachusetts has reciprocity agreements with Pennsylvania and Vermont. These states allow their residents attending institutions in Massachusetts to "carry" need-based state grants into Massachusetts. Awarding from other state scholarship programs depends on annual state funding levels.

The Massachusetts Gilbert Matching Grants Program is allocated annually to WPI. These funds are awarded to Massachusetts residents who fall within a certain financial need.

Learn more here: https://www.wpi.edu/admissions/tuition-aid/types-of-aid/scholarships-grants.

#### STATE FUNDED STUDENT LOAN PROGRAMS

The Commonwealth of Massachusetts provides the Massachusetts No Interest Loan (MA NIL) Program through annual allocations to participating colleges and universities. Students who file the FAFSA and meet state eligibility criteria are eligible for the Massachusetts No Interest Loan on a funds available basis.

#### WPI COLLEGE SCHOLARSHIP

WPI awards College Scholarships and other restricted or endowed "gift" assistance, to students who have a demonstrated financial need based on review of the completed financial aid application, including the FAFSA, the CSS Profile Application (if first year applicant), IRS Data Retrieval Tool, and W-2 forms (if selected for verification). WPI gift aid may be combined with federal and state grants to make up a student's total portion of "gift" assistance, before loans and work are packaged.

#### WPI INSTITUTE STUDENT LOAN PROGRAM

The WPI Institute Loan is an institutional need-based loan awarded to students. Repayment of the principal and interest begins 9 months after the last day of enrollment or withdrawal from college. Learn more <a href="here">here</a>.

#### FEDERAL DIRECT PLUS LOANS

Federal Direct PLUS Loans are available annually to parents of dependent undergraduate students. Repayment begins when the funds are advanced to the school with the option to defer repayment until after the student graduates or falls below half-time enrollment status. Parents have 10 years to repay the Federal Direct PLUS Loan. Learn more <a href="here">here</a>.

#### WPI DEPARTMENT-FUNDED WORK PROGRAM

Students who are not eligible for Federal Work Study funds may seek employment opportunities through departments or offices on campus that set aside funds for hiring undergraduate employees. These employment funds vary from year to year in terms of monies available or the number of students allowed per department/office. Students may also inquire about department-funded summer positions on campus.

#### Financial Aid Policies

Financial aid is awarded one year at a time. Aid applicants are required to reapply annually by the end of the academic year for the next academic year. A student's financial need is reviewed annually through the FAFSA to ensure that aid is renewed equitably, as different circumstances may cause needs to change. The WPI Office of Student Aid & Financial Literacy determines a student's financial need through a review of the completed financial aid application.

Financial aid offers are made available in the student's portal (www.wpi.edu/+fastatus) in July for the following academic year. If an aid offer is not available when a student anticipates receiving one, contact the office to determine why - finaid@wpi.edu or 508-831-5469.

Students should monitor their WPI email and check their portal for missing documents or requirements throughout the summer. If a student is selected for verification, the Office of Student Aid & Financial Literacy will not review the student for awarding until they submit all verification documents and are verified. Please visit www.wpi.edu/+faverification for more information on the verification process.

#### STUDENT CONTRIBUTION

It is expected that the student's family will contribute its maximum financial effort and that the student will also make a maximum effort through savings from annual earnings, and by accepting a proportion of financial aid in the form of loans and/or in-school employment, if eligible. Students at WPI are expected to contribute a minimum \$2,750 each academic year from summer or other annual earnings. While this minimum student contribution is used, the WPI Office of Student Aid & Financial Literacy must review previous calendar year student earnings and student savings/assets as the basis for determining the annual student contribution.

#### INDEPENDENT/DEPENDENT STUDENT STATUS

WPI believes that the primary responsibility for an undergraduate education lies with the student and parent(s), to whatever extent possible. Therefore, all undergraduates applying for WPI institutional funds are required to provide parental information regardless of federal dependency status.

Although a student may meet federal guidelines to be considered an independent student, and therefore receive federal funds as an independent student, the ability of parents to assist their children, regardless of age and dependency status, is a factor WPI considers in determining eligibility for institutional need-based grants. Because of this, the WPI Office of Student Aid & Financial Literacy will require parental information from all students applying for need based institutional aid.

#### AID RETENTION/PROGRESS TOWARD A DEGREE

The Institutional (WPI) financial aid retention policy is found <a href="here">here</a>.

All full time students are expected to register and enroll in the equivalent of 36 credits (12 classes) each academic year\*.

A student must pass a minimum of 24 academic credits each academic year (A through D term) to keep the same level of WPI institutional funding for the following academic year.

AP courses, transfer credit, incomplete grades or extensions are not counted in the number of credits passed. The student is responsible for resolving any incomplete grades with the faculty member assigning the grade.

If a student does not meet the minimum number of academic credits required in an academic year (A-D term), their WPI merit based scholarships will be reviewed and a percentage of their merit scholarship may be reduced based on the number of courses they did not pass.

Reductions to WPI merit-based scholarships begin at having passed only 21 credits, which results in a 5% decrease in funding. WPI merit-based scholarships will continue to be reduced by 5% for every 3 credits not passed.\*

Students are able to submit an appeal due to a loss of funding related to their academics. Please reach out to finaid@wpi.edu to obtain the appeal form.

\*There are exceptions for students on an approved reduced course load, participating in a Co-Op experience, or returning from a Leave of Absence, for example.

#### Federal and/or State Financial Aid

For retention of federal and/or state financial aid funding. Please refer to these aid policies here.

### **WPI Need Based Scholarships**

WPI need based scholarships awarded to students will not increase in future academic years regardless of changes in a student's financial need. However, student's WPI need based scholarships may decrease based on a lower financial need and/or poor academic performance (from the prior academic year).

#### **WPI Merit Scholarships**

WPI merit scholarships will not increase or decrease based on changes to a student's financial need. However, a student's merit scholarship will decrease or be eliminated if a student does not pass a minimum of 24 academic credits per year.

Eligibility for consideration for all types of financial aid for the following academic year is lost if a student is placed on Academic Probation (D term). If a student is placed on Academic Probation, they may submit an appeal form. Please email finaid@wpi.edu to learn more and obtain this form.

#### **Financial Aid Appeals**

Students placed on Academic Probation, have lost a portion of or all of their merit scholarship and/or are placed on federal financial aid suspension, may in some cases which involve unusual and extenuating circumstances such as documented medical problems, file a financial aid petition with the WPI Office of Student Aid & Financial Literacy.

Financial Aid Appeals can be obtained in the WPI Office of Student Aid & Financial Literacy or online here.

The appeal will be reviewed by the Financial Aid Appeal Committee. Determination on financial aid appeals will be made on a case by case basis.

- 1. Regardless of academic progress status, eligibility for WPI financial aid (including the merit scholarship) is available for the shorter of the two following periods: 16 terms (4 years) of enrollment at WPI, as a full time or part-time student, (NOT 16 terms of receiving financial aid), or completion of your Bachelor Degree requirements at WPI.
- 2. Students must be enrolled full time (minimum of 12 credits per semester) to be eligible for WPI need based and merit based scholarship funding, as well as most federal and state grant programs and work study. A student is considered to be a full time student if they are being charged full time tuition and fees. Students are responsible for knowing their enrollment status and should enroll in the number of credits per year necessary to maintain their aid eligibility.

PLEASE NOTE: With the exception of the Federal Direct Loan, the Federal Pell Grant, and the Global Scholarship - financial aid is not available for enrollment during term E (Summer School) at WPI. This includes all forms of assistance including WPI merit scholarships.

If you enroll during term E, and request to borrow a Federal Direct Loan, the amount you borrow will be based on the student's Federal Direct Loan eligibility within the prior academic year (terms A-D). Federal Pell Grant eligibility will be based on enrollment and eligibility within the prior academic year (terms A-D).

\*there are exceptions such as students on an approved reduced course load. Please contact the Office of Student Aid & Financial Literacy if you have concerns.

#### INTERNATIONAL STUDENTS

International students (who do not have official documentation of Permanent Residence Status in the United States) are ineligible for all sources of federal and state aid administered by the WPI Office of Student Aid & Financial Literacy. Limited scholarships are available for entering international students through the WPI Office of Student Aid & Financial Literacy.

### **Alternative Financial Programs**

Alternate financing programs are available to many students and their families who do not apply for aid or who need additional resources beyond federal, state, and institutional financial aid offered. WPI offers a payment plan through the Bursar's Office. Learn more here: https://www.wpi.edu/offices/bursar/payment.

There are many long-term financing programs available to assist students and their families in spreading their educational costs over 10 to 20 years. Many of these loans allow students and their families to borrow the difference between the cost of attendance determined by the college and total financial aid received for the academic year.

Please contact the WPI Office of Student Aid & Financial Literacy or visit.

#### **FEDERAL Parent PLUS LOANS**

Federal Parent PLUS Loans are available annually to parents of dependent undergraduate students. Repayment begins when the funds are advanced to the school with the option to defer repayment until after the student graduates or falls below half-time enrollment status. Parents have 10 years to repay the Federal PLUS Loan. Learn more <a href="https://example.com/here">here</a>. This loan must be re-applied for each year.

### Reserve Officer Training Corps (ROTC) Scholarships ARMY ROTC SCHOLARSHIP PROGRAM

For information on Army ROTC Scholarships, please contact the Army ROTC office at WPI at (508) 831-5268.

#### NAVAL ROTC SCHOLARSHIP PROGRAM

For information on Navy ROTC Scholarships, please contact the Naval ROTC Unit at Holy Cross College in Worcester (508) 832-2433.

#### AIR FORCE ROTC SCHOLARSHIP PROGRAM

For information on Air Force ROTC Scholarships, please contact the WPI Department of Aerospace Studies at WPI at (508) 831-5747.

PLEASE NOTE THE COMBINATION OF ALL SOURCES OF AID CANNOT EXCEED A STUDENT'S BUDGETED COST OF ATTENDANCE.

### Awards, Conditions and Notes

As a student receiving merit and/or need-based funding at WPI, students are responsible for reviewing WPI's Award Conditions and Notes document each year to make sure they understand the renewal criteria for the fund(s) in their financial aid offer.

If there are any questions about the information provided in this document, please contact the WPI Office of Student Aid & Financial Literacy at finaid@wpi.edu. The document is updated annually and found <a href="mailto:here">here</a>.

### Financial Aid Upon Withdrawal/Leave of Absence/Suspension

Students who withdraw, take a leave of absence, or are suspended from WPI and are receiving any type of financial aid should review the policy on Withdrawal or Leave of Absence found here: <a href="https://www.wpi.edu/admissions/tuition-aid/policies">https://www.wpi.edu/admissions/tuition-aid/policies</a>.

Leaving WPI because of an approved official or unofficial <u>withdrawal</u>, <u>leave of absence or suspension</u> may have an impact on a student's financial aid package. Early notification to the <u>WPI Registrar's Office</u> will help ensure that student's financial aid is appropriately recalculated, and that any required adjustments are made to the student's account as soon as possible.

#### No classes passed in a term:

If a student who receives federal financial aid fails to earn a passing grade in at least one course during a term (and does not officially withdraw from the institution), federal regulations require WPI to assume that the student has unofficially withdrawn from the institution. WPI must recalculate the student's federal aid eligibility for the semester unless the student can provide documentation from their professors that they completed the term but simply failed to earn a passing grade.

Recalculation of each student's financial aid package will be unique and is dependent on many factors (e.g., time of withdrawal, charges incurred, and financial aid package components); therefore, students are encouraged to contact the <u>WPI Office of Student Aid and Financial Literacy</u> at 508-831-5469, for any questions or concerns.

# **Expenses**

### **Estimated Expenses**

Expenses for the 2022-23 year are published via the web: <a href="https://www.wpi.edu/admissions/tuition-aid/cost-attendance">https://www.wpi.edu/admissions/tuition-aid/cost-attendance</a>.

Tuition	\$56,000
Undergraduate Student Life Fee	\$316
Health and Wellness Fee	\$580
Total of Tuition and Fees	\$56,896
New Student Orientation Fee	\$200
Room	\$9,608
Board (Meal Plan)	\$7,062
Books and Supplies	\$1,200
Personal Expenses	\$1,200
Total Budgeted Costs	\$76,166

Room and board (meal plan) amounts shown above are estimates and are determined once the student is assigned a room and chooses a meal plan.

Books and Supplies and Personal Expenses are budgeted Items that are not billed directly by the school but are estimates of what your expenses may be. There may be additional course or program specific fees not listed here.

All full-time students must be covered by health insurance equivalent to that offered under the WPI Student Health Insurance Plan. Students must complete a waiver form online annually if they wish to not purchase the WPI offered plan. Optional coverage for a spouse or dependent is available.

Please contact the Bursar's Office at bursar@wpi.edu or visit our page for further health insurance information.

#### Part-Time Student

1/3 unit (3 credits) \$4,668

# **Payment of Tuition Deposit**

#### **Entering Students**

Payment of a nonrefundable \$500 deposit is required upon acceptance of admission to WPI. The \$500 will be credited to the student's tuition.

#### **Enrollment and Tuition Due Dates**

Enrollment for students pursuing a baccalaureate degree will occur three times per year:

- 1. Fall semester-at the beginning of Term A.
- 2. Spring semester-at the beginning of Term C.
- 3. Summer session-at the beginning of Term E.

There will be no check-in at the start of Terms B and D, although a course change period will be available for students continuing from the previous term.

Special tuition features relative to Term E enrollment are available on the E-term website.

WPI sends a notification to the WPI email address assigned to each student when semester charges are available to view. Fall charges are available to view at the beginning of July and Spring charges are available to view at the beginning of December. When viewing your financial account in Workday, you will find an option to print or create a pdf statement for the semester. It is important to view your financial account in Workday frequently for any current changes.

Tuition must be paid in full by the specified due date provided you in the emailed semester notification, which is also found on the semester statement you can create from within your account. Students that register after the due date are required to pay at the time of registration. Students remit payment online with a checking account (no fee) or via credit card (2.85% fee). For international credit card or domestic and international wire payments visit WPI's Flywire page. For information on payment options, please visit the Bursar webpage.

For E-Term (Summer) charges are available to view in your financial account in Workday at the beginning of April. E-Term typically has two due dates, an E1 due date around second week of May, and an E2 due date around second week of July. If a student registers after either due date, payment is due at the time of registration.

Non-matriculated students, (not enrolled in a WPI degree program) payment is due at the time of registration. Failure to pay will result in being dropped from any course(s).

### Financial Obligations, Holds, and Late Fees

\*The college reserves the right to hold grades, official transcripts, registration for any student who has an outstanding financial obligation with the college.

Late fees, up to \$250, will be assessed on balances not paid by the due date.

A student may be administratively withdrawn due to an outstanding financial obligation for a term, which may require the student to apply for financial re-admission.

Students who elect to petition any charge on their Student Account must do so in writing prior to the final day of classes in the respective term (B term for Fall or D term for Spring). No late petition will be reviewed or approved if submitted after a term has commenced.

Failure to pay your financial obligation may result in the account being referred to an outside collection agency and reported to a credit bureau agency, which will negatively affect your credit rating. You will be responsible for all costs associated with the collection of this debt to the maximum amount allowed by Massachusetts general statutes.

\* WPI fully supports the Veterans Benefits and Transition Act of 2018. Sec. 103 amends US code to prevent schools from penalizing Ch. 31 or 33 students if/when the VA is late making payments. WPI policy supports and agrees to the VA recommendations of the following while waiting for VA payments: WPI agrees to not prevent enrollment, charge a late penalty fee(s), require alternative or additional sources of funding or deny access to school resources.

# **Overload Charges**

There will be a tuition surcharge on registration which contains academic overloads in excess of  $2^1/3$  (7/3) units per semester. Wellness and Physical Education and Military Science are not included in the determination of overloads. The overload charge will be based upon the total registration credit held by the student at the close of the initial course change period in B- and D-terms. (Please consult the Registrar's Office or the Office of the Bursar for current fees.) Fall overload billing will take place during Term B and spring overload billing during Term D. The current Term E charge system will not be affected.

# Tuition Adjustment Charges Upon Withdrawal, Leave of Absence, or Suspension

Tuition adjustment charges upon formal withdrawal from the college during each semester are:

#### Charge

Withdrawal	Charge
Withdrawal after enrollment but prior to first day of classes of a semester	0%
Withdrawal weeks 1 & 2	10%
Withdrawal week 3	20%
Withdrawal week 4	30%
Withdrawal week 5	40%
Withdrawal week 6-8	50%
Withdrawal week 9	60%
Withdrawal week 10	80%
Withdrawal week 11 and after	100%

To qualify for a tuition charge adjustment, students must submit an Official Withdrawal form to the Registrar's Office. The date of the student's last date of attendance determines the charge.

There is no adjustment in tuition/fees in the case of withdrawal from individual courses.

Students who have paid full tuition for eight semesters may be allowed to enroll as part-time students on a percourse basis and be charged tuition accordingly. (Two summer terms enrolled as a full-time student may be counted as a semester.) Students must submit the Application for Part-time Status to the Registrar's Office at least two weeks before the beginning of the fall or spring semester.

Health insurance, health fee, and social fee are neither pro-rated nor refunded.

After all adjustments have been made, any balance due to WPI is payable immediately.

# Room & Board Charges Upon Withdrawal, Leave of Absence, or Suspension Charge

Withdrawal	Charge
Withdrawal after enrollment but prior to first day of classes of a semester	0%
Withdrawal weeks 1 & 2	10%
Withdrawal week 3	20%
Withdrawal week 4	30%
Withdrawal week 5	40%
Withdrawal week 6-8	50%
Withdrawal week 9	60%
Withdrawal week 10	80%
Withdrawal week 11 and after	100%

### Financial Aid Upon Withdrawal/Leave of Absence/Suspension

# Housing

### Residence Halls

WPI provides its undergraduate students with a variety of housing options. The WPI residence halls offer first year students housing in double and triple occupancy rooms as well as suites designed for four to eight people. A limited number of singles for students with documented need through the Office of Accessibility Services are available. (Residence hall living at WPI offers opportunities that can be a valuable part of higher education.)

First-year students admitted for Term A, who meet all application deadlines, are guaranteed housing in the residence halls for that entire academic year. The Housing & Residential Experience Center works to maximize the opportunities available for upper-level housing. Some options include townhouses, apartments, and residential houses. Off campus housing alternatives include rooms in homes, apartments and commuting from home. Additionally, for fraternity and sorority members there is Greek chapter housing available. Upper-level students are not guaranteed on-campus housing. The Housing and Dining Contract is a legally binding contract which extends from the beginning of Term A through Term D as long as the student is enrolled at WPI.

#### Residence Hall Staff

Resident Advisors (RAs) and Graduate Housing Assistants (GHAs) are the core of the residential life staff in the residence halls. RAs serve as a source of assistance in resolving students' academic, personal, and social concerns. They plan and implement social and educational programs in the halls and enforce all WPI policies and regulations in an effort to develop an effective residential community in the residence halls. The administrative responsibility for the operation of the residence halls rests with the professional staff in the Housing & Residential Experience Center, specifically the Community Directors (CDs) who supervise and work with the RAs and GHAs. They counsel and advise students, work with maintenance and dining hall staffs, and handle many administrative processes for students living on campus.

### Occupancy

Opening and closing dates of the residence halls are posted on the Housing & Residential Experience Center website as they are determined. Students will also receive email communication with move in information ahead of each process. Housing and food service privileges are not transferable, nor may any person take up de facto residence without paying rent. The traditional residence halls will be closed during the Winter Break period.

### **Furnishings and Facilities**

Students are responsible for the neatness and cleanliness of their rooms. Residence halls are furnished with a twin-size bed, a desk and chair, closet space, and drawer space for each student. All residence halls are smoke-free environments. Data network services and a movie streaming service are included in room rates. Residents provide their own pillows, linens, blankets, and other personal furnishings.

Mobile pay laundry facilities are available on the campus.

The following are some things not permitted in the residence halls:

- · Sale, use or possession of illegal drugs
- · Pets, except small fish
- Refrigerators larger than 4.3 cubic feet in size, 3D printers
- Gambling
- Use of alcoholic beverages in violation of Massachusetts State Laws
- · Firearms, weapons, explosives, incendiary or toxic chemicals, starting pistols, paint ball guns, knives
- · Cooking, except in kitchen areas provided
- Candles or other flame-emitting devices
- Smoking of any kind

For a complete copy of the housing and dining contract, please visit the WPI website.

## Mail & Packages

Mail and express packages should be addressed to the student by name, and box number, WPI, 100 Institute Road, Worcester, MA 01609-2280. Please visit the Mail Services website https://www.wpi.edu/offices/mail-services for more detailed information.

#### Roommates

One of the most memorable aspects of campus life can be the relationship you will build with your roommate(s). Roommates often find that a meaningful relationship is developed through good communication. We

encourage you to be as open as possible so that you and your roommate can begin early to create a relationship based on respect and understanding. This relationship can help make residence hall living one of the most enjoyable part of your college career.

### **Room Charges**

Room Rates can be found by <u>CLICKING HERE</u> (Note: Room rates are shown for the entire academic year or per semester)

#### First Year Residence Halls & Houses:

Daniels, Founders, Institute, Messenger, Morgan, Riley, Stoddard, Trowbridge House, Wachusett House, and WPI Townhouses.

### Upper-level Apartments & Houses:

East, Elbridge House, Ellsworth, Faraday, Fuller, Hackfeld House, Schussler House, South Village (Cedar A House, Cedar B House, Fruit House, Marston A House, Marston B House, Oak House, Sever House, West House, and William House) and WPI Townhouses.

Payment for housing and food service fees are made in two installments, one each at the beginning of Terms A and C. Reduced charges, if applicable, will be processed according to the established withdrawal policy of the college. Students entering the residence halls other than at the beginning of Term A or C will be issued a prorated billing for the period. This bill must be paid in full prior to occupancy.

Students are expected to care for the physical facilities of the residence halls. Damage to the facilities beyond the normal wear and tear shall be the financial responsibility of the residents. Damage to common areas of the residence halls will be divided among residents of that wing, floor, or building.

First year students can expect to receive a link to the Housing Portal in May, after their \$500 tuition deposit is received by the Office of Admissions. First Year students should be prepared to select their housing through the online housing selection portal in early to mid-July.

#### Meals

All first-year students and upper-level students residing in South Village are required to participate in a residential meal plan. All other students are welcome to purchase a meal plan as well. The MEAL PLANS are a combination of traditional meal swipes plus additional funds to be utilized at the student's discretion.

Once a student has contracted for food service, this is a legally-binding agreement, and students are obligated to assume financial responsibility for the entire academic year.

**Board Plan Rates can be found by <u>CLICKING HERE</u>** (Note: Board plan rates are shown for the entire academic year or per semester)

(Note: Students are required to be on a meal plan for the entire academic year)

Descriptions of the board plans are available at: <a href="http://www.dineoncampus.com/wpi">http://www.dineoncampus.com/wpi</a>

# Off-Campus Living

After the first year, on-campus housing is not guaranteed. If you decide to look for an off-campus apartment, make plans well in advance. Information is available on the <u>WPI website</u> for you to research questions about housing codes, leases, tenants' rights, etc. The following are a few hints for you as you begin your search for off-campus housing.

**Leases**: Contract periods for off-campus housing vary in length, from twelve-month and nine-month to summer only and three-month leases. As you consider various places, find out what types of leases are available.

**Be Prepared**: You'll want to plan realistically for expenses such as utilities, transportation, repairs, laundry, and food. Also, try to pick your roommates carefully and ahead of time.

### **Lodging Laws**

You should also be aware that the City of Worcester has a zoning code that prohibits more than three unrelated persons living together unless the landlord or owner has obtained a lodging house license.

# **Policies & Procedures**

# **Academic Policy**

# **Grading Policies**

#### Distribution of Grades

Academic grades of undergraduate students may be released to parent(s) of a student claimed as a dependent for tax purposes. WPI presumes that all undergraduate students are dependents of their parent(s) unless they file a Declaration of Independent Status petition form with the Registrar's Office. These forms are available in the Registrar's Office. After the Registrar's Office receives a Declaration of Independent Status petition form from an undergraduate student, the Office will not release the student's academic grades to the parent(s) of such student until such time as the student rescinds their Declaration, in writing filed with the Registrar's Office, or his/her parent(s) provide acceptable proof of tax-dependent status to the Registrar's Office. The Registrar's Office will keep a record of any release of grades directly to the parent(s) of a dependent student in that student's record, and the student will be able to review that record.

## **Grading System**

*Projects*: The following term grades are possible: A, B, C, SP (Satisfactory Progress), NAC (Not Acceptable) and NR (No record).

Courses: The following grades are possible: A, B, C, NR, and I (Incomplete). An instructor may also assign an "I" in an Independent Study course. AT (attended) is used to denote participation in seminars or college-sponsored programs. If an undergraduate student repeats a course previously graded with an A, B or C, both grades will appear on the undergraduate student transcript with the lower grade marked with a '/R' indicating a repeated class. Only the higher grade will be used to calculate the student's numerical equivalent.

Students such as Consortium (CO), nondegree-seeking students, and Graduate students will receive traditional A, B, C, D, F, Withdrawal and Pass/Fail grades.

# Grades for Completion of Degree Requirements

The overall evaluation of degree requirements (for the MQP, the IQP and the Humanities and Arts Requirement) will be graded in the student's respective grade system. The transcript will contain an abstract describing the content of the completed project.

#### No Record (NR)

The NR (No Record) grade is assigned by a faculty member for course or project work for which credit has not been earned. This grade applies to PLAN students (admitted, degree-seeking) only. The NR grade does not appear on the students' transcripts or grade reports.

#### Incomplete (I)

An I grade, when assigned, will be changed to NR after one term unless extended in writing by the instructor to the Registrar's Office. The I grade is not assigned for Qualifying Projects.

### **Satisfactory Progress (SP)**

In project work (IQP, MQP only) extending beyond one term for which a grade is not yet assigned, an interim grade of SP (Satisfactory Progress) may be used on grade sheets. In such cases, the SP evaluation will count as units earned toward meeting the 15-unit rule, the distribution requirements, and the minimum standards for satisfactory academic progress. SP grades remain on the transcript until changed to the final grade as submitted on the Completion of Degree Requirement Form or through the grade change form procedure.

#### **Other Grades**

A? or Q signifies a grade that has not been submitted.

### **Qualifying Project Grading**

The Faculty of WPI has endorsed the following grading guidelines for qualifying project activity:

- 1. Each term a student is registered for a qualifying project, the student receives a term grade reflecting assessment of his or her accomplishments for that term.
- 2. Upon completion of a project, each student will receive an overall project grade (also known as the "CDR grade," since it certifies completion of the degree requirement) reflecting his or her individual overall accomplishments for the project.
- 3. The term grades and the overall project grade reflect both the *products* of the project (e.g., results, reports, etc.) and also the *process* by which they were attained. The term grades and the overall project grade may be different.

# The following are some characteristics that faculty should use in communicating expectations and evaluating the quality of each student's project work.

The degree to which the student:

- developed effective or creative goals or approaches,
- · demonstrated initiative and originality,
- · showed depth and critical thought in analysis,
- · produced high quality results,
- · took the lead in discussion, planning, and analysis,
- · produced a clear, professional-level report with excellent drafts along the way,
- · anticipated work that needed to be done and completed it in a timely manner, and
- worked to advance the success of the team.

#### For both terms and overall project, the available grades and interpretations are:

**A**: This grade denotes *excellent work* that attains all of the project goals and learning outcomes. The product and process of this work meet all of the expectations and exceed them in several areas.

**B**: This grade denotes *consistently good work* that attains the project goals and learning outcomes. The product and process of this work meet but generally do not exceed all of the expectations.

**C**: This grade denotes *acceptable work* that partially attains project goals and learning outcomes. The product and process of this work meet some but not all expectations.

**SP**: This grade denotes *satisfactory progress* and certifies sufficient accomplishments to earn credit for that term. Faculty who assign this grade should provide clear feedback to the student regarding his or her progress during the term. The use of the SP grade is discouraged except in circumstances where the faculty member is unable

to judge the quality of the work, yet can attest that the granting of credit is appropriate. This is a temporary grade and must be replaced by a permanent grade consistent with the criteria outlined above by, if not before, the end of the project.

**NR**: This grade denotes work that did not attain the project goals or learning outcomes and is *insufficient for registered credit*. Both product and process were inconsistent with acceptable project work at WPI as outlined above.

**NAC**: This grade is reserved for *performance that is unacceptable*. It might mean that a student's performance (or lack of it) has seriously impeded group progress, or it has embarrassed the group, a project sponsor, or WPI. Note that this grade remains on the transcript.

- 4. Project goals should be established and clearly articulated early in the project. This may be done in the form of a formal project proposal. Learning outcomes for the qualifying projects have been established by the faculty and are published in the undergraduate catalog.
- 5. Project advisors should clearly convey in writing their expectations for learning and performance to project students at the start of the project, and provide students with substantive feedback on a regular basis during the project.

### **Cumulative Grade Point Average**

WPI does not maintain a Cumulative Grade Point Average for undergraduate students. A student who needs a cumulative point average for external use may apply to the Registrar and receive a numerical equivalent. This information is usually provided only for students applying to graduate or professional schools when the application process requires a translation. Cumulative point averages will not be printed on student's transcripts nor shall class rankings be developed from them.

When requested by the student, the numerical equivalent of the cumulative point average will be based on a point assignment of A = 4.0, B = 3.0, C = 2.0 while DIST and AC grades will be 4.0 and 2.75 respectively.

#### Dean's List

The Dean's List is created and published twice a year: in January to review student work completed during the AB terms and in May to review student work completed during the CD terms. To be named to the Dean's List a student must:

#### Complete 4/3 units with grades of A's, and at least an additional 2/3 units with grades of B or above.

For example, a student with 4A's, 2B's and 1C (or 1 NR) in 1/3-unit courses during a semester is eligible for the Dean's List. Credits earned in Wellness and Physical Education, Military Science, and Air Force Aerospace Studies are not used in the evaluation for the Dean's List. For the purposes of determining the Dean's List only, an SP grade for project work will be considered a B grade. The Dean's List recognizes outstanding work completed during the most recent semester. Student requests to re-evaluate their eligibility for the Dean's List due to a grade change after the semester review is completed will be considered only in unusual circumstances and at the discretion of the Dean of Undergraduate Studies.

## Grade Appeal and Grade Change Policy

The purpose of the Grade Appeal Policy is to provide the student with a safeguard against receiving an unfair final grade, while respecting the academic responsibility of the instructor. Thus, this procedure recognizes that,

- Every student has a right to receive a grade assigned upon a fair and unprejudiced evaluation based on a method that is neither arbitrary nor capricious; and,
- Instructors have the right to assign a grade based on any method that is professionally acceptable, submitted in writing to all students, and applied equally.

Instructors have the responsibility to provide careful evaluation and timely assignment of appropriate grades. Course and project grading methods should be explained to students at the beginning of the term. WPI presumes that the judgment of the instructor of record is authoritative, and the final grades assigned are correct.

A grade appeal shall be confined to charges of unfair action toward an individual student and may not involve a challenge of an instructor's grading standard. A student has a right to expect thoughtful and clearly defined approaches to course and project grading, but it must be recognized that varied standards and individual approaches to grading are valid. The grade appeal considers whether a grade was determined in a fair and appropriate manner; it does not attempt to grade or re-grade individual assignments or projects. It is incumbent on the student to substantiate the claim that his or her final grade represents unfair treatment, compared to the standard applied to other students. Only the final grade in a course or project may be appealed. In the absence of compelling reasons, such as clerical error, prejudice, or capriciousness, the grade assigned by the instructor of record is to be considered final.

In a grade appeal, only arbitrariness, prejudice, and/or error will be considered as legitimate grounds for an appeal.

**Arbitrariness**: The grade awarded represents such a substantial departure from accepted academic norms as to demonstrate that the instructor did not actually exercise professional judgment.

**Prejudice**: The grade awarded was motivated by ill will, and is not indicative of the student's academic performance.

**Error**: The instructor made a mistake in fact.

This grade appeal procedure applies only when a student initiates a grade appeal and not when the instructor decides to change a grade on his or her own initiative. This procedure does not cover instances where students have been assigned grades based on academic dishonesty or academic misconduct, which are included in WPI's Academic Honesty Policy. Also excluded from this procedure are grade appeals alleging discrimination, harassment or retaliation in violation of WPI's Sexual Harass- ment Policy, which shall be referred to the appropriate office at WPI as required by law and by WPI policy.

The Grade Appeal Procedure strives to resolve a disagreement between student and instructor concerning the assignment of a grade in an expeditious and collegial manner. The intent is to provide a mechanism for the informal discussion of differences of opinion, and for the formal adjudication by faculty only when necessary. In all instances, students who believe that an appropriate grade has not been assigned must first seek to resolve the matter informally with the instructor of record. If the matter cannot be resolved informally, the student must present his or her case to the Faculty Review Committee before the end of the second week of the term after the disputed grade is received (D term grades may be appealed the following A term). Any exceptions to this deadline for submission of appeal can only be made by the Office of the Provost.

## Student Grade Appeal Procedure

- 1. A student who wishes to question a grade must discuss the matter first with the instructor of record within one week after the start of the next regular academic term (A D) after receiving the grade. Late appeals will only be reviewed at the discretion of the Faculty Review Committee (FRC). In most cases, the discussion between the student and the instructor should suffice and the matter will not need to be carried further. The student should be aware that the only valid basis for grade appeal beyond Step One is to establish that an instructor assigned a grade that was arbitrary, prejudiced, or in error.
- 2. If the student's concerns remain unresolved after the discussion with the instructor, the student may submit a written request to meet with the appropriate Department Head, within one week of speaking with the instructor. For a grade in a course, independent study, Inquiry Seminar or Practicum, or Major Qualifying Project (MQP), the appropriate person is the instructor's Department Head. For a grade in an Interactive Qualifying Project (IQP), the appropriate person is the Dean of the Department of Integrated and Global Studies (DIGS). If the instructor of record is a Department Head or the Dean of the DIGS, then the student should request to meet with the representative from the Provost's office (the Dean of Undergraduate Studies, or alternative if necessary), who will serve as the appropriate Department Head/Dean in this step. The appropriate Department Head/Dean will meet within one week with the student, and, if he or she believes that the complaint may have merit, with the instructor. After consultation with the Department

- Head/Dean, the instructor may choose to let the grade remain, to change a course grade, or to petition the Committee on Academic Operations to change a grade for a Degree Requirement (CDR grade for MQP, IQP, or Humanities and Arts Inquiry Seminar or Practicum). The Department Head/Dean will communicate the result of these discussions to the student.
- 3. If the matter remains unresolved after Step Two, the student should submit a written request within one week to the Provost's Office to request an ad hoc Faculty Committee for Appeal of a Grade. The Provost's representative (the Dean of Undergraduate Studies, or alternate) will meet with the student, and will ask the FRC to appoint the ad hoc Committee for Appeal of a Grade. The Chair of the FRC will select the members of the ad hoc committee and serve as its non-voting chair. The ad hoc committee for all undergraduate appeals will be composed of three FRC members. Appointees to the ad hoc committee must not have any apparent conflicts of interest with the student or instructor of record. The Chair of the FRC requests a written statement from the student and a written response from the instructor. The ad hoc committee examines the written information and may gather additional information as it sees fit.
- 4. Through its inquiries and deliberations, the ad hoc committee is charged to determine whether the grade was assigned in a fair and appropriate manner, or whether clear and convincing evidence of arbitrariness, prejudice, and/or error might justify changing the grade. The ad hoc committee will make its decisions based on a majority vote.
- 5. If the ad hoc committee concludes that the grade was assigned in a fair and appropriate manner, the ad hoc committee will report its conclusion in writing to the student and instructor. This decision of the ad hoc committee is final and not subject to appeal.
- 6. If the ad hoc faculty committee determines that compelling reasons exist for changing the grade, it would request that the instructor make the change, providing the instructor with a written explanation of its reasons. At this point, the instructor may change the grade. If the instructor declines to change the grade, he or she must provide a written explanation for refusing. If the ad hoc faculty committee concludes that the instructor's written explanation justifies the original grade, the ad hoc committee will report this in writing to the student and instructor and the matter will be closed. If the ad hoc faculty committee concludes that it would be unjust to allow the original grade to stand, the ad hoc committee will then determine what grade is to be assigned. The new grade may be higher than, the same as, or lower than the original grade. Having made this determination, the three members of the committee will sign the grade change form and transmit it to the Registrar. The instructor and student will be advised of the new grade. Under no circumstances may persons other than the original faculty member or the review committee change a grade. The written records of these proceedings will be filed in the student's file in the Registrar's Office.

### Faculty Grade Change Procedure

The Student Grade Appeal Procedure affirms the principle that grades should be considered final. The principle that grades for courses or projects should be considered final does not excuse an instructor from the responsibility to explain his or her grading standards to students and to assign grades in a fair and appropriate manner. The appeal procedure also provides an instructor with the opportunity to change a grade for a course or project on his or her own initiative. The appeal procedure recognizes that errors can be made and that an instructor who decides that it would be unfair to allow a final grade to stand due to error, prejudice or arbitrariness may request a change of grade for a course or project without the formation of an *ad hoc* committee. An instructor may request a grade change in one of two ways. First, for courses, an instructor may submit a course grade change via Workday to the Registrar at any time prior to a student's graduation. Second, for Degree Requirements (MQP, IQP), an instructor must submit a petition to the Committee on Academic Operations (CAO) to change the grade.

# **Transfer Credits**

# **Transferring Credit Before Matriculation to WPI**

The Office of Admissions transfer admissions team coordinates the formal evaluation of credit with evaluators in each academic department for a WPI degree for coursework taken prior to matriculation. For incoming first year students, this process starts after the May 1<sup>st</sup> enrollment deadline for the upcoming fall semester. For transfer students, this starts after admission to the university. More information is available at <a href="https://www.wpi.edu/+transfercredit">www.wpi.edu/+transfercredit</a>. Each WPI academic department has their own policy regarding transfer credit and designates a faculty evaluator to review coursework submitted. Courses taken at regionally

accredited post-secondary institutions that are comparable to courses offered at WPI will be reviewed for course content and level by the WPI academic department offering the comparable course. In general, only those courses in which the student received a grade of C or better will be evaluated for possible transfer credit, with some department requiring a grade of B or better. Please note vocational, correspondence, pre-college or review courses are not transferable. Also, noncredit CEU courses, adult enrichment or refresher courses, and CLEP examinations are not recognized for transfer credit.

### **Transferring Credit After Matriculation to WPI**

If you are currently a WPI student who wishes to take courses at a regionally accredited post-secondary institution, you must obtain a WPI Transfer Credit Authorization form from the Registrar's Office. This form and the course description must be taken to the WPI department head or transfer faculty approved by the department head for approval **before** the course is taken. On the form, the department head specifies a minimum grade for transfer. This minimum grade depends on the institution at which the course is taken and how critical the course is to the department. Please note, most departments do **not** accept on-line courses for transfer credit. Confirm this with the relevant department before registering and completing any on-line courses. Courses that have not been pre-approved may not receive transfer credit. The completed form must be filed in the Registrar's Office before taking the course. After successful completion of the course, an official transcript should be sent to WPI. Students can check the web for posting of credit. Please note vocational, correspondence, pre-college or review courses are not transferable. Also, noncredit CEU courses, adult enrichment or refresher courses, and CLEP examinations are not recognized for transfer credit.

### **Transferring Consortium Courses**

Courses taken through the consortium do not need to be transferred into WPI. Courses will automatically be part of the WPI transcript. However, if you are taking the course through the consortium to fulfill a WPI distribution requirement, you should check with the Registrar's Office to see if the course has been preapproved to satisfy the requirement. If not, you will need approval from the relevant department head before taking the course.

To apply for approval of a consortium course to satisfy a specific WPI distribution requirement, a student must obtain a WPI Transfer Credit Authorization form from the Registrar's Office. This form and the course description must be taken to the WPI department head for approval before the course is taken. The WPI department head decides whether the proposed course meets the department distribution requirement. If it does, the department head specifies on the form a minimum grade for satisfying the distribution requirement. This minimum grade depends on the institution at which the course is taken and how critical the course is within the department. Courses that have not been pre-approved may receive WPI elective credit. The complete form must be filed in the Registrar's Office before taking the course.

#### **Advanced Placement**

WPI awards credit to students who score a "4" or "5" on most Advanced Placement Examinations. The Office of Academic Advising will notify such students of their earned credit by mail to the home address during early August. You can visit the Registrar's Office web site <a href="https://www.wpi.edu/offices/registrar/policies-procedures/ap-credit">www.wpi.edu/offices/registrar/policies-procedures/ap-credit</a> for a complete list of AP credits for exams taken.

#### **Humanities**

The Humanities and Arts Department will accept a maximum of 1/3 unit of AP credit towards the Humanities and Arts requirement. AP credit beyond one course (1/3 unit) in the Humanities and Arts may be counted toward other requirements such as free elective credit or particular majors and minors at WPI. For most humanities disciplines, students who score a 4 or 5 in the AP test will receive credit in the relevant discipline. Special cases in language and studio art are explained below.

### AP credit in languages

Students who score a 4 or higher on the College Board AP exam in Chinese language and culture, German Language, Spanish language, or Spanish literature, automatically receive 1/3 unit of credit in the language. This

can be applied to the breadth component of the HUA Requirement or to the HUA language track option. In either case, the student will receive credit for one of the following Elementary 1000-level language courses and cannot enroll in that course for additional credit: CN 1541, GN 1511, SP 1523.

Students who took Arabic, Chinese, German, or Spanish in high school – but who do not earn AP credit for it at WPI – can get 1/3 unit retroactive credit for that language if they meet the following 3 criteria: 1) studied it for three or more years in high school and maintained at least a B average for all three years and; 2) place into at least the 2nd term of the appropriate WPI language sequence; and 3) successfully complete two terms of that language at WPI, earning grades of B or higher in both courses. The exception is Spanish: students studying Spanish must complete Intermediate I (SP 2521) and Intermediate II (SP 2522) with a grade B or higher. To request 1/3 unit retroactive language credit, please use the appropriate form on the Humanities and Arts website (<a href="https://www.wpi.edu/academics/departments/humanities-arts/resources">https://www.wpi.edu/academics/departments/humanities-arts/resources</a>). Students may receive credit for either the AP exam or 3 years of high school language study, but not both. For questions about this policy, please contact the Humanities and Arts Department.

#### **AP Credit in Studio Art**

Students who score a 4 or 5 in the AP test in studio art are eligible for HUA credit after a successful portfolio review by art faculty.

#### **Computer Science**

Advanced placement in computer science can be earned for the "Computer Science AP A" exam. Credit for CS 1000 is granted for scoring a "4" or "5" on the CS AP A exam. No credit will be granted for "Computer Science AP Principles" exam.

The Computer Science department advises CS Majors who earn a "4" or a "5" on the CS AP A exam to enroll in CS 1102 (Accelerated Introduction to Program Design). Students who wish to pursue a CS Minor after earning a "4" or a "5" on the CS AP A exam may consider enrolling in CS 2119 (Application Building with Object-Oriented Concepts) or CS 2301 (Systems Programming for Non-Majors).

Students who took CS AP Principles exam and have substantial programming experience should consult with the CS course instructors as to which course to take.

#### **Natural Sciences**

Students who pass the advanced placement test in Biology or Physics B with a "4 or 5" will be awarded 1/3 unit of advanced placement credit. This credit will show on the transcript as "L". For students who score "4 or 5" in Physics C (Mechanics) will be awarded 1/3 unit in Physics 1110/1111. Students who score "4 or 5" in Physics C (Electricity and Magnetism) will be awarded 1/3 advanced placement credit for Physics 1120/1121. For those students who pass Physics B will be awarded 1/3 unit in Physics 1000. Students who score 4/5 on the Chemistry Advanced Placement Examination or 6/7 on the Chemistry International Baccalaureate Exam are automatically awarded 1/3 unit of credit for CH 1010.

#### **Mathematics**

Students who pass the AB mathematics examination with a "4" or "5" will be awarded 2/3 unit of advanced placement credit for MA 1021 and MA 1022. Students with a "4" or "5" on the advanced placement BC exam will be awarded 1 unit advanced placement credit for MA 1021, MA 1022 and MA 1023. Retroactive AP credit is only possible for MA 1021 and/or MA 1022 via the following pathways. In the four-course 1021-1024 mathematics sequence, students who arrive at WPI prepared to start with the second (or third) course in the WPI sequence, and who successfully pass that course and the one that follows it, will be considered to have established advanced placement credit for the first one (or two) courses. Retroactive AP credit is awarded for MA 1021 and MA 1022 if a student arrives at WPI prepared to take MA 1024 and successfully passes that course and MA 2051. To qualify for retroactive credit, the two WPI courses must be passed on the first attempt by D-term of the student's first year and the student must have no grades of NR in any course in the MA 1021-1024 sequence in the first year. The courses credited retroactively will be listed by number without an assigned grade and will count toward the distribution requirement in mathematics.

### **Project Lead The Way (PLTW)**

WPI awards credit to current WPI students who completed a PLTW Engineering course in high school, received a minimum of a "B" in the course, and earned on the PLTW End-of-Course Assessment either a stanine score of 6 or higher (before July 2018) or a minimum scale score of 410 for IED, 410 for POE, 420 for CEA, 430 for CIM, 450 for DE. WPI also honors PLTW transfer credits from other select PLTW university partners, such as RIT. Please visit the WPI Project Lead The Way web site (www.wpi.edu/+pltw) for more information and to apply for credit. A staff member will notify students of their earned credit..

# **Academic Honesty Policy**

Academic honesty is a fundamental principle of learning and a necessary foundation for all academic institutions, particularly those dedicated to independent project-based education, such as WPI. Violations of the principle deny the violators an opportunity to obtain confident command of the material they are credited with knowing, cheat their classmates out of deserved rewards and recognition, debase the institution, and demean the degree that it awards. It is, therefore, a matter of great and mutual concern to all members of the WPI community that a concerted effort be made to maintain high standards of integrity, both to protect the value of the educational process in which we are engaged and to maintain the credibility of the institution.

#### **Definition**

Individual integrity is vital to the academic environment because education involves the search for and acquisition of knowledge and understanding, which are, in themselves, intangible. Evaluation of each student's level of knowledge and understanding is a vital part of the teaching process, and requires tangible measures such as reports, examinations, and homework. Any act that interferes with the process of evaluation by misrepresentation of the relation between the work being evaluated (or the resulting evaluation) and the student's actual state of knowledge is an act of academic dishonesty. The following acts are examples of academic dishonesty at WPI:

### **Fabrication**

#### Examples:

- · Altering grades or other official records
- · Changing exam solutions after the fact
- · Inventing or changing laboratory data
- Falsifying research
- Inventing sources
- Sabotage of another student's work or academic record

#### **Plagiarism**

#### Examples:

- Misrepresenting the work of another as one's own
- · Inaccurately or inadequately citing sources including those from the Internet

#### Cheating

#### Examples:

- · Use of purchased term papers
- Copying on exams, homework, or take-home exams
- · Use of unauthorized materials or sources of information such as "cheat sheet," pre-programmed calculator
- Assistance of another person in cases where prohibited

#### **Facilitation**

#### Examples:

- · Sharing test questions or answers from an exam with another student
- · Letting another student copy a solution to a homework problem, exam, or lab
- Taking an exam for another student
- · Assistance in any act of academic dishonesty of another student

# Responsibilities of Faculty Members and Students

Faculty members should outline their policies concerning evaluation procedures and their expectations pertaining to academic integrity at the beginning of each course. Faculty must ensure that student performance is judged solely on the basis of academic work in courses and projects. Because of the differences in disciplines and the type of work involved, faculty interpretation regarding what constitutes academic dishonesty may vary across campus. Since project-based education places a strong emphasis on group work, faculty and students should be particularly attentive to the distinction between group work and individual performance expectations. Faculty and students are responsible for knowing and understanding WPI's policy and procedure for dealing with academic dishonesty. Faculty are encouraged to implement measures designed to minimize or prevent academic dishonesty.

#### **Procedures**

The WPI faculty and administration have developed a set of procedures designed to ensure uniform (and fair) treatment of undergraduate or graduate students suspected of academic dishonesty. Students or others who suspect a faculty member of professional dishonesty should consult the academic department head or the provost.

- · Faculty shall report to the department chair any suspected act of academic dishonesty.
- The chair shall review cases referred to him/her to determine if there is reason for believing that academic dishonesty may be involved.
- · Faculty shall allow the student to continue in the course without prejudice, pending resolution of the case.
- The chair or instructor shall check with the dean or associate dean of students to determine if the student has any record of prior offenses involving academic dishonesty.
- The chair or instructor shall consult with the student involved. If the act of academic dishonesty is admitted and is the first violation of that nature, the chair or instructor may resolve the complaint within the department, provided the penalty is accepted by the student in writing. The maximum penalty that can be applied at the department level is dismissal from a course or a project without credit. In all cases, a signed, written report on the matter, including the action taken, shall be sent to the Dean of Students Office and to the student's Academic Advisor.
- For the second and subsequent violations, the case shall be submitted to the Campus Hearing Board for resolution
- The Campus Hearing Board shall hear the allegations, following standard procedures for disciplinary hearings established by WPI. The board may impose normal disciplinary sanctions and may recommend loss of any credit or grade for the course or project. If a student is found not responsible on a complaint of academic dishonesty, he/she may not be failed or penalized by the instructor on the grounds of dishonesty. The instructor shall assign a grade based on his or her assessment of the student's mastery of the material being evaluated.
- Disciplinary records for any act of academic dishonesty shall be retained in the Dean of Students Office for two years from the date of graduation or withdrawal from WPI, except when the sanction includes suspension or expulsion. In cases resulting in suspension or expulsion from WPI, disciplinary records shall be kept in perpetuity. Records for cases that are pending completion of the hearing and/or the sanction shall be kept in perpetuity. Judicial records are kept separate from a student's academic records. A student's judicial record may be shared internally as appropriate to determine if a past record exists. Records shall be available to prospective employers and other authorized individuals, in accordance with federal regulations that require written permission from the student involved.

# **Commencement Policy**

The policy for allowing certain undergraduate students who have not completed all degree requirements to participate in Commencement exercises is:

- 1. Undergraduate students who have not met all degree requirements will be eligible to participate in Commencement exercises only if *all of the following* are true:
  - 1. At the end of D term, the student is within 1 unit of completing all requirements for graduation.
  - 2. The student has completed at least 2 of the 3 WPI Project Requirements (Humanities and Arts Requirement, IQP, and MQP).
- 2. Undergraduate students who meet these conditions will be permitted to participate in Commencement exercises but will not receive their diploma. The names of such students will not be included in the Commencement program. The actual degree will be conferred only after all degree requirements have been completed. The student will not be eligible to participate in any future commencement ceremonies for this degree.
- 3. There are no exceptions to this policy.

### **Graduation with Honors**

For all degree candidate students graduating from WPI after May 1, 2011, graduation honors will be determined as follows:

### **Graduation With High Distinction**

An A grade on all four of the following:

- MQP
- IQP
- Inquiry Seminar/Practicum
- Eight units (24/3 units) of work registered at WPI (exclusive of PE and of the MQP, IQP and the Inquiry Seminar/Practicum component of the Humanities and Arts Requirement).

### **Graduation With Distinction**

A grade of A on the following criteria:

- MQP
- IQP
- · Inquiry Seminar/Practicum
- Four units (12/3 units) of work registered at WPI (exclusive of PE and of the MQP, IQP and the Inquiry Seminar/Practicum component of the Humanities and Arts Requirement).

#### or

A grade of A on the following criteria:

- Two of the three projects: MQP, IQP and the Inquiry Seminar/Practicum
- Six units (18/3 units) of work registered at WPI (exclusive of PE and of the MQP, IQP and the Inquiry Seminar/Practicum component of the Humanities and Arts Requirement).

# **Honors for Double Majors**

If a student completes two majors, the student is awarded a degree with "Distinction" or "High Distinction" if the student meets the criteria above in either or both majors; if both awards are received, the degree is awarded with "High Distinction."

# **Awards and Prizes**

Awards and prizes are determined by the academic department or by selected committees.

### College Awards

#### SALISBURY PRIZE AWARDS

These historic awards are made to highly meritorious seniors. These awards were established by Stephen Salisbury, a WPI founder and former president of the Board of Trustees.

#### TWO TOWERS PRIZE

This prize is awarded to the student who, through general academic competence, campus leadership, regular course work and special work in research and projects, best exemplifies a combined proficiency in the theoretical and practical union implicit in the Two Towers concept, which is at the heart of WPI's Two Towers tradition.

#### SIGMA XI AWARDS IN ENGINEERING AND SCIENCE

These awards in engineering and science are given to the students and their advisors for the Major Qualifying Projects which are judged to be the best in originality, contribution to the field, professional competence, and for the most useful applications.

#### PRESIDENT'S IQP AWARDS

These awards are given to student teams whose conception, performance, and presentation of their Interactive Qualifying Projects have been judged outstanding in focusing on the relationships among science, technology, and the needs of society.

#### PROVOST'S MQP AWARDS

These awards offer recognition to those students who have completed outstanding Major Qualifying Projects as a demonstration of their competency in a chosen academic discipline. Each academic department conducts its own competition to select the winners.

#### **CLASS OF 1879 AWARD**

Endowed by the Class of 1879, this prize is awarded by the Humanities and Arts Department yearly for excellent work in the culminating project for the Humanities and Arts Requirement. Projects must demonstrate exceptional creativity and skill in conceiving, developing, and expressing a theme within any discipline within the humanities and arts.

#### **OUTSTANDING WOMEN STUDENT AWARDS**

**Marietta E. Anderson Award**, an award which is presented to the most outstanding woman student in one of the three lower classes who not only has a superior academic record, but also has been a work-study student, participated in recognized extracurricular activities, and has been a volunteer for college-sponsored activities.

Funds from an anonymous donor provide the following awards to women students preparing for careers in engineering or science. Awards are based on academic excellence, contributions to the WPI community, and professional goals. The awards are named each year for women who have played significant roles at WPI.

Bonnie-Blanche Schoonover Award, honoring WPI's former librarian.

Ellen Knott Award, honoring a long-time secretary in the Mechanical Engineering Department.

Gertrude R. Rugg Award, honoring WPI's late Registrar Emerita.

#### Wilmer L. and Margaret M. Kranich Prize

Students who are seniors or completing their junior year will be nominated by faculty for the annual award. The award will go to a student majoring in engineering, science or business who best exemplifies excellence in the humanities and in the full integration of humanities into his/her undergraduate experience. Double-majors who fulfill one major in Humanities and Arts are not eligible.

#### **CHARLES O. THOMPSON Scholars**

Named in honor of the first president of WPI, this honor recognizes outstanding performance by first-year students.

To be eligible for membership, students must receive all

A's and B's, with a minimum of six A's, in their academic subjects during the first three terms at WPI. Selections are made in Term D.

A cash award is presented to the outstanding first year student. Charles O. Thompson Scholars are eligible to apply for this award by submitting an essay to the Office of Undergraduate Studies during D Term.

# Special Awards

Alpha Phi Omega Service Award

#### AMERICAN INSTITUTE OF CHEMISTS FOUNDATION

Chemistry and Biochemistry

An award by the New England chapter of the American Institute of Chemists to honor outstanding seniors majoring in chemistry and biochemistry.

#### AMERICAN SOCIETY FOR METALS: CHESTER M. INMAN '14 OUTSTANDING STUDENT AWARD

Mechanical Engineering

The Worcester Chapter of the American Society for Metals presents \$200 to a student for excellence in a Major Qualifying Project dealing with processing or materials science.

#### Harold S. Black Award

Electrical and Computer Engineering

This award was established in 2001 to honor the memory of inventor Harold S. Black '21. The award is given by the faculty of the Electrical and Computer Engineering (ECE) Department to one or more ECE seniors who have demonstrated outstanding creativity and enthusiasm in engineering problem solving, practical implementation of problem solutions, and exemplary character in their contributions to the welfare of the WPI community.

#### **Central New England Aiche Award for Significant Contribution**

Chemical Engineering

This award is given to an individual in recognition of significant contributions to the American Institute of Chemical Engineers.

#### Community Service Award Presented in the Memory of Edwin B. Coghlin '23

Alumni Office

This award recognizes individuals who have demonstrated an extraordinary personal commitment above and beyond their normal involvement on campus in both academic and extracurricular activities.

### **Computer Science Outstanding Junior Award**

Computer Science

This award is presented to a computer science junior who has an excellent academic record and who shows promise for continuing success.

## **Computer Science Outstanding Senior Award**

Computer Science

This award is presented to one or more computer science seniors who have an outstanding record and who have contributed to the enrichment and professional development of fellow students.

#### JAMES F. DANIELLI AWARD

Biology and Biotechnology

This award, given by the Department of Biology & Biotechnology, honors the memory of Dr. James F. Danielli, a former department head and world-famous scholar.

#### FRANK D. DEFALCO AWARD

Civil and Environmental Engineering

Award to WPI undergraduate Civil Engineering students who has completed two and one half years towards a B.S., interested in career constructed facilities and a member of ASCE student chapter.

#### **Eta Kappa Nu Outstanding Student Award**

Electrical and Computer Engineering

The electrical and computer engineering honor society presents this award to the outstanding senior and junior in recognition of their academic achievement and their service to the WPI community.

#### **GENERAL CHEMISTRY ACHIEVEMENT AWARD**

Chemistry and Biochemistry

This award is given to the student who has completed the freshman chemistry course with superior academic performance. Department award.

#### **ALLAN GLAZER AWARD**

Mechanical Engineering

Established in 1992 by the family and friends of Allan Glazer '47, this award is given to a junior majoring in mechanical engineering who has demonstrated outstanding academic achievement, special ingenuity in problem solving, and enthusiasm for engineering challenges.

#### **Goat's Head Award**

Student Government Association

Awarded annually to the outstanding new Senator of the year.

#### THE ROBERT H. GODDARD AWARD

**Physics** 

Established by the classes of 1908 and 1909 as a memorial to Dr. Goddard, this prize is awarded for outstanding achievement, scholarship, consistent effort and dedication of purpose in both theoretical and experimental areas of physics.

#### **HEALD BROTHERS SCHOLARSHIP**

Mechanical Engineering

This scholarship identifies and supports outstanding young men and women who represent, in modern form, the spirit of "Yankee Ingenuity" that characterizes the evolution of the great manufacturing enterprises from the beginnings of the American Industrial Revolution.

#### ANDREW HOLT MEMORIAL AWARD

Civil and Environmental Engineering

This award is presented to a civil engineering senior who has consistently earned academic honors and who shows excellent promise for success.

#### Steven J. Kahn Award

Humanities and Arts

This award is presented to the outstanding senior in the WPI Glee Club in recognition of his contribution, commitment, and unwavering loyalty to the organization.

#### THE WILLARD ELLIOT LAWTON-SAMUEL JAMES PLIMPTON AWARD

**Physics** 

Established in honor of Professors Lawton and Plimpton, this award is presented to a student who has shown improvement in scholarship, not only in grades but also in depth of understanding.

#### **Lincoln Arc Welding Foundation Award**

Civil and Environmental Engineering

This award recognizes outstanding achievement in solving design, engineering, fabrication, and research problems.

## **Medwin Honors String Quartet Scholarship**

Humanities and Arts

Scholarship money is given to the members of the Medwin Honors string Quartet (4 string players, 2 violins, 1 viola, 1 cellist), who are selected by audition each year.

#### THE ALFRED R. AND JANET H. POTVIN AWARD

Biomedical Engineering

Separate awards are given to the outstanding undergraduate and graduate student in Biomedical Engineering in recognition of their academic performance and their service to WPI and/or the outside community.

#### CARL F. MEYER IMPROVEMENT AWARD IN CIVIL ENGINEERING

Civil and Environmental Engineering

Established by Professor Emeritus Meyer, this award is presented to the civil engineering senior who has demonstrated the most improvement in academic and professional attitude since entering the department.

### **RICHARD V. OLSON AWARD**

Mathematical Sciences

Established to honor the memory of mathematics Professor Richard V. Olson, this annual award to a WPI sophomore recognizes outstanding performance in basic mathematics courses.

#### **EDWARD C. PERRY AWARD**

Mechanical Engineering

This award is given annually to an engineering student or students for an outstanding major qualifying project in the area of mechanical design. The award is made possible through a bequest from Miriam Perry Goll and honors the memory of her father, Edward C. Perry '04, a design engineer with General Electric Company throughout his professional career.

#### PI TAU SIGMA AWARD FOR EXCELLENCE

Mechanical Engineering

The mechanical engineering honor society, Pi Tau Sigma, presents this award to the outstanding junior mechanical engineering student.

#### **Robotics Engineering Outstanding Junior Award**

Robotics Engineering

This award is presented to a robotics engineering junior who has an excellent academic record and who shows promise for continuing success.

### **Robotics Engineering Outstanding Senior Award**

Robotics Engineering

This award is presented to one or more robotics engineering seniors who have an outstanding record and who have contributed to the enrichment and professional development of fellow students.

#### Senior Mathematical Sciences Major Award

Mathematical Sciences

This award is presented to the senior mathematical sciences major who has shown outstanding performance and who has made valuable contributions to the WPI mathematical community.

#### SOCIETY OF MANUFACTURING ENGINEERING SCHOLARS AWARD

Mechanical Engineering

An SME Student Chapter member, recommended by the faculty and confirmed by the officers of SME chapter 25, who has demonstrated excellent scholarship, leadership, service, potential to contribute to the profession of Manufacturing Engineering.

The award includes scholarship assistance (\$900) for full-time study if the winner enrolls in WPI's graduate MFE program.

## SOCIETY OF MANUFACTURING ENGINEERING UNDERGRADUATE SCHOLARSHIP AWARD

Mechanical Engineering

Awarded to a 1st, 2nd, or 3rd year SME Student Chapter member, recommended by the faculty and confirmed by the officers of SME chapter 25, who has demonstrated excellent scholarship and commitment.

#### Society of Manufacturing Engineers Outstanding Student Award

Mechanical Engineering

Awarded to the top three SME Student Chapter members each year, regardless of year, who have not already received the award.

#### Society of Manufacturing Engineers MQP Award

Mechanical Engineering

An SME Student Chapter member, selected by a panel of practicing manufacturing engineers to have the best MQP in the area of Manufacturing Engineering.

#### STUDENT-ALUMNI INTERACTION AWARD

Alumni Office

This award is presented by the WPI Alumni Association in recognition of individuals who, through their involvement on campus, have facilitated the continuing development of interaction between students and alumni. Recipients are full-time undergraduate students who have demonstrated extraordinary personal commitment to WPI and the Alumni Association above and beyond the normal involvement on campus.

The award is designed to recognize students who have stepped forward to become leaders in the alumni and student communities and, in doing so, have benefited both WPI students and alumni in a unique and purposeful way.

#### ACS UNDERGRADUATE AWARD IN ANALYTICAL CHEMISTRY

Chemistry and Biochemistry

Award which is intended to encourage student interest in analytical chemistry and to recognize a student who displays an aptitude for a career in the field. This award is for third-year students.

# **Degree Requirements**

# **WPI Degree Requirements**

# **WPI Degree Requirements**

(effective for students matriculating after August 1, 2011)

WPI's academic requirements are specifically designed to develop an overall educational experience which meets the goals of the college. Each requirement plays a supporting role as follows:

- To provide intellectual breadth and a better understanding of themselves and the diversity and creativity of human experience, every WPI student must complete a Humanities and Arts Requirement;
- To provide an understanding of the priorities of other sectors of society, develop the ability to communicate
  effectively with disparate groups, organize and derive solutions to complex problems, and gain an
  awareness of the interrelationships between technology and people, every WPI student must complete an
  Interactive Qualifying Project (IQP);
- To provide a capstone experience in the professional discipline, to develop creativity, instill self-confidence and enhance the ability to communicate ideas and synthesize fundamental concepts, every student must complete a Major Qualifying Project (MQP);
- To provide for learning through an academic program with fabric and course balance while encouraging individual student choices within that framework, every student must fulfill Distribution Requirements.

### **WPI Terms and Credit Units**

The Bachelor degree from WPI normally is based upon a residency at WPI of 16 terms. WPI operates on a system with four seven-week terms, two in the autumn semester (Terms A and B) and two in the spring semester (Terms C and D). A summer session, Term E, is also available. The normal academic load for each term is defined as one unit of work, usually divided among three courses or projects. Thus, the usual credit unit for courses or independent study/projects is 1/3 unit. Qualifying Projects require one full unit of activity which may be concentrated into a single term (especially if conducted off-campus) or spread throughout an academic year. The degree will be awarded upon completion of the following:

#### **DEGREE REQUIREMENTS:**

- 1. The Humanities and Arts Requirement Qualification by overall evaluation of two units of work in the humanities and arts.
  - To provide intellectual breadth and a better understanding of themselves and the diversity and creativity of human experience, every WPI student must complete a Humanities and Arts Requirement.
- 2. The Mathematics and Science Requirement (See distribution requirements for individual programs)
  - The Mathematics and Science Requirement defines a minimum standard of scientific, technological, engineering, and mathematical literacy for graduates of WPI, regardless of major field. Most degree programs will provide a substantial level of preparation in most of these areas, far beyond this standard. Students will satisfy this requirement by satisfying the program requirements of their individual major programs.
  - The goals of the Mathematics and Science Requirement at WPI are that students will be able, in their careers and daily lives, to: 1) explain and apply key concepts and principles of scientific disciplines and use an understanding of scientific methods to make critical judgments, 2) apply mathematical methods to understand the solution of real-world problems, 3) productively and appropriately use computers and other technology, 4) use methods from the quantitative, natural or engineering sciences to systematically identify, formulate, and solve problems.
  - The specific requirement is two units of work in science, engineering, mathematical science or computer science. Two-thirds units of work must be in Quantitative Science; two-thirds units of work must be in Natural or Engineering Science; the final two-thirds unit may be from any of the Quantitative, Natural, or Engineering Sciences. Each major program may decide which courses and/or prefixes count for each category. Each major program may set more restrictive requirements as the program sees fit.

## 3. The Interactive Qualifying Project

 Successful completion of a qualifying project relating science and/or technology to society (the Interactive Qualifying Project, or IQP) representing at least one unit of credit in project or independent study work. The format of the documentation is to be in accordance with current WPI policy on such documentation.

#### 4. The Major Qualifying Project

- Successful completion of a qualifying project in the major area of study (the Major Qualifying Project, or MQP) representing at least one unit of credit in project or independent study work. The format of the documentation is to be in accordance with current WPI policy on such documentation.
- 5. Distribution Requirements (See program description for specified departments)
  - Satisfaction of published academic activity distribution requirements in or relating to the major area of study. These requirements typically total no more than ten units (including the MQP and two units to fulfill the Mathematics and Science Requirement) and are specified by general topical subject area, not by specific courses. Completion of distribution requirements will be certified by the appropriate Program Review Committee (PRC), upon recommendation by the student's academic advisor. For students desiring designation of a major area for which a determination regarding distribution requirements has not previously been made and published, a faculty committee will be appointed by the department head or DIGS dean to review and approve the student's program of study.

## 6. Social Sciences

Completion of 2/3 unit of work in the social sciences, exclusive of qualifying project.

## 7. Residency Requirement

• A minimum of eight units *must* be completed satisfactorily in residence at WPI. (It is anticipated the normal residence at WPI will be 16 terms.)

#### 8. Minimum Academic Credit

 The minimum academic credit required for the Bachelor degree is 15 units. Credit accumulated beyond the published distribution requirements shall be accomplished by the addition of "free elective" work.

## 9. Wellness and Physical Education

 Qualification in wellness and physical education shall be established by completing 1/3 unit of course work (four WPE classes) or its equivalent. Such an equivalent, for example, may be participation in club or varsity sports.

# **Degree Options**

## Concentrations

#### **Definition**

A Concentration is an option associated with a major which provides recognition for focused and coordinated academic work either within the major or within an area of study closely related to the major.

#### **Rules**

- 1. All Concentrations require completion of two units of integrated academic study plus an MQP with a topic and content appropriate to the given Concentration.
- 2. Concentrations deemed to belong exclusively or primarily within the stated major must be accommodated within the distribution requirements of that major.
- 3. Concentrations deemed to have a substantial interdisciplinary nature can exceed the normal 10-unit allotment of the major by as much as 1 unit, provided that the additional requirements do not include or permit academic work designated by the major prefix or coursework normally taken to satisfy the major's portion of the distribution requirements. Furthermore, Concentrations of an interdisciplinary nature are permitted to use up to 1 unit of the academic program beyond the distribution requirements of the major, including the IQP, Social Science requirement, and Free Electives, as deemed appropriate.
- 4. The requirements of the Concentration must be designed to offer choices for the student within the major area and, if relevant, outside the distribution requirements of the major; however, the Concentration requirements must not preclude meeting the normal distribution requirements for the major.
- 5. Rules and guidelines for each Concentration will be formulated by the faculty associated with the governing major, and must be reviewed by the Committee on Academic Operations (CAO) and subsequently approved by the Faculty. CAO is empowered to rule on whether a proposed Concentration is disciplinary or interdisciplinary.
- 6. An individual program of study leading to a major with a Concentration will be planned by a student in consultation with his/her academic advisor. The student's intention to pursue a Concentration will be declared by application to the appropriate Program Review Committee in accordance with that Committee's schedule of deadlines. Application deadlines should be designed to enable Committee review and communication of decisions to students at a sufficiently early point that flexibility of schedule still exists. Extenuating circumstances may be considered at the discretion of the Program Review Committee.
- 7. Concentrations and minors are additional degree designations. Any credit earned for an additional degree designation must not overlap with credit earned for another additional degree designation by more than one unit. Also, no credit-bearing activity may be triple-counted towards degree designations or degree requirements.

#### Minors

#### **Definition**

A minor is a thematically-related set of academic activities leading to a degree designation in addition to but separate from that granted by the major. A minor should be available to students of any major, with the exception of a minor which overlaps with a major area to such an extent that it is not sufficiently distinct from that major. The Committee on Academic Operations (CAO) is responsible for the review of proposed minor programs and decisions regarding allowed major/minor combinations.

## **Rules**

- 1. A minor requires completion of two or more units of thematically related activity. Individual departments may impose additional restrictions such as a capstone or integrative experience. Students should consult individual minor Program descriptions in Section 2 of this catalog for these restrictions.
- 2. It is expected that minor requirements will be structured so that all acceptable major/minor combinations can be accommodated within a normal 16 term framework.
- 3. A minor may include any portion of the academic program, excluding the MQP. Academic activities used in satisfying the regular degree requirements may be double-counted toward meeting **all but one unit of the minor requirements**, subject to the following restrictions:
  - 1. The one unit of double-counted work may include at most 1/3 unit of the IQP, 3/3 units of the Humanities and Arts Requirement, or a combination thereof.
  - 2. At least one unit of the minor must be free elective choices.
- 4. The Program Review Committee for a minor area will consist of faculty members designated by the sponsoring faculty members.
- 5. A minor area must be proposed by a sponsoring group of faculty and must be defined by the purpose of achieving an educational goal beyond those apparent or implicit in the regular degree requirements. Student- initiated minor programs must be developed with the approval of a sponsoring group of faculty advisors. Each minor program must be reviewed by CAO for its individual merit.
- 6. Minors are additional degree designations. Any credit earned for an additional degree designation **must** not overlap with credit earned for another additional degree designation by more than one unit. Also, no credit-bearing activity may be triple-counted towards degree designations or degree requirements.

Minors are described in the "Program Description" section of this catalog. Minors sponsored by a department are described following the department. Others are listed in the "Interdisciplinary Minors" section. Follow this link to the current list of approved minors:

#### **WPI Minors Listing**

Interdisciplinary or Individually Designed (ID) minors are approved by the Committee on Academic Operations (CAO).

The form needed to declare a minor or to propose an interdisciplinary or individually designed minor can be found under <u>Curriculum Adjustments</u> on the Registrar's Office website.

# **Double Majors**

An option for some students who wish to broaden their WPI experience is the completion of two distinct majors through the double major option. The choice to pursue a double major should be made early in a student's career. No student shall complete more than two undergraduate majors.

A double major should signify capacity in two distinct disciplines. Some combinations of double majors are not sufficiently distinct to merit this designation. Departments and programs decide whether any combinations of double majors overlap to such an extent as to be disallowed. As of the publication date of this catalog, the following combinations are not allowed:

- · Actuarial Mathematics and Mathematical Sciences
- Aerospace Engineering and Mechanical Engineering
- Biochemistry and Chemistry
- · Business and Management Engineering
- Business and Management Information Systems
- · Civil Engineering and Architectural Engineering
- · Civil Engineering and Environmental Engineering
- · Industrial Engineering and Management Engineering with Concentration in Industrial Engineering
- · Interactive Media and Game Development Technology and Interactive Media and Game Development
- Management Information Systems and Management Engineering with Concentration in Information Technology

Physics and Applied Physics

Students who wish to pursue any double major should consult with faculty advisors in both majors. Exceptions to disallowed double majors must be approved by the Committee on Academic Operations.

Degree requirements for double majors are as follows

- 1. **Distribution Requirements.** The distribution requirements of each major must be met, but requirements common to both majors have to be met only once.
- 2. **The Humanities and Arts Requirement.** No modifications are made to the Humanities and Arts Requirement for double majors. All students, including majors in Humanities and Arts or International and Global Studies must satisfactorily complete the Humanities and Arts Requirement culminating in an Inquiry Seminar or Practicum
- 3. **The Interactive Qualifying Project.** If one of the majors of a double major is in Social Science and Policy Studies, a single project bearing at least one unit credit may be used to satisfy both the MQP requirement for the SSPS major and the IQP requirement. In order to be used to satisfy both requirements, the combined social science MQP and IQP must meet the goals of both projects. It must be interactive in nature involving an aspect of technology, and must also be an application of social science knowledge and analytical techniques. In order to select a single project that satisfies both the goals of the MQP and the goals of the IQP, the decision to pursue a social science double major needs to be made fairly early in the student's career.
- 4. **The Major Qualifying Project.** The MQP requirements for Double Majors may be fulfilled in either one of two ways:
  - 1. Option 1: Two distinct projects, one in each major, each of at least one unit of credit.
  - 2. Option 2: One interdisciplinary project of at least 4/3 units of credit, and having significant work associated with each major. An interdisciplinary project must be:
  - jointly advised by at least two faculty members, one associated with each of the relevant degree programs; OR
  - advised by a single faculty member who is associated with both of the relevant degree programs.

Faculty associated with each degree program are listed on the departmental page. <u>Please follow this link for a directory of WPI Faculty</u>.

An interdisciplinary MQP involving social science may not be used as an IQP.

The interdisciplinary MQP option takes advantage of the value of interdisciplinary work at the intersection of the two majors. Students undertaking an interdisciplinary MQP must complete an *interdisciplinary MQP approval* form in advance of project registration, and this form must be signed by all advisor(s) on the project. This form must contain a summary of the proposed project work indicating the content relating to each major. The interdisciplinary MQP option is available only at the discretion of the faculty and only when all faculty advisor(s) agree on the project content. Students planning to use this option should identify and consult with their faculty advisor(s) well before the end of their junior year.

For a double major, completion of a 4/3 unit interdisciplinary MQP completes the 1 unit MQP requirement for each major. The assignment of credit is as follows: 2/3 unit is double counted toward each major, and the remaining 2/3 unit is allocated as 1/3 unit to one major and 1/3 unit to the other major.

*Note:* It is anticipated that in some cases a student pursuing a double major will join a project team whose other members are pursuing a single major. The double-majoring student will bring the interdisciplinary content to the project, and this additional work will be represented by the additional credit that that student (perhaps only that student) earns, and with an enlarged report prepared by that student.

For students wishing to pursue double majors, the program audit for each intended major must be completed and certified by the review committee of each department involved. Academic activities appropriate to both majors may be counted in both majors. For the policy in the special situation of double majors involving the social sciences see the Social Science and Policy Studies department description in Section 2 and the Double Major Distribution Requirements in Section 4 of the Undergraduate Catalog.

Certain interdisciplinary MQP's and corresponding double-majors in the same department are not allowed.

**Interdisciplinary MQP's with two faculty advisors**: All faculty advisors have equal status in approving the final project, and a single grade is submitted for each term's work and a single project grade is submitted on the CDR

form. Should an interdisciplinary MQP, once completed, be deemed acceptable as an MQP for one of the two majors, but not for the other, and/or if the faculty advisors cannot agree on a single grade after much effort to do so, the project may be considered as the MQP for a single major. This conversion can only occur with the consent of the student and the advisor(s) from the single major being selected.

# **Projects and Research**

At the heart of the WPI Plan is student research, open-ended inquiry, and original and creative design to solve problems and to make new discoveries. All students in all majors complete two qualifying projects:

- 1. The Major Qualifying Project (MQP),
- 2. The Interactive Qualifying Project (IQP).

The Major Qualifying Project requires the synthesis of all previous study as well as the development of new knowledge to solve problems in the student's major field. The MQP challenges the student to perform at an advanced level, as a professional would, and to communicate the results effectively.

The *Interactive Qualifying Project* challenges students to address a problem at the intersection of science and technology with human need.

These projects are substantial and are each equivalent to at least one-fourth of an academic year's worth of effort. Most IQPs are completed at an off-campus project center in collaboration with an external sponsor.

Projects must be accepted by a project advisor before project registration can be completed. Many project opportunities come from off-campus organizations, address real-world problems and thus provide experience invaluable for seeking jobs and for professional practice. Students are also encouraged to develop their own project ideas, to identify and work with interested faculty, and to form teams to pool resources and share points of view.

# **Resources - Getting Started**

There are many opportunities for students to learn about project opportunities both in the major (for the MQP) and for the IQP. Advice and links to additional resources can be found on the <u>Undergraduate Studies web page</u>.

# **Available Projects**

Students may obtain information about new or ongoing projects from a variety of sources. Principal sources include discussions with other students, especially those currently involved in a project, the Projects Program web site, department offices, or their web pages. Off-campus projects are discussed annually in the fall. In the spring, Project Opportunities in <a href="ep-Projects">eProjects</a> can be used as a directory of specific IQP projects or as a source of ideas for developing your own projects. Some students will find a project listed which fits their needs and interests exactly. In other cases, the listing will serve to lead students to a faculty member with whom project involvement can be negotiated. The proposals in eProjects are updated periodically to provide an accurate listing of available projects.

Students are encouraged to check the web site of the department of their major and Project Opportunities for MQPs in eProjects (https://eprojects.wpi.edu/), as well as consulting with their academic advisors and with faculty in their courses. In addition, academic departments hold special events where faculty present project and other research opportunities to connect with students who are currently doing research.

# **Project Advisor**

Academic advisors can assist students in identifying a project. They are aware of the project interests of many other faculty members, and have a list of faculty interests which will enable a student to find a faculty member who can help to develop a project idea. Faculty associated with the Department of Integrative & Global Studies (DIGS) are available to assist students in interdisciplinary and interactive projects.

# **Project Performance and Time-on-Task**

A student is normally expected to expend 15-17 hours per week on the average for each 1/3 unit of credit for project work, and expected achievement is based upon that commitment.

A project group, whether it involves one student or more, should have a minimum of one scheduled conference per week with the advisor(s). Additional time should be scheduled when the effort exceeds 1/3 unit per student or when more students are involved.

Students should be prepared to submit interim project reports to the advisor each week. Students are also encouraged to complete a proposal at the beginning of the project activity to define the scope and timeline for completion of the effort. In addition, oral reports may be required as determined by the advisor. At the end of the project, a report must be prepared to the satisfaction of the project advisor. For projects sponsored by off-campus organizations, both a written and oral report for the sponsors is normally expected.

# **Qualifying Project Grading**

The Faculty of WPI has endorsed the following grading guidelines for qualifying project activity:

- 1. Each term a student is registered for a qualifying project, the student receives a term grade reflecting assessment of his or her accomplishments for that term.
- 2. Upon completion of a project, each student will receive an overall project grade (also known as the "CDR grade," since it certifies completion of the degree requirement) reflecting his or her individual overall accomplishments for the project.
- 3. The term grades and the overall project grade reflect both the *products* of the project (e.g., results, reports, etc.) and also the *process* by which they were attained. The term grades and the overall project grade may be different.

# The following are some characteristics that faculty should use in communicating expectations and evaluating the quality of each student's project work.

The degree to which the student:

- · developed effective or creative goals or approaches,
- demonstrated initiative and originality,
- · showed depth and critical thought in analysis,
- · produced high quality results,
- took the lead in discussion, planning, and analysis,
- produced a clear, professional-level report with excellent drafts along the way,
- · anticipated work that needed to be done and completed it in a timely manner, and
- worked to advance the success of the team.

## For both terms and overall project, the available grades and interpretations are:

**A**: This grade denotes *excellent work* that attains all of the project goals and learning outcomes. The product and process of this work meet all of the expectations and exceed them in several areas.

- **B**: This grade denotes *consistently good work* that attains the project goals and learning outcomes. The product and process of this work meet but generally do not exceed all of the expectations.
- **C**: This grade denotes *acceptable work* that partially attains project goals and learning outcomes. The product and process of this work meet some but not all expectations.
- **SP**: This grade denotes *satisfactory progress* and certifies sufficient accomplishments to earn credit for that term. Faculty who assign this grade should provide clear feedback to the student regarding his or her progress during the term. The use of the SP grade is discouraged except in circumstances where the faculty member is unable

to judge the quality of the work, yet can attest that the granting of credit is appropriate. This is a temporary grade and must be replaced by a permanent grade consistent with the criteria outlined above by, if not before, the end of the project.

**NR**: This grade denotes work that did not attain the project goals or learning outcomes and is *insufficient for registered credit*. Both product and process were inconsistent with acceptable project work at WPI as outlined above.

**NAC**: This grade is reserved for *performance that is unacceptable*. It might mean that a student's performance (or lack of it) has seriously impeded group progress, or it has embarrassed the group, a project sponsor, or WPI. Note that this grade remains on the transcript.

- 4. Project goals should be established and clearly articulated early in the project. This may be done in the form of a formal project proposal. Learning outcomes for the qualifying projects have been established by the faculty and are published in the undergraduate catalog.
- 5. Project advisors should clearly convey in writing their expectations for learning and performance to project students at the start of the project, and provide students with substantive feedback on a regular basis during the project.

## **Electronic Project Submission**

WPI requires that all undergraduate students submit their Interactive Qualifying Project (IQP) and Major Qualifying Project (MQP) electronically (<a href="https://eprojects.wpi.edu/">https://eprojects.wpi.edu/</a>).

Students must be registered for a minimum of 1/6 unit of qualifying project credit in the term in which the final project report is submitted.

No matter which format is used to create the original report document (Microsoft Word, LaTeX or other), the final report must be converted to a PDF format in order to be submitted as an eProject. The final PDF is required, and additional related files such as simulations, computer programs, multimedia, and data sets may be submitted as a component of the project. Guidance on eProject report formatting and file formats for the final report and any supplementary files is provided within the online submission process, and detailed instructions are available from an online guide at the Gordon Library: <a href="https://libguides.wpi.edu/submitprojects">https://libguides.wpi.edu/submitprojects</a>.

The final project report should be carefully proofread. Once the submitted project has been approved by the advisor and released to WPI's digital repository (Digital WPI) by the Registrar's Office, it is considered an academic record and cannot be edited.

The deadline for the submission of the initial report draft and the final document may be established at the discretion of the project advisor. Drafts and reports need **not** be accepted by the advisor after the established deadline.

A project that is completed by a team of students, except in extenuating circumstances, will submit ONE project report from the group. After the MQP or IQP team submits the final version of the project report, the advisor must review the work and approve or reject it online at <a href="https://eprojects.wpi.edu/">https://eprojects.wpi.edu/</a>.

# **Group Qualifying Project Efforts**

Students meeting a qualifying project degree requirement by participation in a group, or team effort, will submit, at the discretion of the project advisor, either a single, comprehensive written report from the group, or individual written reports from each member of the group. A single, comprehensive written report must, however, include some means by which each individual's contribution to the group effort may be clearly identified. This identification may take the form of an "authorship page," simply a list of individual chapters and their respective authors, or of a prefacing statement in which each contributing group member is named as having carried out one or more specific tasks within the overall project effort.

In the case where one or more students leave an ongoing group project after having contributed at least one unit each of project effort, those students, again at the discretion of the project advisor, will submit either a single written report or individual written reports in satisfying the qualifying project documentation requirement. The same means of identifying individual contributions will be employed as described above.

# **Dissemination of Project Reports**

Completed project reports are made available to the public through Digital WPI, managed by WPI's Gordon Library (<a href="https://digital.wpi.edu">https://digital.wpi.edu</a>).

MQPs and IQPs completed for off-campus agencies are usually distributed within the sponsoring agency by the agency project liaison. A project report may be redacted or restricted from public viewing for a defined period of time, if it contains confidential or proprietary information of a sponsoring agency.

Students are responsible for keeping personal copies of project reports for their own permanent professional records. In this way, reports can be reviewed for later use, and incorporated into a professional portfolio.

Thus, MQPs and IQPs are best viewed as research reports which establish good professional practices as well as being potential sources for further study and research.

# Pay & Credit (for students working on sponsored projects)

Linked here

# **Projects**

# **Project Planning**

During the academic planning period, which starts in February, students who intend to conduct project work during the following year should set aside time to plan their projects, meet with faculty, and form project teams. Any pre-planned projects will be posted on the project opportunities section in e-projects (<a href="https://eprojects.wpi.edu/">https://eprojects.wpi.edu/</a>). Students are also encouraged to meet with faculty individually.

The most important and difficult part of a project is the planning which precedes the execution. The planning phase of your project will involve developing a background, talking to people in the field, finding out what has already been done in the area, and determining what your goals are and what you need to do to accomplish them. If any special equipment, financing, or resources will be needed for execution of the project, it is especially important to make this known early to ensure that it will be available to you. In addition, most faculty members require a project proposal before registration of the project.

# **Project Registration**

Students who intend to do project work must complete a project registration form by no later than the beginning of the first term of that project work. Students will complete their registration request through e-projects after the project is built by the project advisor and the student is added as a member. Instructions for this process can be found on the Registrar's website. Any student who will travel to an off-campus location, such as a Residential Projects Program site, is also required to fill out an electronic project registration form.

Project registration for terms A-E will be accepted up to the 10th day of the term (not including weekends) without penalty. A project involving an off-campus sponsor (MQP mostly, but some IQP) carries the further obligation of compliance with the rules and regulations of the sponsor. Often, these are specified in a formal contract between the sponsor and WPI, and are legally binding. At the time of registration, any affected student will be required to indicate the sponsor on the electronic registration form.

For an MQP, the project advisor or an associate advisor must be a member of the faculty in the discipline which corresponds to the major area of study of the student.

# **Change of Registration Information**

Students must make all project registration changes through e-projects. Students may make changes to the project by making an addendum to the previously registered project and submitting the changes electronically to the project advisor for approval. Credit distribution can be changed for the current term through day 10, or any future terms. No changes in credit distribution can be made after day 10 of the term.

# **Changing Project Advisor**

To change the project advisor for a degree-required project, students should contact the Registrar's Office.

## **Project Conferences**

Students should report to their project advisor's office at the beginning of the term to make arrangements for subsequent meetings.

## **Overload with Project**

Students are strongly encouraged to consult with their project advisor(s) before registering for an overload. Students are not permitted to overload during a one-term off-campus project offered in the Global Projects Program or during the prior term when students are enrolled in ID 2050, Social Science Research for the IQP and an associated pre-qualifying project.

## **Project Completion**

During the final term of registration for the project and sufficiently prior to the deadline for submittal of Completion of Degree Requirement Forms, students must submit their completed project report to the project advisors. Students are also required to submit a copy of the document to the participating off-campus organization sufficiently prior to the end of the term so that proprietary and confidential information in the report can be identified and removed. Most off-campus organizations require 30 days for this review, and the grade and final report cannot be submitted to the Registrar by the project advisor until this review has been done.

<u>Directions for submitting the project report electronically</u> are available from the Gordon Library. A final project report is submitted electronically through the e-projects website (See <u>Electronic Project Submission</u>) The electronic eCDR must be submitted by the project advisor no later than the 10<sup>th</sup> day of the next academic term.

A student who has filed an application to receive their degree in May must submit a completed eCDR to the Office of the Registrar by the last Thursday in D-term.

# **Registration Policy for Degree Requirements**

The completion of a degree requirement (MQP, IQP or Humanities and Arts Requirement) will not be recorded in the Registrar's Office after the tenth day of classes of a term unless the student is registered for a minimum of 1/6 unit of the same activity in that term. The deadline for receipt of the Completion Form is no later than the tenth day of classes for the next term. Any exceptions to this policy must be handled by written petition from the project advisor.

*Note:* Candidates for degrees must meet graduation deadlines if they differ from the above. Deadlines for degree candidates will be strictly enforced!

Only Completion of Degree Requirement (CDR) forms which are complete, correct and consistent with the student's registration records will be accepted by the Registrar's Office. (See PROJECTS AND RESEARCH section, page 14.)

# **Off-Campus Insurance and Legal Agreements**

WPI's insurance program includes a broad range of coverage for students doing projects in cooperation with off-campus organizations. This insurance coverage requires proper documentation of individual student participation. All students doing project work with off-campus organizations must complete the pertinent portion of the project registration form. In certain cases, where the project is included as part of a regular course, the course instructor must submit to the Projects Office a list of the students going off campus and the name(s) and address(es) of the organization(s) involved.

WPI has entered into a variety of agreements with off-campus organizations, covering a wide range of issues common to the projects program. Students agree to abide by these agreements during the registration for the project.

# Pay and Credit (for students working on sponsored projects)

Many WPI projects, including both the IQP and the MQP, are completed with an external partner or sponsor. It is important to emphasize that WPI project work is different from traditional internships or co-op experiences in two important ways. First, the primary purpose of the project work is always student learning, as defined by the learning outcomes associated with each project. Second, there must be a WPI faculty member advising the project who has primary responsibility for guiding the student work, for setting the goals of the work, and ensuring that the focus of the project remains student learning.

There do arise situations in projects sponsored by an external organization, usually a company or government agency, when the sponsoring organization requires that the students are classified as employees or interns and receive pay in order to work on the project. In these situations, approval from the Office of Undergraduate Studies is required.

WPI students may receive pay for work on an externally sponsored IQP or MQP when all of the following three conditions are met:

- 1. There is documentation, shared with the students, sponsors, and the faculty advisor(s), stating that the primary purpose of the project work is student learning.
- 2. WPI faculty advisor(s) have a central role in the project and have the responsibility and authority to guide and evaluate student work done on the project. The sponsor does not assign grades or evaluate student learning.
- 3. The Sponsored Project Agreement and the Scope of Work document is reviewed and approved/denied by the Office of Undergraduate Studies before project work begins. Proposals for pay and credit projects must be submitted for approval/denial by the Office of Undergraduate Studies before the fifth day of the academic year term (A, B, C, or D) or summer term (E1 or E2) preceding the term when project work will begin.

Note that, in order to receive academic credit, students must be registered for the project during the terms in which project work is being done. Work performed with an external sponsor prior to registration – and outside the three conditions described above – will not receive academic credit.

# Global Projects Program

The Global Projects Program offers WPI students the opportunity to complete a project at one of WPI's off-campus project sites. Some centers are residential, with students traveling to and living on site for an entire term, while others offer the opportunity to complete an off-campus project in Worcester, Boston, or other nearby communities. Project work conducted at these sites provides teams of students with extraordinary opportunities to learn by addressing real-world problems provided by industry, non-profit, non-governmental or government agencies.

The application process for these programs begins in the fall with the Global Fair. At the Fair, IQP, MQP, HUA and exchange program directors will be available to talk with students. Typically, students apply in Term A of the year preceding the year in which they would like to participate. Further information is available at the Global Experience Office in the Project Center or at <a href="https://www.wpi.edu/student-experience/resources/off-campus-projects">https://www.wpi.edu/student-experience/resources/off-campus-projects</a>.

The Global Experience Office strives to create project opportunities for all WPI students, but many project sites are in high demand and students are not guaranteed a placement at their most desired site. Accepted students must complete a series of pre-departure orientations and submit required paperwork to be eligible to travel.

All students accepted to an off-campus IQP Center will be registered for the preparation courses (ID 2050 and PQP) in the term immediately preceding their planned term of travel. Some preparation begins as early as two terms prior to departure. Students must be making satisfactory progress in their academic coursework in order to participate. Students must also follow all policies and procedures for off-campus projects which are overseen by the Global Experience Office: <a href="https://www.wpi.edu/student-experience/resources/off-campus-projects/policies">https://www.wpi.edu/student-experience/resources/off-campus-projects/policies</a>.

Prior to leaving campus for a project program site, each student is required to complete a project registration form

# The Interactive Qualifying Project

At WPI, students are expected to develop an understanding of how science and technology are embedded in the fabric of society. The Interactive Qualifying Project (IQP) challenges students to address a problem that lies at the intersection of science or technology with society. During the IQP, students work in interdisciplinary teams, often with an external sponsoring organization, to address real world problems. In doing so, students learn something about the role of science and technology, its impact on society, its place in meeting human needs and human efforts to regulate, control, promote and manage our changing technologies. The IQP is equivalent to three courses, typically undertaken in a student's junior year. It can be completed over three terms, or as a full course load for a student for one term, and it can be completed on-campus, or at one of our many residential project centers in the U.S. and abroad. For more on the IQP, visit <a href="https://www.wpi.edu/academics/undergraduate/interactive-qualifying-project">https://www.wpi.edu/academics/undergraduate/interactive-qualifying-project</a>. For more on the IQP and study abroad, see the <a href="https://www.wpi.edu/academics/">Global Projects</a> <a href="https://www.wpi.edu/academics/">Program website</a>. Completed IQP reports are electronically archived and made available to the public through Digital WPI, managed by WPI's Gordon Library (<a href="https://digital.wpi.edu/">https://digital.wpi.edu/</a>).

# **IQP Learning Outcomes**

The Faculty adopted the following statement defining learning outcomes for the IQP. Successful completion of an IQP is an important element in helping students achieve WPI's overall undergraduate learning outcomes.

Students who complete an Interactive Qualifying Project will:

- 1. Demonstrate an understanding of the project's technical, social and humanistic context.
- 2. Define clear, achievable goals and objectives for the project.
- 3. Critically identify, utilize, and properly cite information sources, and integrate information from multiple sources to identify appropriate approaches to addressing the project goals.
- 4. Select and implement a sound methodology for solving an interdisciplinary problem.
- 5. Analyze and synthesize results from social, ethical, humanistic, technical or other perspectives, as appropriate.
- 6. Maintain effective working relationships within the project team and with the project advisor(s), recognizing and resolving problems that may arise.
- 7. Demonstrate the ability to write clearly, critically and persuasively.
- 8. Demonstrate strong oral communication skills, using appropriate, effective visual aids.
- 9. Demonstrate an awareness of the ethical dimensions of their project work.

# Preparing for and Finding an IQP

Students are encouraged to view the IQP as a learning opportunity – a chance to gain knowledge outside their major field – while working with others to address open-ended, complex problems. The best approach is to consult with one's academic advisor and select courses to be taken in the first and second year at WPI that can provide a foundation for an IQP in the junior year. Often project preparation involves developing an understanding of the social sciences and humanities, as the concepts and analytical techniques of these disciplines are important in understanding the social context of science and technology. In addition, students enrolled in the Global Projects Program for their IQP will be expected to complete a course devoted to project preparation in advance of their travel.

Project topics originate with external organizations, faculty and students. Students who complete IQPs at an off-campus project center through the Global Projects Program work on project topics identified by external sponsoring organizations. Students can explore these opportunities in eProjects (eprojects.wpi.edu) and at the Global Opportunities Fair organized each September by the Global Experience Office (GEO, <a href="https://www.wpi.edu/offices/global-experience">https://www.wpi.edu/offices/global-experience</a>). Students completing projects on campus are encouraged to seek faculty members that share their interests to advise projects. Faculty interested in advising specific IQPs will post their project topics in eProjects (eprojects.wpi.edu). The Global School also hosts an On-Campus Project Opportunities Fair each March where students can meet faculty advisors to discuss projects being offered on campus during the following year.

The Global School and Global Experience Office offer administrative support for project activities. Students are welcome to seek further assistance from the staff on the first floor of the Project Center.

## What are IQPs About? Science, Technology, and Society

A detailed explanation of the IQP and its options can be found at <a href="https://www.wpi.edu/academics/">https://www.wpi.edu/academics/</a> undergraduate/interactive-qualifying-project. Proposed projects can be located in eprojects.wpi.edu. IQP (and MQP) projects are searchable in Digital WPI (<a href="https://digital.wpi.edu/">https://digital.wpi.edu/</a>).

# The Major Qualifying Project

The qualifying project in the major field of study should demonstrate application of the skills, methods, and knowledge of the discipline to the solution of a problem that would be representative of the type to be encountered in one's career. The project's content area should be carefully selected to complement the student's total educational program. In defining the project area within which a specific topic is to be selected, the student and academic advisor should pay particular attention to the interrelationships that will exist between the bodies of knowledge represented by courses, independent studies, and Preliminary Qualifying Projects; and by the Interactive Qualifying Projects.

MQP activities encompass research, development, and application, involve analysis or synthesis, are experimental or theoretical, emphasize a particular subarea of the major, or combine aspects of several subareas. In many cases, especially in engineering, MQP's involve capstone design activity. Long before final selection of a project topic, serious thought should be given as to which of these types of activities are to be included. Beyond these considerations, the MQP can also be viewed as an opportunity to publish or to gain experience in the business or public sectors.

Off-campus MQPs are also very valuable for access to state-of-the-art resources and contacts for future professional work.

## **Getting Started on an MQP**

Project topics are originated by students, faculty, or practicing professionals participating in WPI's off-campus project programs. A faculty member in each academic department acts as Project Coordinator for all majors within the department. The Project Coordinator has assembled MQP topic descriptions being proposed and has identified the faculty who will serve as project advisors for each topic. All project opportunities-MQP, IQP, PQP, on-campus originated and off-campus originated are made available to the student body through a planned information-sharing program of activities during C and D terms of the academic year prior to the start of the project.

## **Project Proposals**

Students are strongly encouraged to begin their MQPs with a project proposal. A detailed guide to preparing project proposals is available in department offices or on the Projects Program web page (<a href="https://www.wpi.edu/academics/Projects/">https://www.wpi.edu/academics/Projects/</a>).

## **MQP Learning Outcomes**

By completing their MQP, WPI students will achieve the following learning outcomes at a level at least equivalent to that of an entry level professional or graduate student.

Students who complete a Major Qualifying Project will:

- 1. apply fundamental and disciplinary concepts and methods in ways appropriate to their principal areas of study.
- 2. demonstrate skill and knowledge of current information and technological tools and techniques specific to the professional field of study.
- 3. use effectively oral, written and visual communication.
- 4. identify, analyze, and solve problems creatively through sustained critical investigation.
- 5. integrate information from multiple sources.
- 6. demonstrate an awareness and application of appropriate personal, societal, and professional ethical standards.
- 7. practice the skills, diligence, and commitment to excellence needed to engage in lifelong learning.

Specific disciplinary programs may add additional MQP outcomes, such as design or mathematical skills or teamwork, as appropriate.

# **MQP Project Centers**

Each project center has a WPI faculty member as the director, well-defined procedures for completing project work, and selective admissions processes. The Centers tend to be highly structured and require superior performance.

At the present time, the WPI project center close to campus is:

 University of Massachusetts Medical School Project Center/ Tufts University Cummings School of Veterinary Medicine.

Major qualifying projects are available at nearby University of Massachusetts Medical School (UMMS) and Tufts University Cummings School of Veterinary Medicine (TUCSVM) for students from many disciplines on campus. These institutions are nationally recognized for research and medicine and offer project opportunities over a wide range of research areas. Students performing projects at these centers work in cutting edge research programs and typically interact with graduate and post-doctoral researchers to solve real-world problems.

It is recommended that students spread their projects over the entire academic year. Students from any major interested in project opportunities should contact Dr. Destin Heilman in the department of Chemistry and Biochemistry.

# **Humanities and Arts Requirement**

## **Overview**

The Humanities and Arts Requirement empowers students to meet the broad educational goals of WPI. The balance between technological and humanistic education and the emphasis on inquiry-based approaches to student learning have been and remain hallmarks of a WPI education. In concert with WPI's other degree requirements, the Humanities and Arts Requirement embodies the institute's definition of an educated person. The Humanities and Arts Requirement engages students with theory and practice – *Lehr und Kunst* – through the following educational goals.

## **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 life-long interest in the humanities and arts.

# **Meeting the Requirement**

Students fulfill the humanities and arts degree requirement by completing two units of work consisting of five student-selected courses followed by a 1/3 unit Inquiry Seminar or Practicum (HU 3900, HU 3910, or equivalent). In selecting the courses, students must complete depth and breadth components of the requirement, as described below. *All 5 HUA courses must be completed before beginning the Inquiry Seminar or Practicum*. At the end of the Inquiry Seminar or Practicum, every student will submit a completion-of-degree requirement form (CDR) to certify completion of the requirement.

## **Depth Component:**

The WPI Plan calls for students to develop a meaningful grasp of a thematic area of the humanities and arts. To ensure this depth, students complete at least three courses of thematically-related work prior to a culminating Inquiry Seminar or Practicum in the same thematic area. Thematically-related work can be achieved in two ways:

- 1. Focusing on one of the following disciplines or disciplinary areas:
  - 1. art/art history (AR)
  - 2. music (MU)
  - 3. theatre (TH)
  - 4. literature and writing/rhetoric (EN, WR, RH)
  - 5. history and international and global studies (HI, HU, INTL)
  - 6. philosophy and religion (PY, RE)

Paths for language study are described below.

2. Defining the thematic area across disciplines or disciplinary areas in consultation with a Humanities and Arts faculty member.

To ensure that students develop a program of increasing complexity, at least one of the three thematically-related courses that precede the Inquiry Seminar or Practicum must be at the 2000-level or above. Students are strongly encouraged but not required to include a 3000-level course within their depth component. The structure of the requirement remains flexible so that students will become intentional learners as they select a sequence of thematically-related courses.

# **Breadth Component**

To ensure intellectual breadth, before taking the final Inquiry Seminar or Practicum, students must take at least one course outside the grouping in which they complete their depth component. To identify breadth, courses are grouped in the following manner:

- art/art history, theatre, and music (AR, TH, MU);
- · languages (SP, GN, ISE, AB, CN);
- · literature and writing/rhetoric (EN, WR, RH);
- history and international and global studies (HI, HU, INTL);
- philosophy and religion (PY, RE).

WPI offers a flexible curriculum to entrust students with a significant amount of choice and responsibility for planning their own course of study. At the same time, WPI requires students to take at least one course outside the depth area in order to provide exposure to more than one disciplinary approach within the arts and humanities, which include the creativity of the fine and performing arts, modes of communication in languages and literature, and the cultural analysis of the past and present. Students are encouraged to experiment and to take courses in more than one group outside the depth area if they wish. By providing exposure to multiple areas, the breadth component encourages students to appreciate the fundamental unity of knowledge and the interconnections between and among diverse disciplinary fields.

The one exception to this breadth requirement is that students may take all six courses in a foreign language.

## **Depth and Breadth Components in Modern Languages**

Development of proficiency in a language necessitates sustained engagement in the language beyond the elementary and intermediate level. Language instruction is broadly interdisciplinary and includes elements of the history, literature, and culture of a particular language area. A student in languages must still meet the depth component of the requirement by taking 6 courses in the language, one of which is approved as the final Inquiry Practicum or Seminar. Additional information about options for the Inquiry Practicum or Seminar in Chinese (CN), English for Non-Native speakers (ISE), German (GN) and Spanish (SP) can be found later in this section. A student who begins language study is not compelled to remain in that subject, but could choose to switch to another subject of study and complete the depth component in another thematic area.

## **Inquiry Seminar or Practicum**

The culmination of the depth component of the Humanities and Arts Requirement is an inquiry seminar or practicum. The educational goals for the seminar or practicum are the same regardless of the format.

## **Objectives of the Inquiry Seminar or Practicum**

- Critical inquiry: to develop each student's ability to apply concepts and skills learned in the humanities and arts, the seminar/practicum offers opportunities to engage in sustained critical inquiry, analysis, or problem-solving in a focused thematic area.
- Research and investigation: to engage students in research, discovery, creativity, or investigation, the seminar/practicum provides opportunities for students actively and critically to seek and evaluate new information and insights using multiple sources. These opportunities need not necessarily be research papers.
- Communication and writing: to develop each student's ability to communicate effectively both orally and in writing, the seminar/practicum includes discussion of appropriate communications skills and provides opportunities to revise written work after receiving feedback from the instructor.
- Intellectual independence: to foster independence of thought, the seminar/practicum offers significant opportunities for individual, self-directed work.
- Conversation and dialogue: to promote individual reflection and the appreciation of diverse perspectives, the seminar/practicum consists of classroom activities other than traditional lecture to encourage discussion and collaborative learning in a spirit of openness, cooperation, and dialogue with peers. The thematic focus, structure, and assignments for each seminar or practicum are to be determined by each individual instructor to achieve these goals.

# **Inquiry Seminar**

The Inquiry Seminar, usually taken in the sophomore year, represents the culmination of the Humanities and Arts Requirement. The Seminar provides an opportunity for students to explore a particular topic or theme in the humanities in greater depth. The Seminar has two primary goals. The first is to foster independence of student thought, typically through some form of self-directed activity. The second is to encourage a cooperative, dialogic approach to inquiry, through open exchanges with peers in a small, intensive classroom setting (typically 12 students or fewer). Students learn how to frame questions in the context of a particular discipline or field of study, and to explore or investigate problems using methods appropriate to work in the humanities and arts.

As the student's capstone experience in the humanities and arts, the Inquiry Seminar is intended to help students take their knowledge of the humanities to a higher level. The purpose of the Inquiry Seminar, therefore,

is not to provide a broad survey or general introduction to a given discipline, but to provide a structured forum in which students might 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 setting. The pedagogical idea behind the Inquiry Seminar is that work in the humanities and arts is at once an intensely personal enterprise, in which the individual freely draws on her or his own particular interests, abilities, passions, and commitments, and at the same time a form of ethical community in which the practitioner is always in conversation with and accountable to others.

While the specific content and requirements of the Inquiry Seminar vary from instructor to instructor, all Inquiry Seminars incorporate self-directed learning as a significant part of the curriculum. It is the department's expectation, therefore, that by the time they enroll in the Seminar, students should have sufficient background in the humanities and arts to be able to work independently and to pose questions of their own. Students will be asked to research and write a term paper, to assemble a portfolio of writings or exercises, or otherwise to demonstrate their ability to pose a question of relevance to humanities inquiry, and to answer it. At the same time, the Seminars are designed to foster an atmosphere of intellectual collaboration and discovery. Students are required to participate fully in seminar discussion, to share the results of their own research or activities, and to engage the ideas and interests of their peers in a constructive and collegial way.

## **Practicum in Humanities and Arts**

Students in the performing arts have the option to complete their Humanities and Arts sequence with an Inquiry Practicum in music or theatre. A practicum shares the same goals and objectives of an inquiry seminar but provides students with a production/performance experience which emphasizes the hands-on, practical application of skills and knowledge gained from previous Humanities and Arts courses. Samples of practicums in music include composing, arranging, or performing a solo recital. Theatre students may choose to work on a campus production in a number of production roles, including but not limited to acting, directing, dramaturgy, design, technical production, or management. In addition to weekly meetings, students may be required to attend rehearsals, performances, and other production-related activities. The design of the final project is determined through conversations between instructors and students. Due to the unique nature of the practicum, permission of the instructor is required to enroll in a practicum.

# **Languages: Practicum or Seminar**

Students in languages may complete the Humanities and Arts Requirement in one of the following three ways:

- 1. Practicum in the sixth and final course in a language. The practicum will include evaluative components or exams to demonstrate overall language skills in four areas: listening, speaking, reading, and writing. The practicum will require students to demonstrate breadth of cultural knowledge of the language area. (Examples of practicum courses: CN 2544, CN 3544, GN 3512, GN 3515; SP 3522; SP 3527)
- 2. Advanced language seminar after five previous courses in the language. The seminar will explore a thematic topic and provide opportunities for individual inquiry. (Seminar examples: GN 3513, GN 3514; SP 3523, SP 3524, SP 3525, SP 3526, SP 3528, SP 3529, SP 3530, SP 3531)
- 3. Advanced language seminar after advanced-level language courses combined with courses from other areas of study. Students who demonstrate basic oral, written, and cultural knowledge of a language in a placement test at the advanced level may combine courses from other areas for their requirement. (Seminar examples are the same as option 2.) International students who are non-native speakers may take a combination of ISE and WR courses and fulfill the HUA requirement by taking a 3000-level or above ISE/WR project-based course.

Option 1 and 2 require students to take six courses in a language. For example, in option 1, a student without prior language training might begin with GN 1511 Elementary German I and conclude with a practicum in GN 3512 Advanced German II. In option 2, for example, a student might start with SP 2521 Intermediate Spanish I followed by five Spanish courses which culminate in one of the designated seminars. In option 3, students who demonstrate knowledge of the language at the advanced level may mix courses from other areas in their course sequence. For example, a student might take two courses from history, philosophy, music, etc. along with four advanced Spanish courses which would culminate in a designated seminar. Students in the English language track might begin with three ISE courses, take one WR course, one from history, and conclude with a

3000-level ISE/WR course. Students in all three options for languages would be required to submit the same materials to demonstrate completion of the requirement as students whose culminating experience was an inquiry seminar or practicum in another area of the Humanities and Arts.

# HUA Faculty Arranged by Disciplinary Group Art/Art History (AR)

Roshanak Bigonah (AR) Jennifer deWinter (AR) Adryen Gonzalez (AR) Edward Gutierrez(AR) Marie Keller (AR) Jo Ellen Reinhardt (AR) Joshua Rosenstock (AR) M. David Samson (AR)

## Music (MU)

Scott Barton (MU) Fred Bianchi (MU) V.J. Manzo (MU) Douglas Olsen (MU) Joshua Rohde (MU) Douglas Weeks (MU) Brent Wetters (MU)

## Theatre (TH)

Patrick Crowe (TH)
Laura Eckelman (TH)
Sarah Lucie (TH)
Kathryn Moncrief (TH)
Olivia D'Ambrosio Scanlon (Adjunct)
Steve Taylor (OBC/TH)

## Languages (AB, CN, GN, ISE, SP)

Esther Boucher-Yip (ISE))
Althea Danielski (ISE)
Daniel DiMassa (GN)
Wen-Hua Du (CN)
Mohammed El Hamzaoui (AB)
Aarti Madan (SP)
Ingrid Matos-Nin (SP)
Angel Rivera (SP)

Lina Munoz-Marquez (SP) Huili Zeng (CN)

## Literature/Writing (EN,WR)

Joe Aguilar (EN) Esther Boucher-Yip (ISE, WR) Kristin Boudreau (EN)

Joel Brattin (EN)
Jim Cocola (EN)
Althea Danielski (ISE, WR)
Jennifer deWinter (WR)
Mohammed El Hamzaoui (AB, WR)
Michelle Ephraim (EN)
Brenton Faber (WR)
Joshua Harmon (EN, WR)
Shana Lessing (WR)
Kevin Lewis (WR)
Ryan Madan (WR)
Katherine McIntyre (EN, WR)
Svetlana Nikitina (EN, HU)
Lance Schachterle (EN)
Yunus Telliel (WR)

## History/International and Global Studies (HI, HU, INTL)

Bland Addison (HI, INTL)
Steven Bullock (HI)
Constance Clark (HI)
Joseph Cullon (HI)
Lindsay Davis (HI)
Holger Droessler (HI, INTL)
John Galante (HI, INTL)
James Hanlan (HI)
Peter Hansen (HI, INTL)
Shana Lessing (HI, INTL)
Jennifer Rudolph (HI, INTL)
William San Martin (HI, INTL)
David Spanagel (HI)

# Philosophy/Religion (PY, RE)

Bethel Eddy (PY, RE) Roger Gottlieb (PY, RE) Jennifer McWeeny (PY) Rebecca Moody (PY, RE) Geoff Pfeifer (PY, RE) John Sanbonmatsu (PY)

# **AP Credit Policy**

The Humanities and Arts Department will accept a maximum of 1/3 unit of AP credit towards the Humanities and Arts requirement. Students who score a 4 or 5 on the AP test in German or Spanish automatically receive 1/3 unit of credit in the language, provided they do not begin German or Spanish study at WPI with Elementary German I (GN 1511) or Elementary Spanish II (SP 1523). Students who score a 4 or 5 on the AP test in studio art may be eligible for HUA credit, subject to a portfolio review by art faculty. Students who score a 4 or 5 on the AP test in other subject areas of the humanities and arts will receive credit in the relevant discipline. AP credit beyond one course (1/3 unit) in the Humanities and Arts may be counted toward other requirements such as free elective credit or particular majors and minors at WPI.

# **Transfer Students and the Humanities and Arts Requirement**

Students who transfer fewer than six Humanities and Arts courses from another institution must complete an inquiry seminar or practicum to complete the Humanities and Arts Requirement. Students who transfer six or more courses in Humanities and Arts will have the option of submitting a CDR form or engaging in additional work (or documentation of work) to earn an "A" on the CDR, in accordance with current transfer rules (see below).

All students may have the option of completing their Humanities and Arts Requirement while enrolled for 1 unit of coursework at an off-campus project center where one-third unit of the coursework shall include an inquiry seminar or practicum.

Transfer credit in the Humanities and Arts at WPI is granted on a course-for-course basis. All Transfer students entering WPI with *fewer than six courses or their equivalent of transfer credit in the Humanities and Arts* must complete work in the Humanities and Arts, including an Inquiry Seminar/Practicum to the extent that the overall Humanities and Arts credit totals two units.

No credit toward the Humanities and Arts Requirement is given for introductory-level foreign-language courses unless the entire program is in that foreign language. Usually only one transfer course in Freshman English can be applied toward the requirement. In all cases, the professor for the Inquiry Seminar/Practicum has the final decision on what courses are acceptable within the student's sequence leading up to the project. Up to one unit (i.e. three courses) of transferred work in the Humanities and Arts that is not credited toward the Humanities and Arts Requirement can be credited toward the fifteen-unit graduation requirement; such courses shall receive credit under the category of EL 1000.

If a Transfer student has completed two units of acceptable college-level work in the Humanities and Arts prior to entering WPI, a Completion of Degree Requirement form will be submitted by the Humanities and Arts Department Coordinator for Transfer Students at the request of the student. The grade for such a Humanities and Arts Requirement met by transfer credit is normally a grade of "CR". Students whose grades on transferred courses average A can engage in additional work or submit samples of their previous work and may be awarded an A for the Humanities and Arts Requirement. Alternately a transfer student may elect to undertake an Inquiry Seminar/Practicum in an effort to achieve an A grade. These evaluation options must be exercised prior to the Department's submission of the Completion of Degree Requirement form to the Registrar.

Decisions concerning credit toward the Humanities and Arts Requirement are made by the Humanities and Arts Coordinator for Transfer Students, Professor James Hanlan. He can be contacted in room 28 of Salisbury Laboratories, or at extension 5438, or email jphanlan@wpi.edu.

# Guidelines for Granting Transfer Credit to U.S. Students for Foreign Language Study A. Credit for study on the high school level:

- 1. Transfer credit of 1/3 unit is given for Advanced Placement with a score of 4 or 5.
- 2. Students with three or more years of foreign-language study in high school, but who have not taken the Advanced Placement examination in that language, may receive 1/3 unit credit for their high school language study upon satisfactory completion of two courses in the same language on the intermediate level or above. (Note: Courses in Chinese, German and Spanish in addition to those offered at WPI, as well as courses in other languages, are available at other colleges in the Consortium.)
- 3. In either case 1. or 2. above, in order to receive 1/3 unit credit, students must begin their WPI course sequence at the Elementary II level or above.

#### B. Credit for study at other colleges and universities:

- 1. Language study which is done at other universities and colleges prior to entering WPI, or done with the prior written permission of the student's Humanities and Arts Consultant (not the Department Head) as part of an agreed-upon Humanities and Arts sequence, transfers on a course-for-course basis.
- 2. Language study which is done at foreign universities, language institutes, cultural institutes, etc., prior to entering WPI, or done with the prior written permission of the student's Humanities and Arts Consultant (not the Department Head) as part of an agreed-upon Humanities and Arts sequence, is assessed by the Foreign Languages Consultant on the basis of matriculation papers and the level of work accomplished.

# Other Options

# **Interdisciplinary Study at the American Antiquarian Society**

A unique opportunity for interdisciplinary work in the humanities and arts is offered by the American Studies Seminar sponsored each fall by the American Antiquarian Society. Organized in collaboration with Worcester's five undergraduate colleges and universities, this seminar focuses on topics that allow students to investigate the Society's rich holdings in early American history, literature, and culture. The Society's unparalleled collection

of documents is a short walk from the campus. Information on application deadlines and academic credit toward the Humanities and Arts Requirement is available from the WPI Campus Representative to the American Antiquarian Society.

## **Off-Campus Option: Humanities and Arts Project Centers**

WPI offers the option to complete the Humanities and Arts Requirement during one term of study at several Project Centers. Normally, students complete the requirement through at least six courses or independent-study projects on campus. However, the "Off-Campus" option allows students to combine at least three courses on campus with one term studying the humanities and arts at a Project Center. Students may use this option to complete the requirement.

Off-campus projects are available in Germany and Argentina for the study of foreign languages and in England, Taiwan, Japan, and Morocco for other fields. Students devote themselves to one term studying the history, literature, language, or culture at the project center with a WPI faculty advisor. The program might combine a thematic seminar in an area of the faculty advisor's expertise with visits to museums, the theatre, musical performances, or cultural excursions. Although themes or areas of emphasis vary from year to year, all off-campus Humanities and Arts activities culminate in a written report in an area of interest to the student.

To be eligible for participation, students must have already completed three courses in humanities and arts before they leave campus. Students may apply to the off-campus program before they have taken all three courses. In addition, students going to any Project Center must complete all of the forms required by the Interdisciplinary and Global Studies Division.

## Requirements:

- Students must have completed at least three courses in the Humanities and Arts at WPI, or have earned
  equivalent course credit approved by the Humanities and Arts Department, before the term of the offcampus activity. The Department may allow students to count transfer or advanced placement credits
  toward the three course minimum;
- Students must be accepted into the off-campus Humanities and Arts program by the Humanities and Arts Department, and complete all forms required by the Interdisciplinary and Global Studies Division, in order to register for these projects.
- Students might be required by the faculty advisor to complete a PQP or attend required meetings before the off-campus project;
- Students must submit a written report or paper at the end of the program. Students also may be required to submit written updates at various times in the course of the program. In all cases, the faculty advisor at the project center will determine the precise form of the written requirements.
- Students may be required to give an oral presentation at the end of the program;
- Under normal circumstances, students must complete the program within one term in order to receive the full unit of credit:
- Only members of the Humanities and Arts faculty at WPI may advise off-campus Humanities and Arts programs.

# **Off-Campus Recommendations**

All off-campus programs benefit from advance planning. Discuss the possibility of an off-campus activity with your academic advisor at the beginning of the freshman year. Consult with the WPI faculty who will advise these off-campus programs as early as possible, since they may be able to suggest useful courses or other background resources for the projects. Also keep in mind that three courses are the minimum required, but many students find it advantageous to take additional courses before going away.

The interdisciplinary programs are open to students with a background in areas of the humanities and arts besides foreign languages, including art history and architecture, drama/theatre, history, literature, music, philosophy, religion, or writing/rhetoric. After taking at least three courses in any of these areas on campus, you could then go to a HUA project center to complete your requirement. Some students also have participated in this program to study beyond the Humanities and Arts Requirement for a minor in international and global studies, history, literature, music, theatre, or other areas.

The Humanities and Arts Department advertises upcoming program locations and application deadlines at the Global Fair each September. Future programs might include other locations that provide the context for an intensive study of humanistic themes associated with particular locales within the United States. Contact the Department of Humanities and Arts for more information.

# The Social Science Requirement

The goals of the Social Science Requirement are to give students the opportunity to:

- 1. Study human society, including human thought and behavior, politics, ethics, human-environment relationships, public policy, economics, and technology;
- 2. Learn to think critically about social issues and problems, particularly those at the interface of society and technology;
- 3. Become inspired and develop the skills necessary to help solve social problems throughout their academic and professional careers.

#### **What Counts**

Any two courses taught in the Social Science & Policy Studies Department may be counted toward the Social Science Requirement, including all courses with one of the following prefixes: ECON, ENV, DEV, GOV, PSY, SD, SOC, SS, STS.

One-third unit of a Great Problems Seminar course may be counted, but only if the GPS is co-taught by a faculty member with at least a half-time appointment in the SSPS Dept.

The project preparation course SS/ID2050 may be counted toward the Social Science Requirement. However, we recommend that students use the requirement to fully explore their interest and develop a knowledge base in one or more of the following social science disciplines: economics, environmental studies, political science & law, psychology, system dynamics, or science, technology, and policy.

Students interested in obtaining WPI credit for a social science course taken at another institution should consult our transfer credit authorization policies and procedures available at: <a href="https://www.wpi.edu/academics/study/programs/social-science-policy-studies/resources">https://www.wpi.edu/academics/study/programs/social-science-policy-studies/resources</a>

### What Doesn't Count

Courses taught in the Humanities & Arts Department or the School of Business do not count toward the Social Science Requirement. Courses taught in STEM Departments or programs that address social implications (e.g., CS 3043, IMGD 2000) do not count. The course ID 3100 does not count.

#### Why Stop at Two Courses?

The Department of Social Science and Policy Studies has a variety of majors and minors that will contribute to your WPI experience, improve your career prospects, and provide additional perspective to your degree. Reach out to a faculty member to determine which minor or major is right for you.

#### Depth or Breadth?

The requirement allows students a choice of focusing on depth or breadth in the social sciences. Students who are unsure which social science disciplines are of most interest or value to them may use the requirement to explore two different areas. For example, students may take one course in economics and another in psychology, or one in environmental studies and another in government/policy. Students who have more

defined interests may focus on depth, taking both an introductory and advanced course in the same discipline (e.g. Introduction to Environmental Studies and Environmental Problems in the Developing World). Students are welcome to contact the various program directors to learn more about the different social science courses.

#### When

We recommend that students complete the 2-course Social Science Requirement prior to beginning their IQP. The social science courses can help students identify interests and make more informed and rewarding choices for their IQP project. They will also provide social science knowledge and analytical skills that can enable projects to succeed.

#### **Double Counting**

Courses taken to fulfill the Social Science Requirement may overlap with the distribution requirements of any major. For example, students majoring in Management are required to take two courses in economics. Those two courses can count toward both the Management major and the Social Science Requirement.

#### Questions?

Questions about the Social Science Requirement may be directed to our Social Science Requirement Coordinator, Prof. Lisa Stoddard (eastoddard@wpi.edu, X5284, 310F Salisbury Labs).

### Want more? How about a social science minor? (You're 2/3 of the way there!)

The Social Science Requirement calls for a minimum of two courses. But students who want to *bring depth to their WPI experience and their resumes* are encouraged to use their free electives to pursue additional courses or a minor. If the two courses that count toward the SS requirement are in the same discipline, only 4 additional courses are required to obtain a minor in economics, environmental studies, psychology, law & technology, or system dynamics. For more information or questions about minors, see one of the following program liaisons:

Economics: Prof. Alex Smith (adksmith@wpi.edu, X6543, 310B SL)

Environmental Studies: Prof. Laureen Elgert (lelgert@wpi.edu, X5110, 223C SL)

Global Public Health: Prof. Angela Rodriguez (acrodriguez@wpi.edu, X5787, 317B SL)

STP: Prof. Crystal Brown (<a href="mailto:cbrown2@wpi.edu">cbrown2@wpi.edu</a>, X5163, 332 SL)

Psychology: Prof. Jeanine Skorinko (skorinko@wpi.edu, X5451, 317D SL)

System Dynamics: Prof. Oleg Pavlov (opavlov@wpi.edu, X5234, 310A SL)

# Wellness and Physical Education Requirement Wellness and Physical Education Requirement

To provide an understanding and experience in Wellness and Physical Education to gain awareness for lifelong well-being to thrive personally and professionally, every student must complete a Wellness & Physical Education requirement.

Qualification in wellness and physical education shall be established by completing 1/3 unit of course work. Students may take classes multiple times for credit. We do not offer independent study options in Wellness and Physical Education. In addition to PE 1000-series course offerings, students may satisfy their PE requirement by the following:

1. WPI approved varsity athletic team participation (PE 2000-series). Student must be registered with instructor permission in advance of participation. No retroactive credit will be awarded if failure to register.

- 2. Club Sports (PE 1200-series). Students must be members of a PE approved club prior to becoming eligible for physical education credit and by meeting established department policies for credit. Students must be registered in advance of participation; no retroactive credit will be awarded if failure to register in advance. Additional fees for some clubs may apply.
- 3. Approved courses not offered at WPI; advance approval by the Physical Education Department is necessary so students are encouraged to contact the department directly in advance to review. No retroactive credit will be awarded if failure to receive advance approval.
- 4. Participation in certain ROTC programs may entitle students to a receive PE credit. Students in ROTC programs should review in advance with their respective commanders.

# GENERAL PHYSICAL EDUCATION COURSES (PE 1000 series)

This series is offered to provide a variety of courses in the more traditional sport-based area of physical education. These courses can serve the beginner to the more experienced in each activity area. PE 1000 series courses meet twice a week (generally between 8am-5pm) at predetermined times with attendance and participation major factors in a student's final grade.

# HEALTHY ALTERNATIVE PHYSICAL EDUCATION COURSES (PE 1099)

These PE courses are offered to provide a variety of wellness, dance and healthy alternatives to traditional PE sport-based classes. These classes are subject to change on a yearly basis in order to provide flexibility in the PE offerings based upon the latest trends in wellness and dance. The focus of these classes is more on individual fitness, wellness and education, with instruction provided to all students in the classes.

#### THE CLUB SPORTS PROGRAM (PE 1200-series)

Club Sports are activities in various sports and wellness that are organized and recognized by Student Government Association as Class II organizations and open to any undergraduate student. Students who are properly registered in advance for the club activity in their interest area (more information regarding Club Sports can be found at <a href="wpi.edu/+techsync">wpi.edu/+techsync</a>) and meet the established criteria for participation by the club as well as by PERA department policy, may be eligible for PE course credit. Practice and/or competition times vary but are generally in the evenings and weekends. Participating students may incur additional fees for equipment, travel, and/or uniforms.

# Individually Sponsored Residential Projects (ISRPs)

Through the Individually Sponsored Residential Projects (ISRP) process, faculty may design custom off-campus projects in addition to the established options available at WPI Project Centers. ISRPs are subject to an approval process through the DIGS that includes routine planning and risk management protocols employed for the Global Projects Program.

Consult the Global Portal at <a href="https://www.wpi.edu/+globalportal">https://www.wpi.edu/+globalportal</a> for ISRP Process Deadlines. Please contact DIGS at global@wpi.edu with any questions about the ISRP process.

# Individually Sponsored On-Campus IQP Programs

**Energy Sustainabilty Project Center** 

Director, Professor Paul Mathisen, Kaven Hall 209E

This center supports and helps to coordinate project work (both MQPs and IQPs) in all aspects of energy and across all areas of academic inquiry at WPI. A goal is to promote the use of innovative technologies and approaches to meet on-campus, regional, and global energy challenges. The principles of sustainability, with consideration to economics, the environment, and social justice, are emphasized in all of the Center's activities. The Center's objectives are to

support and to facilitate the organization of project teams and advisors to address problems involving sustainability and energy. Areas of interest range from traditional and renewable forms of energy to the use of systems approaches to address the relationships between energy and societal needs such as buildings, transportation, food and water. Center activities include the following: communication of WPI's activities in the energy area both internally and externally; establishment of a clearinghouse for project topics and the formation of project teams; organization of a forum for discussion of major energy-related topics, highlighting excellent energy-related projects; and identifying externally-sponsored projects. For more information contact Prof. Paul Mathisen (mathisen@wpi.edu).

# STEM Education Project Center

## **Director, Kathy Chen**

The heart of the STEM Education Project Center is captured in the quote by Leila Janah, "Talent is equally distributed but opportunity is not." Projects associated with this Center focuses on transforming PreK-12 Science, Technology, Engineering, and Mathematics (STEM) education to be high-quality, equitable, and culturally relevant. With the goal of improving PreK-12 STEM education opportunities for all children, our objectives include: 1) providing engaging and inclusive STEM activities to diverse audiences, 2) examining the educational opportunity gaps in different contexts, and 3) supporting informal and formal educators in STEM. Some projects may be to design, develop, and test hands-on, standards-aligned, PreK-12 STEM; to examine STEM education in a global context; and to develop sustainable relationships between WPI and local non-profits around STEM opportunities. In addition, the teaching practicum requirement in the Teacher Preparation Program is typically done as an IQP during A&B or C&D terms. These projects (MQPs and IQPs) are in partnership with the STEM Education Center at WPI and PreK-12 schools, afterschool programs, non-profits, and educators. Faculty are invited to bring projects under the STEM Education Project Center. For more information, please contact Kathy Chen (kcchen@wpi.edu) and go to https://www.wpi.edu/+stem.

## Sustaining WPI Project Center

## Co-Directors, Suzanne LePage and Derren Rosbach

There is a great deal of interest in enhancing the sustainability of WPI – both as an institution and as a campus. The Sustaining WPI Project Center was developed to support and coordinate project work (primarily IQPs) developed around these interests. Project topics are proposed by the project teams based on their sustainability interests and in coordination with faculty advisors and the WPI Office of Sustainability. The intent is to address all aspects of sustainability as outlined in the WPI Sustainability Plan: campus facilities, the educational curriculum, research and scholarship, as well as civic engagement. The Center sponsors IQPs in D-term each year with student preparations beginning in C-term. For more information contact Suzanne LePage (slepage@wpi.edu).

# Courses Qualifying for Engineering Distribution Areas

## Mathematics

All Courses designated "MA."

Advanced placement established by AP exam or through passing WPI advanced courses (see page 243) also qualify.

#### **Basic Science**

All courses designated "PH," "CH," "BB," and GE 2341.

#### Engineering Science/Design

The following courses may be applied to the "Engineering Science and Design" distribution requirement for each respective engineering major:

AE: All courses designated "AE"

**BME:** All courses designated "BME" (except BME 1001, BME 1004, BME 3110, BME 3112, BME 532, BME 560, BME 562, BME 564, and BME 593; BME 595 requires departmental approval) and CE, CHE, ECE, RBE, and ME courses at the 2000-level or above (except RBE 3100).

CE: All courses designated "CE". Also ES 2503 and ES 3004.

**CHE**: All courses designated "CHE." Also ES 3002, ES 3003, ES 3004, and other courses approved by the Chemical Engineering Department. See the department web site, and consult with your academic advisor for details.

**ECE**: All courses designated "ECE" and ES 3011 may be included in the six-unit ECE area distribution requirement.

**IE**: OIE courses including OIE 2081, OIE 2600, OIE 2850, OIE 3020, OIE 3405, OIE 3410, OIE 3420, OIE 3460, OIE 3510, OIE 4410, OIE 4430, OIE 4460, MIS 3720, MIS 4084, MIS 4720 and MIS 4741.

ME: All courses designated "ME".

RBE: All courses designated (except RBE 3100).

In addition, engineering majors selecting "Engineering Science/Design" courses from outside their major may choose appropriate activities from any of the following:

All courses designated ES, ECE, CHE, ME.

All OIE courses listed above (for ME majors only).

All courses designated as RBE except RBE 3100.

All courses designated as CE except CE 3022.

All courses designated as CS except CS 1101, CS 1102, and CS 3043. (Only RBE majors may select CS 1101 or CS 1102 to satisfy the Engineering Science and Design Distribution Requirement.)

(Electrical and Computer Engineering majors are restricted to these courses at the 2000-level or higher.)

All ABET engineering programs require six units of Engineering Science and Design.

All graduate-level courses may be counted in the appropriate categories.

# **University Procedures**

# Administrative Obligations and Holds

The college reserves the right to hold grades, transcripts, registration and/or diploma for any student who has an outstanding administrative obligation with the college.

# **Early Completion**

Students completing 100% of WPI graduation requirements by the end of A-term or C-term will be eligible for a 50% tuition adjustment for the semester of completion. Eligible students must complete the form available in the Registrar's Office and submit by the end of B-term (for C-term completion) or D-term (for A-term completion). Students/responsible parties will be billed for the full semester and then tuition charges will be reduced by 50% once the graduation requirements have been signed off and the student's withdrawal has been

officially processed. Qualified students receiving financial aid from WPI will retain 50% of any WPI scholarship, and their loan eligibility will be reviewed on an individual basis. Students living in WPI housing will still be financially responsible for paying the full semester's worth of room and board.

Students are permitted to enroll in a maximum of 4/3 units (12 credits), excluding PE, in either A or C term. Students registered beyond 4/3 units will be charged the overload fee.

# **Double Major**

## **Distribution Requirements**

The distribution requirements of each major must be met, but requirements common to both majors may have to be met only once. A minimum of three units of qualifying project work is thus required for fulfillment of the project portion of the double major requirements: one unit in each of the two major areas of study, and one unit of an IQP.

For students wishing to pursue double majors not involving social science, the program audit for each intended major must be completed and certified by the review committee of each department involved. Academic activities appropriate to both majors may be counted in both majors...

If a student wishes to complete two Interdisciplinary (individually designed) Majors Programs, the double major must be proposed in a single Educational Program Proposal, which must be approved by the student's Program Advisory Committee for each major. The Committees shall ensure that the majors are substantially non-overlapping.

If a student's double major includes an Interdisciplinary (individually designed) Major Program, the double majors must be described in the Educational Program Proposal for the Interdisciplinary Major.

# **Designation of Class Year**

Class year will normally be designated as year of matriculation plus four with the additional requirement that the accumulation of 34/3 units is necessary for fourth-year status, 22/3 units for third-year status, and 10/3 units for second-year status. The class year of transfer students will be determined on an individual basis. Class year designations will be reviewed at the end of Term E each year and changed if the credit accumulation does not meet the above specifications. After Term E, students may petition to be redesignated in their original class if they meet the minimum unit requirements.

# Directory Information and Release of Information

The items listed below are designated as "Directory Information" for each student: campus mailbox, full name, year, major, advisor, e-mail address, permanent address, local address, local phone, photograph, date and place of birth, dates of attendance, enrollment status, degrees and awards received, and most recent or previous educational agency or institution.

Under the provisions of the Family Educational Rights and Privacy Act of 1974 (FERPA), the institution is permitted to release Directory Information without a student's consent. A student, however, has the right to restrict the disclosure of any or all of their Directory Information. Written notification to withhold Directory Information must be received by the Registrar's Office during the first week of the fall semester/A term. Forms are available in the Registrar's Office or on the Registrar's website. A request to restrict the disclosure of Directory Information does not restrict internal use of such by the institution.

Unless a student notifies the Registrar's Office in writing to the contrary, the college considers all undergraduate students to be dependents of their parents. In compliance with the Family Educational Rights and Privacy Act, the college reserves the right to disclose information about the status of dependent students to their parents without the students' written consent. Petition forms for Declaration of Independent Status are available in the Registrar's Office upon request (see information under <u>Distribution of Grades</u>).

# **Policy on Releasing Information on Deceased Students**

The education records of deceased students may be released or disclosed, at the time of death, upon written request, to a spouse, a parent, the executor of the estate, the eldest surviving child, the eldest surviving sibling, and surviving descendent, or pursuant to a court order or subpoena. Only the Registrar may release the academic records of deceased students. The person requesting the records must provide as much of the following information as possible within the written request:

Student's name (and maiden name, if applicable).

Student's Social Security number.

Student's date of birth.

The dates that the deceased student attended WPI.

Death Certificate (Photo copy is acceptable).

The petitioner must also provide the following personal information within his/her written request:

- · Name.
- Address.
- · Phone Number.
- Evidence that he/she is qualified to receive the records, based on the above criteria or, in the absence of evidence, a statement certifying the same.
- Signature.
- · Date of request.

# **Off-Campus Programs**

All off-campus programs offer students the opportunity to complete a project in one term of full-time work. Advance preparation is required. Faculty advisors are in residence at IQP sites and some Humanities and Arts and MQP sites.

More details about current off-campus program offerings, including an up-to-date list of program locations can be found on <u>eProjects</u>. Find a listing of all global project centers <u>here</u>.

# **Academic Standing**

# **Satisfactory Academic Progress**

In order to assist the student, parents, and the academic advisor in determining whether a student is making academic progress, WPI has adopted the following guidelines.

To maintain Satisfactory Academic Progress, a student must:

- 1. Complete at least 4/3 units of academic work for the fall semester (A and B terms); and
- 2. Complete at least 4/3 units of academic work for the spring semester (C and D terms).

**Note:** Air Force Aerospace Studies (AS), Military Science (ML), and Wellness and Physical Education (WPE) courses are not included in any evaluation of Academic Progress.

Academic Progress is evaluated at the end of each semester and any student who does not maintain Satisfactory Academic Progress will move down one level of academic standing (to warning, from warning to probation, or from probation to suspension). First-year students who earn no academic credit (see note above) during their first two terms at WPI will be placed on Academic Suspension. Thereafter, any student who earns no academic credit in a semester will move down two levels in academic standing.

# **Academic Warning**

Each student's academic record will be reviewed at the conclusion of terms B and D according to the guidelines above. If a student's performance falls short of either guideline 1 or 2, the student will be placed on Academic Warning for two terms. At this time, the student is urged, with the help of the advisor, to identify the nature of the

academic difficulty and to formulate a course of action for overcoming the difficulty. Students on academic warning may apply to the Global Projects Program, but WPI reserves the right to withdraw acceptance to students who are subsequently placed on academic probation.

#### **Academic Probation**

During the next review of academic progress, should the student fail, once again, to maintain satisfactory academic progress, the student will be placed on Academic Probation for two terms. Academic Probation will prevent the student from receiving financial aid, will result in loss of eligibility for team sports, will prevent the student from obtaining undergraduate employment in the Co-op Program and will prevent participation in the Global Projects Program.

# **Academic Suspension**

Should a student on Academic Probation fail to make satisfactory academic progress during the next review period, the student will be *suspended* from WPI. This status will prevent the student from enrolling as a full-time student *or* a part-time student for at least the next two terms. Subsequent readmission is subject to approval (with possible conditions) of a petition through the Registrar to the Committee on Academic Operations (CAO). As a general rule, a student readmitted after suspension will be placed on an Academic Probation status.

New students (first year or transfer) who fail to obtain academic credit for the first two terms shall be placed on Academic Suspension and not allowed to enroll for the following two terms. To apply for readmission, a student must submit a petition to the Committee on Academic Operations (CAO).

## **Improvement in Status**

Students on Academic Warning or Academic Probation have the opportunity to improve their status by progressing through the levels in reverse order. If a student on Academic Probation satisfactorily meets the guidelines at the end of the next review period, he or she will be moved to the list of students on Academic Warning. A student on Academic Warning would be moved back to Satisfactory Academic Progress status.

#### **Summer Review Period**

An exception to the guidelines stated above can occur when a student registers for Term E. At the conclusion of Term E, a review will be conducted which will include E-term and the previous four terms. If the student has completed 10/3 units acceptable work, the student's academic progress status will improve. Thus, a student on Warning status after the Term D review will start terms A and B on Satisfactory Academic Progress. A student placed on Academic Probation after the Term D review will be on Warning status for terms A and B.

# **Summer Academic Success Program**

Students who finish the academic year on Academic Warning or Academic Probation status, but who have passed at least 2 units of academic work during the previous four terms, are eligible to participate in the Summer Academic Success Program. Students who participate in the program enroll in ID 1000- Summer Academic Success Program, a five-week academic skills course, as well as two E Term courses. Successful completion of the courses and ID 1000 will result in the academic status rising one level (Academic Probation to Academic Warning, or Academic Warning to Satisfactory Academic Progress). The Office of Academic Advising coordinates the Summer Academic Success Program.

#### **Part-time Students**

Students pursuing the bachelor's degree as part-time students will be subject to the same review schedule and standards as full-time students. All part-time students will be reviewed after the Fall and Spring semesters and must satisfactorily complete at least one-third of the academic activities for which he/she has registered. For more information on part-time status, click here.

# **Grade Changes and Academic Status**

Students who are placed on Academic Warning or Academic Probation at the end of a given semester may receive a grade change (either incomplete to letter or letter to letter) that may improve the standing. The

Registrar will re-review a student's standing if the grade change comes in by the last day of the immediately following term. Please note that, depending on the timing of this re-review, the improved standing may not have an effect on financial aid implications. This option is not available to students on suspension. Suspended students must petition the Committee on Academic Operations for reconsideration or to return from suspension.

## **Petitions**

Students may petition through the Registrar's Office to the Committee on Academic Operations (CAO) for reconsideration of the status of the following:

- · Academic Probation
- Academic Suspension
- Readmission after Suspension

Students who petition for reconsideration of status must accomplish the following:

- 1. Obtain a petition form from the Registrar's Office webpage.
- 2. Complete the form and obtain advisor's approval and signature.
- 3. Submit the form to the Registrar's Office within three weeks of the issuance of grades for B, D, or E term reviews except for readmission after suspension.

# **Deadlines for Readmissions after Suspension**

July 20 for Term A

November 15 for Term C

# Registration and Enrollment

# Registration

During the spring, students will receive information regarding course offerings for the following academic year. After consulting with academic advisors, students will make course selections via the online registration system. Students with holds will be prevented from registering until the obligation is met.

A calendar is published by the Registrar's Office prior to the add/drop period which specifies the time periods and fees for late changes. Students are responsible for the dates and should contact the Registrar's Office if they need information to avoid late fees. Requests for exceptions to published deadlines must be submitted in writing to the Registrar's Office and will be granted based on documented extenuating circumstances, i.e., medical, military obligations.

# **Course Changes**

There is an add/drop period at the start of each term and the exact deadlines depend on the length of the course session (7, 10, or 14 weeks).

For 7-week courses (undergraduate and graduate), a student can add a course without a fee through the fifth day of classes. On the sixth through the tenth day of classes, students can add courses (with instructor approval) with a \$100 late fee. Students can drop courses on days 1-10 of each term without incurring a late fee. For undergraduates in 7-week courses, no adds or drops are allowed after the tenth day of the term. For graduate students in 7-week courses who drop a course after the tenth day, but before the end of the fifth week of the term, a W (Withdrawal) will be assigned. No tuition or fees will be refunded after the tenth day of the term.

**For 14-week courses** (undergraduate and graduate), students can make course changes (add or drop) without penalty through the tenth day of the semester. A \$100 late fee will be charged for course adds after the tenth day of the semester and instructor permission is required. No drops are allowed after the tenth day of the

semester; for graduate students, course withdrawals are permitted through the tenth week of the semester, and a grade of W (Withdrawal) will be assigned. No tuition or fees will be refunded after the tenth day of the semester. Consult the University calendar for specific dates.

For 10-week courses (undergraduate and graduate), students can make course changes (add or drop) without penalty through the tenth day of the semester. A \$100 late fee will be charged for course adds after the tenth day of the semester and instructor permission is required. No drops are allowed after the tenth day of the semester; for graduate students, course withdrawals are permitted through the seventh week of the semester, and a grade of W (Withdrawal) will be assigned. No tuition or fees will be refunded after the tenth day of the semester.

Note: If a degree-seeking student is dropping or withdrawing from all registered course activity, they must either take an institutional leave of absence or officially withdraw from the University.

## **Wait Lists**

When a seat in a class becomes available to a student on the wait list, they will be notified via e-mail. The e-mail contains instructions on how to claim the available seat. If a student does not receive an e-mail, it means no seat is available for them in the wait-listed class.

## **Overloads of Courses**

The standard course load for WPI students is one unit per term (exclusive of courses for ROTC and Wellness and Physical Education, which do not count towards overloads). Students may register in advance for a maximum of one unit in any term.

Registration for courses which will result in an overload may take place, on a space-available basis, after all current undergraduate students have had the opportunity to register for classes. This date will be posted on the Registrar's website.

Students are strongly encouraged to consult with their academic advisor before registering for an overload.

Overload charges will be computed each semester based on the course and project load based on the student's registration after the add/drop period in the second term of the semester.

*Note*: undergraduates taking graduate courses receive more credit for said courses and are billed accordingly. Please take this into account when considering overload fees.

## Withdrawal from Courses

Students who wish to withdraw from a course or project will be assigned a grade of NR (No Record) by the instructor. The student should contact the instructor and indicate that they will not be continuing in the class.

# **Records and Audits**

# **Transcript Fees**

All official transcript requests must be made online and carry a fee per transcript.

Please visit https://www.wpi.edu/offices/registrar for more information.

# **Degree Audits**

WPI programs Academic Progress Reports in Workday to track degree requirements. The degree evaluation is available in Workday.

# Graduation

Each student must file an application for degree with the Registrar's Office in accordance with the following schedule:

## To graduate in:

May – prior A-term September – prior D-term December – prior D-term

# Independent Study

Independent Study provides the opportunity for an individual student or group of students, with the approval and under the direction of one or more faculty advisors, to study and to explore in greater depth an area of particular interest to the student and faculty member. An independent study may be used as a substitute for an existing WPI course, as an opportunity to study a topic not currently offered as a course at WPI, or to conduct directed undergraduate research.

Independent Study registration for terms A-E will be accepted up to the 10th day of the term (not including weekends) without penalty.

An independent study may be used to assign credit in a particular discipline only when at least one of the faculty advisors has an appointment in the department or program associated with the discipline or with the approval of the appropriate Department Head or Program Director. If disciplinary credit is not assigned to the independent study, the academic credit will be identified as Interdisciplinary (ID) and the credit will be assigned as free elective on the student's transcript.

# Official Withdrawal or Leave of Absence

There are many reasons why a student may need or wish to take time away from WPI. There may be personal or medical issues interfering with their academics; opportunities for professional experience; family or community commitments; or the desire to just take a break.

- Institutional Leave of Absence (LOA): Request this if you are planning to return to WPI. Leaves may be granted for the remainder of the current semester (if applicable) and the immediately following semester (not counting summer). Leaves may be renewed for one additional semester, and an extension must be requested before the expiration date of the current leave. If a student does not return by the expiration date, they will be automatically withdrawn. For students with federal funding in their financial aid awards you will be reported to federal agencies as a federally withdrawn student. This may have impacts on deferment and loan repayment start times. Please contact the Office of Student Aid & Financial Literacy for further details.
- Official Withdrawal: Request this if you are leaving permanently and not planning to return to WPI.

Any reduction in charges is based on the student's certified last date of attendance.

Students who have attended through the 12th week of a semester (or the 5th week of B or D terms) may not withdraw or take an LOA for that semester and will be academically reviewed. They may withdraw or take an LOA for the following semester.

See Return from Leave of Absence section for information about returning to WPI after a leave. Students who officially withdraw are expected to apply through Undergraduate Admission if they decide they would like to return at a later date to pursue undergraduate study.

See full list below for more information and other types of withdrawals or leaves.

#### **Restrictions to WPI access:**

- You will be dropped from any classes and/or projects you have scheduled for future terms.
- You will not be able to live in university housing, and if applicable, will not be able to select or keep your future academic year assignment.
- · You may not be able to retain your spot for an IQP/MQP Project Center.
- If you have financial aid, your financial aid will be readjusted.
- · You will not be able to participate in campus activities, including clubs, sports, etc.
- Students on Institutional Leave of Absence will retain use of their WPI email. All other access will be removed.
- Students on Official Withdrawal will NOT retain use of their WPI email. All other access will also be removed.

#### **Procedure:**

- 1. Students should inform themselves about the consequences to the following if applicable
  - 1. Financial Aid
  - 2. Visa Status
  - 3. Housing
  - 4. Billing, including potential tuition adjustments
  - 5. Health insurance: If insured by student health insurance please check for coverage options.
  - 6. Undergraduate students schedule an appointment with Academic Advising
  - 7. And any other considerations.
- 2. Complete the appropriate form available at <a href="https://www.wpi.edu/offices/registrar">https://www.wpi.edu/offices/registrar</a>
  - 1. Undergraduate Institutional Leave of Absence Form
  - 2. Undergraduate Official Withdrawal Form
- 3. If seeking a medical leave of absence, please make an appointment with the appropriate office below
  - 1. If seeking a medical leave of absence for psychological reasons, schedule an appointment with the Student Development and Counseling Center (SDCC).
  - 2. If seeking a medical leave of absence for all other medical reasons, schedule an appointment with WPI's Office of Health Services.
- 4. Submit completed form to Registrar's Office

# Return from Leave of Absence

Students who have been away from WPI for a voluntary institutional leave of absence or medical leave of absence may request to return from leave of absence. The return from leave of absence process has been designed to make sure that students are ready to return successfully to WPI. Students must submit a request to return before the leave of absence expires. If the leave expires you will be automatically withdrawn.

All students requesting to return to WPI must complete the Request to Return from Leave of Absence Form and submit it to the Registrar's Office by the applicable deadlines. Please note that students returning from a medical LOA must be cleared by the appropriate office. Forms and information are available at <a href="https://www.wpi.edu/offices/registrar">https://www.wpi.edu/offices/registrar</a>.

#### Deadlines:

Fall Semester: July 15th

Spring Semester: December 1st Summer Session: May 1st

# Part-Time Degree Students

Students may apply for Part-Time Student status on a **semester** basis at the Registrar's Office. Part-time students pay tuition on the basis of registered credit at the start of each semester, including credits for ROTC and PE. Campus housing will not be allowed. Part-time students may not engage in varsity/club sports, may not

participate in any extracurricular activities, and are only eligible to apply for limited federal and state financial aid (institutional financial aid is not available) including any form of on-campus student employment. The following registration procedures apply:

- Students who wish to enroll as part-time students must apply by July 20 for the Fall semester and by November 15 for the Spring semester. Such status will allow a maximum of one unit per each semester of the academic year.
- Changing between full-time/part-time status is not allowed at mid-semester.
- Part-time students wishing to return as full-time students must be readmitted according to the procedures specified under Readmission in the Admissions section of this catalog

# Non-Degree Students

Students wishing to take courses on a full-time or part-time basis as a non-degree student may do so by contacting the Registrar's Office. Non-degree students are permitted to earn a maximum of 18 credits (6/3rds) in a non-degree status. Non-degree students will be tracked through the Registrar's Office. Non-degree students pay tuition on the basis of registered credit at the start of each semester. Campus housing will not be allowed. Non-degree students may not engage in varsity/club sports, may not participate in any extracurricular activities, may be required to register for courses on a space-available basis, and are not eligible for financial aid or any form of on-campus student employment.

# Summer Session (Term E)

With course offerings directed at meeting student needs, a variety of sessions, and both traditional and online classes, E-term provides flexibility for students looking to work over the summer and still take advantage of these academic opportunities. E-term is a great time to

- · Speed up your time to degree completion
- Stay on track in the BS/MS program
- · Lighten the load for the next year
- Get back into good academic standing

E-term offers an exceptional opportunity to participate in certain types of project activity on a convenient basis since classrooms and laboratories will be less crowded and outside field work will enjoy better weather conditions. E-term also offers an excellent opportunity to complete a qualifying project through a full-time effort during a single term.

Since class sizes are generally smaller in E-term, students will enjoy more individually-oriented course work – a real benefit for classes that students find challenging or courses that are designed to prepare students for more advanced classes in their major.

Students planning to participate in Term E should register at the regular spring registration period. For more information, including payment and financial aid information, visit the E-term webpage at: <a href="https://www.wpi.edu/academics/undergraduate/summer-courses">https://www.wpi.edu/academics/undergraduate/summer-courses</a>/current-wpi-students

Students from other campuses are also invited to take advantage of E-term offerings at WPI. Admission to the summer session does not imply admission to regular academic year programs. Students desiring to continue their work at WPI following the summer session should seek admission following standard WPI admissions procedures issued through the Admissions Office.

# **Graduate Courses**

WPI students may enroll in graduate courses as part of their regular undergraduate studies without being admitted to the graduate program. An exception: In order to enroll in graduate courses offered by The Business School, the student must have been admitted to a dual BS/MS program, regardless of department.

Effective in the fall 2011 semester, Undergraduate students taking graduate courses may use the conversion factor: 1 graduate credit = 1/6 undergraduate unit. The policy was put into place to recognize the additional academic challenge of graduate studies with an appropriate increase in academic credit. All credit increases will be manually processed through the Registrar's Office and may not be completed the same day of registration; therefore, your initial bill may not reflect the credit conversion.

Please note that this change might have an impact on students' planning, especially if enrolled in a BS/MS program. More importantly, it also can impact overload calculations. Here are some examples:

- If a student is registered for 5 undergrad courses and 1 grad course: the student has 5/3 plus 1/2 units (or 2 and 1/6 units total) => No overload
- If a student is registered for 3 undergrad courses and 3 grad courses: the student has 3/3 + 3/2 units (2 and 1/2 units total) => 1/6 unit overload

Please note that the standard course load for WPI students is one unit per term (exclusive of ROTC and Physical Education classes, which do not count toward overloads). Students who register for more than 7/3 (or 21 credits) per semester will be charged accordingly. Overload charges are computed at the beginning of B term and at the beginning of D term based on the course and project load included in the student's final term registration. Please note that project work is credit-bearing and is included in overload calculations.

# **Transfer Students**

### **Transfer Agreements & Transfer Credit**

WPI currently holds formal articulation agreements with specified programs of studies at Quinsigamond Community College. However, WPI will grant appropriate transfer credit from any accredited two-year or four-year institution.

WPI is able to offer a transfer credit evaluation once a transfer student is admitted. For incoming first year students, the transfer credit evaluation process is available after the enrollment deadline of May 1<sup>st</sup>, typically beginning in mid-May. Admitted transfer students and newly enrolled first year students should follow the WPI transfer credit guidelines, policy and procedure available at www.wpi.edu/+transfercredit, which included a list of transfer equivalencies to date. The Transfer Admissions team coordinates the process with WPI faculty who evaluate the coursework to determine credit eligibility. Each academic department at WPI reviews courses under their program, and provides a decision to the Transfer Admissions team. Admissions communicates any credit updates to the WPI Registrar's Office as well as WPI Academic Advising. In general, courses that are the academic equivalent of a WPI course with a grade of a B or better will be considered for transfer credit. College-level and lab-based chemistry and biology, calculus, calculus-based physics with lab, engineering science, and most social science and humanities and arts courses are typically considered for transfer credit. To be eligible for credit review, the courses must be completed on a college campus taught by college instructors. Early college, early entrance programs, or college coursework provided in partnership with a college or university but offered at the high school taught by high school teachers are not eligible for credit at WPI, with the exception of Project Lead The Way (PLTW). Online coursework is also typically not eligible. Additional courses that are not transferable include pre-calculus, non-calculus based physics or engineering science, and computer courses in BASIC.

#### **Humanities & Arts Requirement for Transfer Students**

As part of the WPI Plan, all WPI students must complete the Humanities and Arts Requirement. As such, all transfer students should review their humanities and arts coursework accepted for transfer credit at WPI and plan with the Humanities and Arts Department's coordinator for transfer students to determine next steps towards the completion of the HUA Requirement. All transfer students entering WPI with fewer than two units of humanities and arts credit must complete thematically related work in humanities and arts. This will include an inquiry seminar or practicum to the extent that the overall humanities and arts credit totals two units. The HUA Requirement is considered fulfilled for transfer students who have completed the equivalent of two units of humanities and arts work prior to their matriculation at WPI. A Completion of Degree Requirement form (or CDR) must be submitted once the HUA Requirement has been satisfied. This form can obtained at the WPI Registrar's Office, and will be completed by the Humanities and Arts Department coordinator for transfer students. For

those transfer students who have satisfied the HUA Requirement based on work completed at their previous institution(s) and who submit the approved CDR form to the WPI Registrar's Office will have this information posted to their student account. This process normally takes place prior to or during the first term of full-time enrollment at WPI.

# **Special Programs**

# Special Programs for New Students

#### **New Student Orientation**

During the week prior to classes, the Student Activities Office and the Office of Academic Advising coordinate a comprehensive new student orientation program for all first-year and transfer students. New student orientation provides an introduction to the WPI experience, ranging from academic work and expectations and project-based education, to student life and campus activities. Led by upperclass student team leaders and Insight advisors, new students attend team meetings that are designed to familiarize them with the overall campus environment.

#### **Insight Program**

Beginning with New Student Orientation and continuing through the first semester, incoming first year and transfer students are assigned to an Insight Team, a group of students and advisors dedicated to assisting with the transition to college. This group of fellow students and mentors will help new students acclimate both personally and academically, and make the most out of their first year at WPI.

#### Connections Pre-Orientation

The **Connections Pre-Orientation** is a week-long residential bridge program at Worcester Polytechnic Institute (WPI) held in August prior to <u>New Student Orientation (NSO)</u> and the <u>Insight Program</u>. Connections helps entering eligible new and first-year students make a smooth transition from high school to college.

The **Connections Academic Immersion Experience** allows new students to have a jump start and introduction to the WPI course structure (in a low stakes environment), an opportunity to meet WPI faculty, and form relationships with peers while learning college study skills and helpful methods for navigating through WPI. Participants who choose to take a summer course in E-Term will also have the opportunity to attend workshops in the Fall semester (A-Term and B-Term) which build upon the experiences and skillsets students bring to WPI and cover additional topics such as faculty and staff mentoring, major exploration, and guidance on course selection. This will be a time to reconnect with your Connections peers and a place to ask those questions you might have.

The Connections Pre-Orientation Program is offered at no cost to pre-registered eligible first-year WPI students. See the website for more information.

#### **Great Problems Seminars**

This is a two course sequence designed to serve as an introduction to project work and university level research with a focus on themes of global importance. Each seminar has at its core an important problem. Students explore the complexity of our global issues, and demonstrate their ability to solve some aspect of the big problem. The skills the students develop are exactly what they need to be successful both in project work at WPI and in their future careers.

Examples: In Food Sustainability, students and faculty focus on issues surrounding food: nutrition, production, economics, and policy issues. Student projects have included plans for urban gardens, extending Meals on Wheels to younger but non-mobile seniors and nutritional information in the dining hall.

In Power the World, the production, distribution and use of all forms of energy and associated ethical issues are reviewed. Student projects have included stove design for indigenous people, improvements on solar-powered emergency medical devices and energy audits of campus buildings.

Themes will change from year to year. Enrollment is limited.

#### **Discovering Majors and Careers**

Discovering Majors and Careers is a class for first year students undecided about academic majors. This 1/12 unit course can be taken on top of a regular course load. Students enrolled in this course will utilize a variety of tools including self-assessments, panels, campus resources, and informational interviews with alumni to help identify personal interests, WPI majors, related careers, and life goals.

#### Additional Resources on the Web

The Undergraduate Programs Web Site (<a href="https://www.wpi.edu/Academics/Undergraduate/">www.wpi.edu/Academics/Undergraduate/</a>)

The Academic Advising Office (www.wpi.edu/+OAA)

The First Year Web Site (<u>www.wpi.edu/+FYE</u>)

# **Cooperative Education**

**Cooperative Education - Undergraduate** 

#### Co-op

The WPI Cooperative Education Program (Co-op) is an opportunity for undergraduate students to alternate time in the classroom with extended periods of paid, full-time, career-related work experience in industry or government. This optional program can be done during the following scenarios:

- 1. Summer plus A term
- 2. Summer, A term and B term
- 3. C term, D term and Summer
- 4. D term and Summer
- 5. Summer, A term, B term, C term and D term
- 6. A term, B term, C term, D term and summer

Most students elect to participate in one Co-op assignment, though up to two is possible. Because Co-op is not a credit-baring program, it is recommended that students pre-plan during their first or second year. Preparation of a complete four year plan with the student's academic advisor is required to ensure compatible scheduling of work periods and academic courses.

In order to qualify for the Co-op program, students must meet the following requirements:

- 1. Must be a current, full time, undergraduate WPI student in good standing. Note: If any of the following conditions apply a student may petition for eligibility.
  - 1. Not in good academic standing (i.e. on academic warning or probation)
  - 2. Have financial holds on their account
  - 3. Have a judicial record. Note: having a judicial record does not automatically preclude you from participating in a Co-op.
  - 4. Want to register for up to 1/3 unit of course while on Co-op.
- 2. International students must complete one full academic year at WPI before being eligible for Co-op, due to US Federal Government regulations. In addition, the Co-op must be related to the major (not minor). For questions, please contact International House.
- 3. Understand the impact Co-op would have on your federal and institutional financial aid through a meeting with the Office of Student Aid & Financial Literacy.

- 4. Understand the impact your Co-op will have on your course schedule and outline your four year plan, including projects, Co-op, etc. and have it reviewed through a required meeting with your Faculty Advisor.
- 5. Approval will be needed from your Faculty Advisor, Office of Student Aid & Financial Literacy, Supervisor at your Co-op, Bursar, Dean of Students Office, Career Development Center (CDC), and International House (if applicable). Approvals are done electronically through Handshake, beginning with you entering your Co-op information in your Handshake Account's Experiences section. The deadline for fall Co-op application is August 1; the deadline for spring Co-op application is December 1. Co-op applications received after deadline are reviewed on a case by case basis. Submissions after the add/drop deadline will not be approved.
- 6. To be considered, the Co-op must be full time (at least 30 hours per week), paid, 4-8 months in duration and related to your major and career goals.
- 7. Understands and accepts the Terms of Agreement. (see website for more information)

#### **Advantages for Students**

Co-op offers several advantages for students:

- 1. Gain experience, build their resume and bring theory into practice.
- 2. Earnings enable students to pay a significant portion of their college expenses.
- 3. Sharpen skills and abilities as an emerging professional.
- 4. Test out career options to help clarify career goals and interests.
- 5. Return to school with new knowledge and experience in their field.
- 6. Position themselves for future opportunities; Co-op participants are preferred full time hires.
- 7. Transcript will show Co-op and indicate company name.

#### Information and Registration

Students interested in exploring the possibility of participating in the co-op program should attend drop-ins or schedule an appointment with a CDC Career Advisor.

# **HECCMA Course Cross-Registration**

The Higher Education Consortium of Central Massachusetts (HECCMA) consists of the following institutions: Anna Maria College, Assumption College, Clark University, College of the Holy Cross, Cummings School of Veterinary Medicine at Tufts University, Massachusetts College of Pharmacy and Health Sciences, Nichols College, Quinsigamond Community College, University of Massachusetts Medical School, WPI and Worcester State University. Full-time WPI students who cross-register for courses at other HECCMA colleges pay no extra fees. Students are limited to one course per semester. The no-charge plan does not include evening colleges or summer school. For cross registration information visit <a href="https://www.heccma.org/students/">https://www.heccma.org/students/</a>.

Students interested in registering for HECCMA courses should discuss their program with their advisors, and then obtain regulations and registration forms from the Registrar's Office.

# Societies, Registration and Licensing

#### **Engineering Societies**

All engineers are professionals in accordance with the definition of engineering, one of which states that "engineering is the profession in which a knowledge of the mathematical and natural sciences gained by study, experience and practice is applied with judgment to develop ways to utilize, economically, the materials and forces of nature for the benefit of mankind." Professional engineers also observe a code of ethics, exercise judgment and discretion while providing their services, and are involved in a confidential relationship with their clients. Professional engineers enjoy legal status, use professional titles, and associate together through professional societies.

An excellent way to begin learning about the status of the professional engineer is to join the student branch of a professional society relevant to your interests. At WPI, students are encouraged to join the student branches of

such societies as the American Academy of Environmental Engineers and Scientists (AAEES), American Society for Metals (ASM), American Society of Mechanical Engineers (ASME), the Institute of Electrical and Electronic Engineers (IEEE), the American Society of Civil Engineers (ASCE), the American Institute of Chemical Engineers (AIChE), the American Institute of Aeronautics and Astronautics (AIAA), the Association of Computing Machinery (ACM), the American Nuclear Society (ANS), APICS, the Institute of Industrial Engineers (IIE), the National Society of Black Engineers (NSBE), the Society of Automotive Engineers (SAE), the Society of Manufacturing Engineers (SME), the Society of Fire Protection Engineers (SFPE), the Society of Women Engineers (SWE), the American Chemical Society, (ACS), the Society of Hispanic Professional Engineers (SHPE), and Women in CyberSecurity (WICyS). For information on these organizations, see the appropriate department head.

#### **Engineering Registration and Licensing**

In order to become a "Professional Engineer" (P.E.) and enjoy the legal status which affords certain rights, privileges and responsibilities, engineers must qualify through the formal procedures of registration and licensing. Procedures vary from state to state, but in most cases, the applicant must first pass a Fundamentals of Engineering Examination.

#### Fundamentals of Engineering Examination

To become legally registered as a professional engineer (P.E.), candidates must submit data regarding formal education and technical ability to the appropriate state Board of Registration for Professional Engineers. Two major examinations, The Fundamentals of Engineering Examination (also called Engineering-in-Training, E.I.T.) and the Professional Practice Examination (P.P.E.), must be successfully completed as a measure of technical ability. The Fundamentals Examination must be taken first; the Professional Practice Examination must then be taken after a designated period of substantial professional experience, usually a minimum of four years. The Fundamentals Examination and Professional Practice Exams are administered year-round.

There are several possible qualification paths to registration as a P.E. The quickest and most common route is to obtain a degree from an ABET (Accreditation Board for Engineering and Technology-formerly ECPD) accredited curriculum, and to acquire the specified amount of suitable professional level experience in addition to passing the two examinations mentioned above. There are seven ABET accredited curricula at WPI-biomedical engineering, civil engineering, chemical engineering, electrical and computer engineering, environmental engineering, industrial engineering, manufacturing engineering, and mechanical engineering. Persons with an unaccredited degree can still become registered in most, but not all, states by submitting evidence of a longer "apprenticeship" period (variable by states) before taking the two examinations. Students should strive, if at all possible, to pursue a program which is accredited by ABET and should work closely with their advisors and appropriate major departments to assure that the total program qualifies for accreditation, since this will greatly facilitate the achievement of registration in the future.

ALL SENIOR ENGINEERING MAJORS IN BME, CE, CHE, ECE, AND ME ARE URGED TO TAKE THE FUNDAMENTALS OF ENGINEERING EXAMINATION WHICH IS GIVEN ON CAMPUS EACH FALL AND SPRING. There will never be a better time!

Refresher courses for students, alumni and practicing engineers are available. Successful completion of this examination is normally the first step in eventually obtaining the right to use the initials "P.E."

WPI's Office of Continuing Education sponsors an eleven session EIT Refresher course from mid-January through mid-April on the WPI Campus. The course, which is taught by WPI faculty, includes reviews of the major topics covered on the exam. For further information, call 508-831-5517.

Description of Fundamentals of Engineering Examination (F.E.E.)

Typical Date Given: Last Saturday in October (also in April).

Typical Application Deadline: First week in September (also in January).

Duration: Eight hours.

Type: Multiple choice, open book.

# **Student Exchanges**

As technology and commerce become increasingly international in outlook, students in engineering, science and business must learn about countries and cultures other than their own. To respond to this need, WPI offers its students an extensive range of opportunities to broaden their academic and cultural perspectives through participation in the Global Projects Program. WPI also offers traditional exchange programs.

The principal academic emphasis in all exchanges is upon course work. In such programs, students must work closely with their advisor, the academic advisor of the exchange program, and the program coordinator at the site to design an individual program of study. Students have the responsibility of obtaining prior tentative approval from their department that courses taken abroad will count towards departmental distribution requirements. For final transfer credit evaluation, students must provide upon return the necessary detailed information on the content of courses taken abroad and the satisfactory completion of all work. In some exchanges, opportunities exist to complete project work (IQP, MQP, and Humanities and Arts requirement). The exchanges offer exceptional possibilities for projects comparing American and overseas applications of technology and the impact of technology on society. For WPI students on these exchanges, time is usually available for additional travel, before or after the formal academic period.

For more information on these programs, consult with the Global Experience Office in the Project Center or the academic advisor listed for each program.

#### Language Requirements

The usual language of instruction at most of the exchange institutions is the official language of the host country. While these institutions may offer a few courses taught in English, most lectures will be given in a foreign language. Thus, exchange students who intend to complete substantial course work must acquire the necessary language background. In some cases intensive language instruction can be arranged on site. In other cases, students acquire the language background through courses taught at WPI or other colleges, or by self-study. A few exceptions exist at some technical universities where the official language of instruction may be English.

#### University of Applied Sciences; Konstanz, Germany; Exchange

Students who already know German or are planning to begin studying it have the opportunity to study in Germany for a semester at the Hochschule für Technik, Wirtschaft und Gestaltung (HTWG: university of applied sciences; <a href="http://www.htwg-konstanz.de/">http://www.htwg-konstanz.de/</a>) in Konstanz, Germany. The city of Konstanz, located at the western end of Lake Constance (in German, der Bodensee) and right on the border with Switzerland, is one of Germany's most beautiful cities, with a well- preserved medieval and renaissance city center. The snow- covered Alps are visible across the lake and the HTWG campus is on the bank of the Rhine where it flows out of the lake and heads north. The city is pedestrian friendly, has great food, and there are unlimited opportunities for biking, boating, swimming, skiing, and hiking in the immediate vicinity. Weekend travel to Austria, Italy, and France is easy and Switzerland is literally right across the street. Students who begin their study of German in Terms A, B, C can complete the Humanities and Arts requirement by attending the HTWG in Terms D and E. WPI will not charge these students extra tuition for Term E. Students whose German is already at an intermediate or advanced level may take either advanced language courses or technical courses at the HTWG. Admission to this exchange program is competitive.

#### NEOMA Business School, Rouen, France; Exchange

Perfect opportunity for any Business School major or minor to spend a fall or spring semester in France, immersing yourself in French culture while studying at NEOMA Business School. NEOMA is one of the top ten business schools in France and ranked as one of the best business schools in Europe by the Financial Times. Courses at NEOMA are taught in English and French.

Students may study in Rouen, France. Rouen is located on the River Seine with a beautiful medieval city center. Rouen was fashioned by history, and has seen the likes of Joan of Arc, William the Conqueror and Claude Monet walk its streets. Dynamic festivals and events bring present day Rouen to life. The campus in Rouen offers students beautiful surroundings in seven hectares of woodland and is equipped with state-of-the-art equipment. It is located less than two hours from Paris and the coast of Normandy.

Students participating in this exchange program pay regular WPI tuition, but pay semester room and board to NEOMA. WBS staff will help students map out a curriculum at NEOMA, ensuring all NEOMA credits will transfer back into WPI. Admission to this exchange program is competitive.

# Combined Bachelor/Master's Program

#### Introduction

WPI undergraduates can begin work on a graduate degree by enrolling in a combined Bachelor's/Master's program. This accelerated course of study allows students to obtain an MS degree after only five years of full-time work (i.e., typically one year after completion of the BS). Students often obtain the BS and MS in the same field or department, but with careful planning some students complete the combined BS/MS program in two different fields; the combination of a BS in Civil Engineering and an MS in Fire Protection Engineering is a common example. (Throughout this section, "MS" will be used to refer to all Master's-level degrees; most students who complete the combined program obtain the MS).

#### Planning your Program

Because BS/MS students use some approved courses to satisfy the requirements of both degrees simultaneously, it is crucial for them to plan their curriculum early in their undergraduate career.

The specific course and MQP requirements for a BS/MS program are determined individually, so students should consult with their own advisor as well as the graduate coordinator in the department in which they plan to pursue their MS degree early in their Junior year. This consultation, or series of consultations, should produce a slate of approved undergraduate courses that will be used for graduate credit. Sometimes the instructors of these courses will ask BS/MS students to complete additional work, or will otherwise hold them to higher standards of achievement.

A student's advisor and graduate coordinator will also determine what role the MQP will play in the BS/MS program. Sometimes the MQP provides a foundation for a thesis. In cases where the BS and MS are not awarded in the same field, the MQP usually relates to the graduate program's discipline.

Once the specific course and MQP requirements have been established, students complete a Course Selection Form which is submitted to the relevant department(s) for approval. This written agreement constitutes the set of conditions that must be met for a student to complete the BS/MS program. They are a plan for completing the requirements for both degrees and they will not supersede or otherwise obviate departmental and university-wide requirements for either degree. The completed, signed form must be submitted to the Registrar before the student may matriculate in the combined program.

#### How to Apply

Students almost always apply for admission to the BS/MS program in their Junior year, typically after they have established their curriculum and other program requirements and completed the Course Selection Form with their faculty advisors. Applications are submitted to the Office of Graduate Admissions and are processed with all other graduate applications. Once a decision has been reached, the Office of Graduate Admissions will notify the student, usually within six weeks of completing the application.

#### **Program Requirements**

Only registered WPI undergraduates may apply for admission to the combined BS/MS programs. Students are considered undergraduates, no matter what courses they have completed, until they have met all of the requirements for the Bachelor's degree. In order to receive the BS and the MS, all of the requirements for both degrees must be completed.

In most departments a student may take up to four years to complete the Master's portion of the BS/MS program. There are exceptions, however, so students are advised to discuss their timetable with the appropriate advisor or graduate coordinator. Students who stop registering for classes for an extended length of time may be asked to petition the Committee for Graduate Studies and Research to continue their program.

#### Credit Equivalence and Distribution

No more than 40% of the credit hours required for the Master's degree, and which otherwise meet the requirements for each degree, may be used to satisfy the requirements for both degrees. In some departments, students may not double-count more than 30% of their graduate credits. Consult the graduate catalog for the requirements of your program.

Effective in the fall 2011 semester, Undergraduate students taking graduate courses may use the conversion factor: 1 graduate credit = 1/6 undergraduate unit. The policy was put into place to recognize the additional academic challenge of graduate studies with an appropriate increase in academic credit. All credit increases will be manually processed through the Registrar's Office and may not be completed the same day of registration; therefore, your initial bill may not reflect the credit conversion.

Please note that this change might have an impact on students' planning, especially if enrolled in a BS/MS program. More importantly, it also can impact overload calculations. Here are some examples:

- If a student is registered for 5 undergrad courses and 1 grad courses the student has 5/3 plus 1/2 units (or 2 and 1/6 units total) => No overload
- If a student is registered for 3 undergrad courses and 3 grad courses: the student has 3/3 + 3/2 units (2 and 1/2 units total) => 1/6 unit overload

Please note that the standard course load for WPI students is one unit per term (exclusive of ROTC and Physical Education classes, which do not count toward overloads). Students who register for more than 7/3 (or 21 credits) per semester will be charged accordingly. Overload charges are computed at the beginning of B term and at the beginning of D term based on the course and project load included in the student's final term registration. Please note that project work is credit-bearing and is included in overload calculations.

# **Campus Resources**

# **Academic Advising**

WPI's advising program is based on a cooperative and understanding relationship between students and advisors. Under the WPI Plan, students have the final responsibility for designing their own educational experience at WPI which includes understanding all their degree requirements and making sure those requirements have been satisfied for graduation. Advisors will support students in doing so.

All WPI students are assigned an academic support advisor in the Office of Academic Advising upon matriculating to WPI. These advisors are not major specific and will work with the student throughout their time at WPI to provide holistic and individualized academic support. In the second semester of the first year, students are also assigned a Faculty Advisor who is a professor in the student's chosen major. The two advisors work in tandem to support students in their academic pursuits and pathway to graduation.

The role of both the academic support advisor and the faculty advisor is to help their advisees design a program of study which reflects the students' interests and professional goals. While advisors are willing to suggest specific programs of study and help students explore the academic opportunities WPI has to offer, they will not insist that students follow a particular path. Advisors also help students choose among academic alternatives, help interpret degree requirements and review their Academic Progress Reports. Students are expected to understand curriculum planning resources such as the Program Tracking Sheets and Academic Progress Reports and their implications for academic progress. Therefore, it is critical that students take the initiative to consult regularly with their academic advisors for help with curriculum planning and course selection.

The Office of Academic Advising at WPI has several areas of focus, including but not limited to: 1) general academic advising; 2) academic resources; 3) transition programs; 4) Pre-Health programs; 5) nationally competitive scholarships and fellowships advising;

#### **General Academic Advising**

Students can come to the Office of Academic Advising for general advising in areas such as course selection, academic standing concerns, major selection, and individualized academic coaching. Support is also offered for students looking to include a co-op experience or pursue a BS/MS program. Academic support advisors are available to meet with students throughout the year for any of the reasons above, and may provide drop-in support at various times of the academic year such as add/drop periods and course registration. Academic support advisors may refer students to their Faculty Advisor when appropriate. Students are encouraged to meet with their Faculty Advisor for major-specific support.

The academic coaching program, primarily geared toward students on Academic Warning and Probation or who are at risk of being on Warning or Probation, includes guidance from an Academic Advisor in areas such as learning styles, effective study strategies, problem solving and critical thinking skills, organization, and time management. Students work on setting academic goals and designing learning and study strategies that work best for them.

#### **Academic Resources Center**

The Academic Resources Center (ARC) is located on the 5th floor of Unity Hall and houses the academic tutoring program and MASH (Math and Science Help). Peer tutors and MASH leaders are students who have demonstrated a mastery of material, and have been trained in peer tutoring and communication.

MASH is an academic support program for students enrolled in math and science classes. Offered to all students in a supported course, MASH provides assistance through regularly scheduled weekly study sessions beginning the first week of every term.

MASH review sessions are offered for a limited number of courses which students and faculty have identified as challenging. Many of the courses are typical first year classes, allowing extra support for students transitioning to college-level work. Each session is guided by a MASH leader, an undergraduate student who has taken the course before and has excelled. They understand the course material and what the instructor expects.

Through the MASH and tutoring programs, students become actively involved with the content material in a supportive environment. Studies show that students who attend MASH or tutoring regularly earn higher grades than students electing not to participate. Even more importantly, they learn how to master new concepts, learn how to put ideas into perspective, develop a better way to study, and effectively manage their time.

## **Transition Programs**

The Office of Academic Advising oversees programming for First Year students (including the Insight Program) and sophomore students. OAA also provides specific programs and advising opportunities tailored to the unique needs of students transferring to WPI from other institutions.

Insight Program: Beginning with New Student Orientation and continuing through the first semester, incoming first year and transfer students are assigned to an Insight Team, a group of students and advisors dedicated to assisting with the transition to college. This group of fellow students and mentors will help new students acclimate both personally and academically, and make the most out of their first year at WPI.

## **Pre-Health Advising**

The Pre-Health Advisor works with students who are interested in pursuing careers in the health professions.

Students may meet with the Pre-Health Advisor to

- a) explore various careers in healthcare and receive assistance in selecting the most suitable path for themselves;
- b) receive advice regarding pre-requisite courses and other preparation for various health professions programs (e.g. medicine, dentistry, veterinary medicine, optometry,
  - physician assistant studies, physical therapy among others;
- c) receive assistance throughout the professional school application process, including the arrangement of a committee recommendation letter;
  - d) take advantage of academic coaching or receive general help.

Special programming is offered throughout the year for Pre-Health students. To get connected with the Pre-health Advisor, students may email academic-advising@wpi.edu.

## **Scholarships and Fellowships Advising**

Nationally competitive scholarships and fellowships are selective awards that provide financial and professional support for individuals who exhibit interest in a particular area or field of study and who are likely to make positive contributions and advancements in their field.

These awards are available to help fund undergraduate education, graduate school, international study, and many provide additional benefits including access to alumni networks, employment opportunities, and conference funding. Funding from each scholarship is provided for a specified amount of time such as an academic year or for several years.

The Office of Academic Advising provides students with support and guidance with the application process for these highly competitive awards. This includes assistance in understanding the nomination process, feedback on application materials, support in determining suitable letter writers, and submission of the final application to the scholarship foundation for selected nominees.

Many national scholarships and fellowships require official nomination from WPI, which entails an on-campus selection process. Students who are interested in being considered for institutional nomination for a scholarship opportunity can connect with the Office of Academic Advising for additional information regarding nomination procedures. For more information click here.

## **Academic Resources**

#### **Academic Resources Center**

WPI's Academic Resources Center (ARC), located in Unity Hall, provides academic support services that are designed to enrich and enhance the learning experience of all WPI undergraduate students. Its student-based collaborative learning environment offers individualized assistance in a variety of subjects, as well as a comprehensive peer tutoring program. The ARC offers individual and group tutoring (MASH) sessions. All peer tutors and MASH Leaders are certified by the College Reading and Learning Association, and help students in a variety of academic subjects. Peer tutors are available by appointment, whereas MASH sessions are drop-in. To schedule an appointment with a peer tutor visit tutortrac.wpi.edu.

## The Writing Center

The WRITING CENTER, located on the second floor of Salisbury Labs (SL 233), employs ~20 peer writing tutors trained to help undergraduate and graduate students with any type of communication project: course papers and project reports, application documents, dissertations, oral presentations and slides, website and document design, and more. Through one-on-one appointments, tutors talk through project goals, help writers brainstorm and organize ideas, provide a critical reader's feedback, and provide mini-reviews of grammar and punctuation rules. To make an appointment, visit our website at www.wpi.edu/+writing. Faculty interested in designated tutoring for courses should contact Writing Center Director, Ryan Madan, at x6561 or ryanmadan@wpi.edu

## Writing Courses and Advisors

For information on WPI's writing programs, see Humanities and Arts faculty as follows:

Students interested in the Professional Writing major or the Writing and Rhetoric minor should contact Sarah Riddick (sriddick@wpi.edu) about these programs.

The HUA advisors for undergraduate international students whose native language is not English are Esther Boucher-Yip and Althea Danielski. For more information you may contact Esther Boucher-Yip at efboucher@wpi.edu and Althea Danielski at amdanielski@wpi.edu.

# Career Development Center

The Career Development Center (CDC) at WPI serves all degree seeking undergraduate and graduate students in the development of life-long skills related to careers, the internship/co-op and job search process, and the pursuit of graduate studies. The CDC serves all undergraduate and graduate students in addition to offering free lifetime alumni services.

The Career Development Center (CDC) provides a variety of services to students including the following:

- 1. **INDIVIDUAL APPOINTMENTS** Students can easily schedule one-on-one appointments with a CDC Staff Member online through their Handshake account in order to get help on a wide variety of topics. Students can choose to discuss topics ranging from major selection, exploring career options, searching for internships/co-ops/jobs, interviewing, applying to graduate school, and evaluating and negotiating job offers
- 2. **DROP-IN HOURS** Students can also be seen by a CDC Staff Member during advertised drop-in hours. During these times, an appointment is not required and students can get help on a first-come, first-served basis with their resume/cv, cover letter, interviewing skills, job offer evaluation and negotiation, and other quick 15 minute questions.
- 3. HANDSHAKE All students are provided with an account for the CDC's web-based system called Handshake. Handshake contains internship, co-op, part-time, and full-time job opportunities posted by employers for WPI students. Handshake also contains a company directory and information about upcoming events and career fairs hosted by the CDC. In addition, Handshake's resources section has special subscription resources (free of charge) that the CDC provides for students.
- 4. SUBSCRIPTION RESOURCES The CDC maintains a subscription to several resources to assist students in their career development and job search process, which are housed in Handshake. Among the many resources the CDC offers to students are: MyPlan (self-assessments, majors and careers database, graduate school search), CareerShift (internship/job, company, and contacts search), GoingGlobal (country/state-specific career resources and H-1B visa company database, interviewstream (interview practice and feedback), Vault (Career, Industry and company exploration) and Versatile PhD (Industry career options for PhDs). These are free for students to use.
- 5. **CAREER OUTLOOK PAGES** The CDC has put together a webpage with short descriptions of what can be expected from different WPI majors and careers, including average salaries, companies that have hired WPI graduates in a particular field, sample job titles, professional associations and clubs, popular industries, and more.
- 6. **CAREER FAIRS** Each year the CDC organizes career fairs for students to network with employers and obtain information on full-time, summer internship and co-op opportunities. The CDC hosts 2 in person events and many more events virtually.
- 7. **CAREER WORKSHOPS** Throughout the year, the CDC delivers frequent workshops for students on a wide variety of career development topics. Common workshop topics include: resumes/cover letters, internship/co-op/job search strategies, networking, interview skills, job offers and negotiation, and applying to graduate school, among others.
- 8. **NETWORKING NIGHTS and CAREER EXPOS** The CDC hosts networking nights and career expos throughout the year to give students an opportunity to network with alumni, fellow students, and industry professionals.
- g. **COMPANY INFORMATION SESSIONS** Companies host events on-campus to present on their organization, culture, and technology while networking and sharing opportunities with students. Check your WPI Handshake account for upcoming events.
- 10. **JOB OPPORTUNITIES** Job Postings are presented to WPI students and alumni exclusively by employers who want to hire WPI talent within the CDC Handshake system. Review and apply to Cooperative Education, Internships and Job positions to develop work experience.
- 11. **ON-CAMPUS INTERVIEWS** Each year over 1,000 interviews are held on campus with a variety of private, non-profit, and government organizations. Employers interview students for full-time, summer internship, and co-op opportunities. For a list of companies actively seeking candidates for interviews, please utilize your Handshake account
- 12. **RESUME DATABASE** Students and recent alumni may elect to make their resume viewable to employers through Handshake. If available, employers can access your "public" resume and may result in an interview request leading to a future opportunity.

- 13. **GRADUATE STUDIES** The Career Development Center (CDC) and the graduate coordinators in each department can help students search for graduate programs at WPI (BS/MS, MS, MEng, PhD) or elsewhere and assist with preparing for and applying to graduate school.
- 14. **ALUMNI ASSISTANCE** WPI alumni have free lifetime access to the CDC's services, whether they are seeking new employment or making a career change.

#### Location

The Career Development Center is located in the lower level of the Project Center. The CDC can be contacted by phone at 508-831-5260 or by email at cdc@wpi.edu. The website is www.wpi.edu/+CDC

# Center for Well-Being

WPI's Center for Well-Being (CWB) is a hub for cross-functional campus efforts aimed at improving student, community, and campus well-being through evidence-based practices, coordinated initiatives, the support of student and faculty research, and strategic visioning.

The CWB takes a holistic approach to well-being that empowers individuals to foster a sense of vitality (managing cognitive, physical, emotional, social, and spiritual energy), meaning and purpose, enjoyment, connection, and community. The CWB also utilizes comprehensive and coordinated initiatives that encompass peer advocacy, academic initiatives, population-based interventions, individual and small group training, and culture change.

The Center for Well-Being provides a number of services to students, faculty, and staff, including:

- A Supportive and Safe Space: The Center offers a beautiful and supportive oasis of calm and peace to gather, relax, reflect, and recharge. All are welcome to enjoy community spaces for popping in for a wellness break and cup of tea or be soothed by the water wall while doing puzzles.
- **Hub for Wellness Resources**: Not sure what well-being resources are available at WPI, or what support you need? The staff of the CWB can help connect you to the well-being support and resources you need.
- Quiet Spaces for Meditation or Reflection: Sign up or drop in for a 15-minute Sip of Wellness session in the Rest and Recovery Room or schedule a Reiki session with our certified Reiki master.
- Gathering Spaces for Group Programming: The Center for Well-Being Programming Room and conference rooms can be requested for hosting your wellness event by emailing <a href="mailto:cwb@wpi.edu">cwb@wpi.edu</a>.
- Coordination of Wellness Days: The CWB works with departments and student groups to coordinate programming on Wellness Days. If you are interested in sponsoring or co-sponsoring an activity or event, please fill out the Wellness Day Event Request Form on our website or email <a href="mailto:cwb@wpi.edu">cwb@wpi.edu</a>.
- **Wellness Programs**: CWB programs are offered in a variety of formats and settings so that individuals and groups can create their own well-being journey. Some programs are offered as drop-in group sessions while others require pre-registration. Interested in a wellness session for your club, organization, or department? Email the CWB at <a href="mailto:cwb@wpi.edu">cwb@wpi.edu</a>!
- **Peer Advocacy and Support:** The Center for Well-Being Peer Well-Being Ambassadors are trained to provide learning and wellness coaching and mentoring. They can also help you figure out what wellness support you need and where to find it.
- Individual Consultations: Looking for more personalized support to foster your wellness and resiliency?
   Email the CWB at <a href="mailto:cwb@wpi.edu">cwb@wpi.edu</a> to request an appointment with our Director, Associate Director, or Peer Well-Being Ambassadors.
- Mental Health Awareness Education and Suicide Prevention Initiatives: The CWB works with the Student Development and Counseling Center to ensure everyone is able to recognize signs of distress and know what to say if a friend or colleague needs help. Programming includes Kognito, an online suicide prevention simulation, as well as more intensive learning through Recognizing and Responding to Student Distress (RRSD), Question, Persuade, Refer (QPR), and Student Support Network (SSN). Visit the CWB website for more information.
- Research and Project Opportunities: The Center for Well-Being supports academic and research initiatives focused on studying and promoting health and well-being through research projects, IQPs, MQPs, or graduate projects.
- Wellness Courses for WPE Credit: In collaboration with Physical Education, Recreation, and Athletics (PERA), the Center for Well-Being offers wellness courses as an option for completing the Wellness and Physical Education (WPE) requirement. Wellness courses are numbered WPE 1600 to 1999 for students to easily identify the wellness courses that fulfill the WPE requirement.

#### Location

The Center for Well-Being is located in Daniels Hall, Room 102, in the Morgan/Daniels Wedge. The CWB can be contacted by phone at 508-831-6494 or by email at <a href="mailto:cwb@wpi.edu">cwb@wpi.edu</a>. The website is <a href="mailto:https://www.wpi.edu/offices/center-well-being">https://www.wpi.edu/offices/center-well-being</a>.

# **Cooperative Education**

#### **Cooperative Education - Undergraduate**

#### Co-op

The WPI Cooperative Education Program (Co-op) is an opportunity for undergraduate students to alternate time in the classroom with extended periods of paid, full-time, career-related work experience in industry or government. This optional program can be done during the following scenarios:

- 1. Summer plus A term
- 2. Summer, A term and B term
- 3. C term, D term and Summer
- 4. D term and Summer
- 5. Summer, A term, B term, C term and D term
- 6. A term, B term, C term, D term and summer

Most students elect to participate in one Co-op assignment, though up to two is possible. Because Co-op is not a credit-baring program, it is recommended that students pre-plan during their first or second year. Preparation of a complete four year plan with the student's academic advisor is required to ensure compatible scheduling of work periods and academic courses.

In order to qualify for the Co-op program, students must meet the following requirements:

- 1. Must be a current, full time, undergraduate WPI student in good standing. Note: If any of the following conditions apply a student may petition for eligibility.
  - 1. Not in good academic standing (i.e. on academic warning or probation)
  - 2. Have financial holds on their account
  - 3. Have a judicial record. Note: having a judicial record does not automatically preclude you from participating in a Co-op.
  - 4. Want to register for up to 1/3 unit of course while on Co-op.
- 2. International students must complete one full academic year at WPI before being eligible for Co-op, due to US Federal Government regulations. In addition, the Co-op must be related to the major (not minor). For questions, please contact International House.
- 3. Understand the impact Co-op would have on your federal and institutional financial aid through a meeting with the Office of Student Aid & Financial Literacy.
- 4. Understand the impact your Co-op will have on your course schedule and outline your four year plan, including projects, Co-op, etc. and have it reviewed through a required meeting with your Faculty Advisor.
- 5. Approval will be needed from your Faculty Advisor, Office of Student Aid & Financial Literacy, Supervisor at your Co-op, Bursar, Dean of Students Office, Career Development Center (CDC), and International House (if applicable). Approvals are done electronically through Handshake, beginning with you entering your Co-op information in your Handshake Account's Experiences section. The deadline for fall Co-op application is August 1; the deadline for spring Co-op application is December 1. Co-op applications received after deadline are reviewed on a case by case basis. Submissions after the add/ drop deadline will not be approved.
- 6. To be considered, the Co-op must be full time (at least 30 hours per week), paid, 4-8 months in duration and related to your major and career goals.
- 7. Understands and accepts the Terms of Agreement. (see website for more information)

#### **Advantages for Students**

Co-op offers several advantages for students:

1. Gain experience, build their resume and bring theory into practice.

- 2. Earnings enable students to pay a significant portion of their college expenses.
- 3. Sharpen skills and abilities as an emerging professional.
- 4. Test out career options to help clarify career goals and interests.
- 5. Return to school with new knowledge and experience in their field.
- 6. Position themselves for future opportunities; Co-op participants are preferred full time hires.
- 7. Transcript will show Co-op and indicate company name.

#### Information and Registration

Students interested in exploring the possibility of participating in the co-op program should attend drop-ins or schedule an appointment with a CDC Career Advisor.

# George C. Gordon Library

The George C. Gordon Library welcomes 300,000 visitors each year, and provides resources and innovative services that support teaching, learning, scholarship, and community at WPI. Gordon Library Information Services, the ITS Service Desk, and the Technology for Teaching and Learning (TTL) group of the Academic Technology Center (ATC) are conveniently co-located near the library's main entrance on the second floor. The adjacent Class of 1970 Library Café offers food and beverages. During the academic year, students may access the library from 8am to 1am Monday-Thursday, until 9pm on Friday and Saturday, and until 1am on Sunday.

The library's four floors offer a wide variety of individual and group study spaces, including modern private carrels and team study areas on the upper level, and a floor dedicated to quiet study (1<sup>st</sup> floor/lower level). The library's eleven Tech Suites are private reservable collaborative rooms, seating up to six people and equipped with large monitors and wireless screen-sharing technology. Additional group study spaces and several individual study or interview rooms are located throughout the building.

The library offers both wireless and wired computer network access throughout the library's open study areas, with over 50 computers that offer free access to dozens of high quality software packages. The Multimedia Lab on the first floor offers specialized multimedia software and hardware. The library offers several tools to support accessibility and convenience on the second floor, including printers, a KIC book scanner, and an accessibility station that includes Kurzweil 3000 text-to-speech software.

The staff of Gordon Library provides many services to support student learning. Our research and instruction librarians help students with their research questions and course assignments, offer library instruction and orientation sessions, and provide research consultations to individuals and project groups.

The information resources of the library are selected to support WPI courses, projects, research, scholarship, and community interests. In addition to print books, the library offers an extensive collection of over 1 million electronic books and thousands of electronic journals, as well as more than 250 research databases. The library's special book collections include books by WPI faculty authors, recreational reading, music, videos, video games, and board games.

The library catalog, electronic journal and book collections, specialized research databases, course-specific information, and many other resources are available from the library's web site (<a href="wpi.edu/library">wpi.edu/library</a>) which features powerful search options and links to research guides, journals, articles, databases, and other digital resources and services. Off-campus access to the library's electronic resources is available with a WPI login or VPN.

Through the Digital WPI platform (<u>digital.wpi.edu</u>), the library collects and offers global digital access to WPI student work including posters created by first year students in the Great Problems Seminar program, IQP and MQP reports, graduate theses and dissertations, as well as selected WPI faculty research.

All students can request materials not held in Gordon Library through a free interlibrary loan service. WPI students also have access to the collections of other academic libraries within Central Massachusetts through the library's membership in the Academic and Research Collaborative (ARC). Students can obtain an ARC cross-borrowing card which allows direct borrowing at many regional academic libraries.

The Archives and Special Collections, located on the ground floor, serves as the institutional memory of WPI and curates the university's collection of manuscripts, rare books, photographs, art, and objects. Our archivists

work with the campus community to provide access to historical resources related to WPI, the social and technical stories of the Industrial Revolutions, and regional history. Highlights from the collection include a world-class collection of material related to the life, world, and works of Charles Dickens; selected fine art including prints, paintings, and sculptures; records and publications documenting the history of the university; documentation of the foundations of Fire Protection Engineering; and records of the Morgan Construction Company. These items can be explored through ArchivesSpace (<a href="archives.wpi.edu">archives.wpi.edu</a>), and are available to researchers by visiting the Fellman Dickens Reading Room, with select digitized and digital-born material hosted at Digital WPI (<a href="digital.wpi.edu">digital.wpi.edu</a>).

Special exhibits including works by guest and student artists are offered in the library's galleries. WPI authors are regularly invited to talk about their work in the library's Meet the Author series, and other programming occurs regularly to serve the WPI community.

For more information, please visit the library website at wpi.edu/library.

# Information Technology Services

#### **Information Technology Services**

WPI Information Technology Services (ITS) offers a wide range of information technology resources to the WPI community to support teaching, learning, research and student life.

#### Access

The WPI account acts as an undergraduate student's WPI virtual identity while the student is actively registered. Usage is governed by the <u>Acceptable Use Policy</u>. The account provides access to many technology resources including:

#### **Network**

- Wired and wireless network access available in all academic buildings, residence halls, and participating Greek houses
- High speed Internet connectivity including connection to Internet2
- Virtual Private Network (VPN) secure remote access to WPI on-campus information technology resources

Information Security monitors the WPI network and provides Endpoint Detection and Response for ITS-managed Systems.

#### **University Systems**

- University services, such as email, learning management system, eProjects, web site, software applications, remote desktop, databases, etc. are enabled by ITS.
- Workday, and related campus-wide data systems, enable administrative departments to run the critical business functions of the University. They also provide students and faculty access to student registration, advising, and financial information. They enable students to update their biographical information, designate proxy access, and check grades.

#### **Software**

Numerous software applications including academic courseware (<u>The WPI Hub | Software Library</u>) are offered for student access:

- in public computer labs
- via remote services
- via network download for some applications
- · via discounted purchase at online store

#### **Computer Labs**

Over 600 public computers are available across campus for student use. Many are located in open access labs within academic buildings and throughout the Gordon Library. Public computer labs offer a consistent user interface and software profile. Specialty labs for students include:

- · Multimedia Lab enabling digital editing and scanning is located in the Gordon Library
- Maker space, prototyping and recording labs are housed in the Innovation Studio
- Design Studio offering powerful workstations for CAD/FEA/FEM projects and coursework is located in Higgins Labs
- Virtual labs with remote access are also available

#### **Printing Services**

The Gordon Library Information Commons Print Center is equipped to meet students' scanning and printing needs. Printers are also located throughout the Gordon Library as well as within some computer labs. These additional printing services are detailed in Technology Support and Instruction:

- · Large-format poster printing
- · Rapid prototyping/3D printing

#### **Collaboration and Learning Resources**

Collaboration and learning are supported through specialized software and applications, technology-enhanced spaces, and equipment loans.

- Learning Management Software: Canvas course web sites
- Tools: Microsoft 365 (email/calendar/contact, task, file storage and management, Teams), FusionForge, and CampusPress
- Web-conferencing: Zoom and Teams allow remote participants to conduct real-time meetings in a webbased environment from any location with a web-enabled device and a high speed Internet connection
- Tech Suites: Technology-enhanced meeting spaces with wireless screensharing are designed for student project group use
- Learning Spaces: Active learning classrooms, and technology-enhanced classrooms and conference rooms
- Equipment Loans: Laptops, digital cameras, audio recorders, hard drives, projectors, etc. are available through the Academic Technology Center

#### **Technology Support and Instruction**

#### Technology Service Desk

Gordon Library, Main Floor; (508) 831-5888; hub@wpi.edu; https://hub.wpi.edu

- · Offers in-person and remote technology support
- Requests for assistance can be submitted via phone, email or web.
- · IT Service, Software, and Knowledge Catalog provides answers to common issues

#### Academic Technology Center (ATC)

Fuller Labs, Room 117; (508) 831-5220; atc@wpi.edu

- In-person technology support on audio-visual equipment loaned out for multi-media projects and campus events sponsored by WPI student organizations
- · Large-format poster printing

#### Academic and Research Computing

Higgins Labs, https://www.wpi.edu/research/resources/support/academic-research-computing

- Instructor-led scientific and engineering software applications training
- · Data management and access to cloud collaboration space

- Numerous high performance computational resources available for student research projects
- · Large-format poster printing located in Higgins Labs
- Enterprise level rapid prototyping/3D printing located in Higgins Labs

#### Download as PDF

# Office of Accessibility Services

The Office of Accessibility Services (OAS) provides support for WPI students with documented disabilities to equally participate in programs and campus life by putting approved accommodations in place. OAS strives to foster an environment that supports and encourages self-advocacy, independence, and personal growth. Accommodations can be provided to students with disabilities that are permanent in nature as well as temporary when injuries have occurred. More information on how to disclose a disability, documentation guidelines, and general office information can be found at: <a href="https://www.wpi.edu/+accessibility">www.wpi.edu/+accessibility</a>.

OAS services are confidential and available to any student enrolled in a WPI course. Students seeking accommodations or services are responsible for identifying themselves to the OAS as well as providing documentation of their disability by a licensed professional.

OAS is located on the 5<sup>th</sup> floor of Unity Hall and is open Monday-Friday 8am to 5pm. Please call the office at 508-831-4908 or email accessibilityservices@wpi.edu to schedule an appointment.

## Music and Theatre Facilities

### **Computer Music Laboratories**

Alden Memorial and Sanford Riley Hall

These laboratories support creative and research activity in a variety of music- and sound-related applications including real-time virtual orchestra design and production techniques. The lab contains hardware and software for multi-track digital recording and editing, signal processing, algorithmic composition, sound synthesis, MIDI sequencing, music notation, and music programming. The computer music classroom is located in the basement of Alden Hall.

# First Baptist Church

The Choral Department is housed in the First Baptist Church, located on the north corner of WPI's campus. Each of the four choirs (Glee Club, Alden Voices, Festival Chorus, and Chamber Choir) hold their weekly rehearsals at the church, along with many a cappella groups. The ensembles regularly rehearse in the spacious and versatile Gordon Hall, while giving three performances a year in the resonant sanctuary. The office for the Director of Choral Activities and choral library are also located within the church.

## Alden Hall Theatre Spaces

Alden Memorial: First Floor

Alden Hall houses many of the performance activities at WPI, both academic and extracurricular. The Green Room serves as a space for rehearsals, meetings and other academic projects of the theatre community. It holds various public resources for the WPI theatre community, including plays and reference books. The Great Hall is used for VOX Musical Theatre performances as well as choral and instrumental performances. In addition, the Hall is sometimes used for festive and gala campus functions.

Alden Memorial: Sub-basement

The sub-basement of Alden Hall houses a scenic workshop, as well as storage for props & costumes.

## Jazz History Database Lab

The Jazz History Database lab, located in the basement of Alden Hall, is an interactive multimedia museum focused on artists deserving of wider recognition and dedicated to the preservation of "at-risk" jazz artifacts. The

rare and unique materials on this website have been contributed by individuals, academics, institutions and media from the U.S. and Internationally. The Jazz History Database is hosted by Worcester Polytechnic Institute (WPI) under the direction of Professor Ben Young, Director. Academic credit is awarded to students working in teams to preserve materials for archiving and inclusion in the database.

#### The Little Theatre

Sanford-Riley, Lower Level

Made possible with a major gift from the George I. Alden Trust, the Little Theatre is the University's first dedicated academic theatre facility. With a combination of flexible and fixed seating, this 80-111 seat facility has a permanent lighting grid and sound system, a control booth, and a green room/dressing room. The Little Theatre is the laboratory for the Theatre division of the Department of Humanities and Arts.

#### Music, Perception, and Robotics Lab

Alden Memorial: B21

The Music, Perception and Robotics Lab explores how creative expression can be inspired by and enhanced through technological tools and understanding of human auditory perception. The lab designs, builds, composes for and performs with musical robots. It conducts psychological research that examines human musical perception and creativity. It synthesizes these efforts by developing software that allows human musicians to interact with robotic ones.

### Spaulding Recital Hall and Other Rooms for Rehearsal and Performance

Alden Memorial: Lower Level

Alden Center for the Performing Arts houses the Spaulding Recital Hall, Perreault Chamber Rehearsal Room, the Janet Earle Choral Rehearsal Room, three practice rooms, and the Knight Lecture Room. Available for practice are Steinway grand pianos and the Three Manual Aeolian-Skinner pipe organ in the main Concert Hall. There are three concert grand pianos for recitals, ensemble work and concerts. WPI has some instruments that can be made available to students upon request.

#### Other Music Facilities

Music facilities also include The Janet Earle Room, The Perreault Chamber Rehearsal Room, the music classroom, practice rooms, computer music labs and storage facilities.

# Student Development and Counseling Center

The SDCC's team of experienced professionals is here to support your mental health, emotional well-being, and interpersonal growth. We offer a variety of clinical services—including **short-term individual counseling**, **group sessions**, and **crisis interventions**—and will partner with you to identify the tools, resources, and strategies that can help you meet your academic, social, and personal goals. This might take one session, or it might require a little more support. **Either way, you are not alone, and we are here to support you on your WPI journey.** 

Some of the ways the SDCC supports students are:

**Short-term Individual Counseling:** While the length of counseling may differ, all first sessions at the SDCC begin with an Intake Appointment. The intake appointment at the SDCC is typically 25-minutes where you and the therapist will discuss your presenting concern(s), clarify and work on goals for treatment, and then they will work to make a recommendation about next steps. These next steps may include following up as needed, joining a group, helping a student connect with specialists in the area, or other options as appropriate. The SDCC clinician will talk through the Scope of Services with students and recommend next steps.

**Confidentiality:** The SDCC is dedicated to creating an inclusive, respectful, and comfortable environment where students can share openly and work with counselors to set goals, identify obstacles, and move in a positive direction. Confidentiality is taken very seriously, and only under certain, very specific conditions—outlined in the confidentiality policy (PDF)—will counselors share information outside of the SDCC.

**Group Sessions and Workshops:** The SDCC offers a variety of groups and workshops focused on student need. These groups may change from term to term. Participating in a therapeutic group can be a helpful resource for students to use both as a stand-alone tool for support, or as an adjunct to individual therapy. Not only will you have the ear of a trained therapist and counselor, but you'll have an opportunity to connect with peers and form new relationships, provide and receive support to/from others, and discover that you are not alone.

Crisis Support: The SDCC can connect students to crisis support options if needed. If you are on-campus or living close to WPI: During normal working hours call the SDCC (508-831-5540). Our services are available whether you live on- or off-campus. If you are off-campus or away from WPI: Call 911 or go to your nearest emergency room.

**After-hours Crisis Support line**: Calling ProtoCall (508-831-5540) is a great first step, as the crisis counselor you connect with can help you determine if you need a higher level of intervention or not. Call Campus Police or 911 if you are concerned about yourself or the immediate safety of someone else.

We know reaching out for help is not easy. We have added <u>an online scheduling too</u>l to make it easy for students to schedule appointments, and our after-hours telehealth line (<u>508-831-5540</u>) connects students to trained mental health professionals after normal business hours and on weekends/holidays.

Additionally, the SDCC hosts trainings, workshops, and presentations that are designed to foster personal growth and skills for success.

Students interested in learning more about the SDCC and its services are encouraged to email us at sdcc@wpi.edu, call us at 508-831-5540, or visit us during our operating hours. The main office is located at #16 Einhorn Road. We are open Monday-Friday 8am-5pm. Our summer hours are Monday-Friday 8am-4:30 pm.

# **Academic Departments and Programs**

# **Departments**

# Major Interdisciplinary Programs

# **Pre-Professional Programs**

## Pre-Law Programs Advisor: K. Rissmiller

Law schools do not require that undergraduates complete any particular course of study. Thus, students who complete degrees in engineering and science (or other WPI programs of study) may wish to consider careers in law. Undergraduates interested in attending law school are encouraged to choose from among the many courses offered which explore legal topics. For those with greater interest, WPI offers a Minor in Law and Technology described on page 121. Courses with substantial legal content are listed among those courses fulfilling the requirements of the minor.

Enrolling in these courses will introduce students to the fundamentals of legal process and legal analysis. Students will study statutes, regulations and case law. These courses will, therefore, offer the student valuable exposure to the kind of material commonly studied in law schools and they may help demonstrate a student's interest to law school admission committees.

Many questions about law school can be answered online. The Law School Admissions Council (LSAC) offers the Law School Admission Test (LSAT) which is generally required for law school applications. Infomation about the test and other aspects of law school can be found on the LSAC website. Students interested in discussing career options and how they might prepare for law school are invited to contact Associate Dean Rissmiller in the Global School.

# Pre-Health Programs ADVISORS: E. Jacoby, A. Holmes

Students at WPI who wish to pursue careers in the health professions (e.g. medicine, dentistry, veterinary medicine, etc.) should, in consultation with their academic advisors, plan their academic programs to include courses in biology, general and organic chemistry, biochemistry, and physics including laboratory experiences. Although required courses for certain majors will naturally overlap with professional school prerequisites more than others, entry into medical or other health professions schools may be accomplished through any major program of study. It is important for students to work closely with their faculty advisors as well as the pre-health advisor to formulate an academic plan of study that will include the courses required for admission to health professions schools while still allowing for completion of all degree requirements. Individual admissions requirements will vary by school and program. Students should consult admissions websites of individual health professions programs for specific information about prerequisites. Pre-med students are encouraged to consult the Medical School Admissions Requirement (MSAR) resource.

WPI's project-focused curriculum offers a tremendous advantage to pre-health students. Health professions programs value teamwork, as well as cross-cultural, research, and community service experience, all of which can be demonstrated through project work. Because students will graduate from WPI with a degree in an academic discipline, they will have other career opportunities should they decide not to pursue a career in a health profession or should they choose to work for some time after graduation before continuing on to a health professions school. Students and alumni applying to health professions schools should plan to meet with the pre-health advisor to discuss the application process and arrange a letter of recommendation from the pre-health committee (if required) to support their application. Such meetings should ideally begin during a student's first year as an undergraduate student (or as soon as a student decides to pursue this path) and continue through their time at WPI.

# Teacher Preparation Program Advisor: Jillian DiBonaventura

Licensed teachers in STEM fields are in continual high demand across the United States. Participation and successful completion of our teacher preparation program will result in obtaining an Initial teaching licensure in the state of Massachusetts. WPI students may elect to pursue licensure in middle or high school mathematics, middle school general science, high school science (Biology, Chemistry, Physics), or technology/engineering while obtaining an undergraduate degree in the STEM-related major of their choice.

Specific content courses are required to meet Massachusetts requirements for Subject Matter Knowledge competency, but these are generally met by courses in a student's major. Joining this certificate program enables participants to pursue the content are of their choice while impacting the lives of middle and high school students in urban schools and the local community. Students wishing to discuss this option further are encouraged to contact Jillian DiBonaventura, Director of Teacher Preparation at the STEM Education Center.

Applications are accepted via eProjects twice yearly (B and C term), and more information can be found on our website or by contacting <a href="https://www.wpi.edu/+teach">www.wpi.edu/+teach</a>

https://www.wpi.edu/academics/undergraduate/teacher-preparation-program

# Teacher Prep students must successfully complete the following requirements for initial licensure in the state of Massachusetts:

- Completion of an online portfolio that addresses the Candidate Assessment of Performance (CAP) required by the Department of Elementary and Secondary Education (DESE)
- Successful completion of a full-time teaching practicum in a local middle or high school (often completed as an IQP C/D term of junior year)
- Pass the state MTEL teaching tests in the following areas:
  - Communication and Literacy skills (Reading & Writing subtests)
  - Relevant Subject Matter test for the license sought
- Complete all program requirements (Pre-practicum fieldwork and workshops, Culturally Responsive Teaching trainings, Senior seminar and coursework)

ltem #	Title	Units
PSY 2401	The Psychology of Education	1/3
	Choose one: PSY 2410, PSY 1401, or PSY 1404	_
ID 3100	Teaching Methods in Mathematics and Science	1/3
ID 3200	Sheltered English Immersion Endorsement Course for Teachers	1/3

#### **ROTC**

## Military Science LTC Joseph T. Mazzocchi

PROFESSOR: LTC Joseph Mazzocchi

ASSISTANT PROFESSOR: MAJ Daniel Gimm, CPT Patrick Crews

INSTRUCTORS: MSG James Conley, MSG Charles Dougherty, SFC Donald Vota

#### **Mission Statement:**

The Military Science and Leadership Program (Army ROTC) is a premiere leadership program offered by WPI. Open to all students within the Worcester Consortium, the program teaches valuable leadership skills and managerial traits that prepare students for careers in both the private and public sectors. Students partake in hands-on experiences that integrate traditional coursework with innovative training. Students develop strong decision-making and organizational management skills, while cultivating team-building and interpersonal skills, as well as mastering time and stress management techniques.

## **Objectives and Outcomes:**

WPI's Army ROTC prepares multi-faceted future leaders. Students who participate in Army ROTC while pursuing their undergraduate and graduate studies are extremely marketable and highly sought after for their problem-solving and adaptable capabilities. As technology continues to transform organizations and corporations, ROTC students are at the forefront of these cutting-edge developments.

## **Program Descriptions:**

The Military Science and Leadership program is intended to be a four-year program which encourages personal growth and cultivates overall character development.

#### A. The Basic Course:

The Basic Course serves as the foundation of the Army ROTC program and is taken over the first two years. The focal points of the Basic Course are leadership, teambuilding and communication skills. Students participate in adventure training (such as orienteering, rappelling and paintball) to put classroom teachings and core concept-strategies to practice.

Students may participate in the first two years of the program commitment free. Students awarded full-tuition scholarships or who participate in the Advanced Course (described below) incur a service obligation and may serve in the Army either full-time or part-time.

#### **B. Advanced Course:**

The Advanced Course is a more intensive leadership program that is taken during the Junior and Senior years, or, during two years of graduate studies. The curriculum continues its focus on problem-solving and team building exercises while incorporating military tactics and Ethics.

Student interested in earning a commission as an Army Officer are required to enroll in the Advanced Camp (AC) at Ft Knox, Kentucky. AC is a six-week leadership and tactical course that students are paid to attend during the summer; it is the culmination of the students' training over their tenure on campus. If students decide later in their academic career that they would like to pursue Army ROTC, there are alternate entry options that allow them to receive Basic Course credit and to prepare them for Advanced Camp (1).

Students attending on an Army ROTC Scholarship receive a yearly book-allowance of \$1,200 in addition to a monthly stipend. Both "scholarship" and "contracted, non-scholarship" students receive a monthly stipend of \$420.00. Students interested in pursuing scholarships or enrolling in the Advanced Course must meet specific eligibility requirements.

# Air Force Aerospace Studies LT COL C. CUDE, DEPARTMENT HEAD

PROFESSOR: Lt Col C. Cude

ASSISTANT PROFESSORS: Maj K. Blackman, Capt C. Rouleau

#### **Mission**

The mission of AFROTC is to develop leaders of character for tomorrow's Air Force and Space Force. The mission of the United States Air Force is to fly, fight and win...airpower anytime, anywhere. The United States Space Force (USSF) is a military service that organizes, trains, and equips space forces in order to protect U.S. and allied interests in space and to provide space capabilities to the joint force. Successful graduates of the program receive a commission as a Second Lieutenant in the United States Air Force or Space Force.

## **Educational Objectives**

Students who successfully complete the AFROTC program will develop:

- 1. An understanding of the fundamental concepts and principles of Air and Space.
- 2. A basic understanding of associated professional knowledge.
- 3. A strong sense of personal integrity, honor, and individual responsibility.
- 4. An appreciation of the requirements for national security.

#### **Air Force ROTC Programs**

There are two traditional routes to an Air Force commission through Air Force ROTC. Entering students may enroll in the Air Force Four-Year Program. Students with at least three academic years remaining in college may apply for the Accelerated Program.

#### **Four- or Five-Year Program**

The preferred program is the traditional Four-Year Program. To enroll, simply register for Air Force Aerospace Studies in the fall term of the freshman year in the same manner as other college courses. There is NO MILITARY OBLIGATION for the first two years of Air Force ROTC unless you have an Air Force ROTC scholarship.

The first two years are known as the General Military Course (GMC). Classes meet one hour per week and are required for freshmen and sophomores.

Individuals who successfully complete the GMC compete nationwide for entry into the Professional Officers Course (POC). POC classes meet three hours per week and are required for all juniors and seniors. Officer Candidates enrolled in the POC and on scholarship receive a nontaxable subsistence allowance of up to \$500 each month.

Qualified Officer candidates will attend the Air Force ROTC field-training program for four weeks, usually between their sophomore and junior years.

#### **Accelerated Program**

For students who do not enroll in Air Force ROTC during their first year in college, it is possible to condense the two years of GMC membership into a single year, as long as the student has three more years of college left.

## Other Aspects of the AFROTC Program Leadership Laboratory:

Air Force ROTC officer candidates participate in a Leadership Laboratory (LLAB) where the leadership skills and management theories acquired in the classroom are put into practice. The LLAB meets once each week for approximately two hours.

This formal military training is largely planned and directed by the officer candidates. The freshmen and sophomores are involved in such initial leadership experiences as problem solving, dynamic leadership, team building, Air Force customs and courtesies, drill movements, Air Force educational benefits, Air Force career opportunities, and preparation for field training. The juniors and seniors are involved in more advanced leadership experiences as they become responsible for the planning and organizing of wing activities, including conducting the Leadership Laboratory itself.

#### **Field Training:**

The summer program is designed to develop military leadership, discipline, and evaluate performance. At the same time, the Air Force can evaluate each student's potential as an officer. Field training includes: expeditionary operations, Air Force professional development, marksmanship training, physical fitness, and survival training.

#### **Base Visits:**

Air Force ROTC officer candidates may have the opportunity to visit Air Force bases for firsthand observation of the operating Air Force.

#### **Additional Information:**

In addition to formal activities, the cadet wing plans and organizes a full schedule of social events throughout the academic year. These include a Dining-In, Military Ball, a Field Day, and intramural sports activities. Professional Development Training Programs, such as Advanced Cyber Education, internships with the National Reconnaissance Office, combative training, and global cultural language and immersion training may also be available to selected volunteer officer candidates during the summer. Students may also participate in Arnold Air Society, Drill Team, and Civil Air Patrol, among other activities.

## Other Areas