CAREER DEVELOPMENT
AND GRADUATE SCHOOL

SECTION 6

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The Career Development Center (CDC) at WPI assists 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 Job Finder 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, resumes/CVs and cover letters, searching for internships/co-ops/jobs, interviewing, applying to graduate school, and evaluating and negotiating job offers.

2. **WALK-IN HOURS** – Students can also be seen by a CDC Staff Member during advertised walk-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 questions.

3. **JOB FINDER** – All students are provided with an account for the CDC's web-based system called Job Finder. Job Finder contains internship, co-op, part-time, and full-time job opportunities posted by employers for WPI students. Job Finder also contains a company directory and information about upcoming events and career fairs hosted by the CDC. In addition, Job Finder houses subscription resources 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 Job Finder. Among the many resources the CDC offers to students are: MyPlan (self-assessments, majors and careers database, graduate school search), Career Search Database (US and international company database), CareerShift (internship/job, company, and contacts search), and GoingGlobal (country/state-specific career resources and H-1B visa company database).

5. **ADDITIONAL OFFICE RESOURCES** – The CDC maintains a library of books and print resources on a variety of career-related topics for students to use, including graduate school resources for researching schools and preparing for standardized entrance exams (e.g., GRE, GMAT, MCAT, LSAT, etc.). In addition, the office maintains WPI Major Binders on each undergraduate and graduate major to help students learn more about what they can do with their major.

6. **CAREER FAIRS** – Each year the CDC organizes three career fairs for students to network with employers and obtain information on full-time, summer internship and co-op opportunities.

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** – The CDC hosts networking nights throughout the year to give students an opportunity to network with alumni, fellow students, and industry professionals.

9. **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 Job Finder 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 Job Finder system. Review and apply to Full Time, Internship, Co-op, and Temporary/Part-Time 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. Some past companies that have interviewed students on campus:

- Anheuser Busch
- Avery Dennison
- EMC
- EMD Millipore
- ExxonMobil
- Fidelity Investments
- Frito-Lay/Pepsi-Co
- General Electric
- Kiewit Construction Company
- Mapfre Insurance
- Microsoft
- Rethink Robotics
- Spectra Energy
- The Hanover Insurance Group
- The Travelers Companies
- Unum

12. **RESUME REFERRAL** – Students and recent alumni may elect to make their resume viewable to employers through Job Finder. If available, employers can access your “default” 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, 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.
INTRODUCTION
WPI offers more than fifty graduate degree programs that enable students to deepen and enrich their understanding of a field, and to develop their professional expertise.

GRADUATE PROGRAMS

Aerospace Engineering
- Master of Science in Aerospace Engineering
- Ph.D. in Aerospace Engineering

Bioinformatics and Computational Biology
- Master of Science in Bioinformatics and Computational Biology
- Ph.D. in Bioinformatics and Computational Biology

Biology and Biotechnology*
- Master of Science in Biology and Biotechnology
- Ph.D. in Biology and Biotechnology

Biomedical Engineering
- Master of Science in Biomedical Engineering
- Master of Engineering in Biomedical Engineering
- Ph.D. in Biomedical Engineering

Business, School of
- Master of Business Administration (M.B.A.)
- Master of Science in Information Technology
- Master of Science in Management
- Master of Science in Marketing and Innovation
- Master of Science in Operations Analytics and Management
- Ph.D. in Business Administration
- Graduate Certificate

Chemical Engineering
- Master of Science in Chemical Engineering
- Ph.D. in Chemical Engineering

Chemistry and Biochemistry
- Master of Science in Chemistry
- Master of Science in Biochemistry
- Ph.D. in Chemistry
- Ph.D. in Biochemistry

Civil and Environmental Engineering
- Master of Science in Civil Engineering
- Master of Science in Environmental Engineering
- Interdisciplinary Master of Science in Construction Project Management
- Master of Engineering in Civil Engineering
- Ph.D. in Civil Engineering
- Graduate Certificate
- Advanced Certificate

Computer Science
- Master of Science in Computer Science
- Master of Science in Computer Science Specializing in Computer and Communications Networks (CCN)
- Master of Science in Computer Science Specializing in Computer Security
- Ph.D. in Computer Science
- Graduate Certificate
- Advanced Certificate

Data Science
- Master of Science in Data Science
- Graduate Certificate
- Ph.D. in Data Science

Electrical and Computer Engineering
- Master of Science in Electrical and Computer Engineering
- Master of Engineering in Electrical and Computer Engineering
- Master of Engineering in Power Systems Engineering
- Ph.D. in Electrical and Computer Engineering
- Graduate Certificate
- Advanced Certificate

Fire Protection Engineering
- Master of Science in Fire Protection Engineering
- Ph.D. in Fire Protection Engineering
- Graduate Certificate
- Advanced Certificate

Interactive Media & Game Development
- Master of Science in Interactive Media & Game Development

Interdisciplinary Programs
- Master of Science in:
  - Impact Engineering
  - Manufacturing Engineering Management
  - Power Systems Management
  - Systems Modeling
- Ph.D., Interdisciplinary Studies
- Graduate Certificate in Nuclear Science Engineering

Learning Sciences and Technologies
- Master of Science in Learning Sciences and Technologies
- Ph.D. in Learning Sciences and Technologies

Manufacturing Engineering
- Master of Science in Manufacturing Engineering
- Ph.D. in Manufacturing Engineering
- Graduate Certificate

Materials Science and Engineering
- Master of Science in Materials Science and Engineering
- Ph.D. in Materials Science and Engineering

Mathematical Sciences
- Master of Mathematics for Educators (M.M.E.)
- Master of Science in Applied Mathematics
- Master of Science in Applied Statistics
- Professional Master of Science in Financial Mathematics
- Professional Master of Science in Industrial Mathematics
- Ph.D. in Mathematical Sciences

Mechanical Engineering
- Master of Science in Mechanical Engineering
- Ph.D. in Mechanical Engineering

Physics
- Master of Science in Physics
- Ph.D. in Physics
Robotics Engineering
  - Master of Science in Robotics Engineering
  - Ph.D. in Robotics Engineering
  - Graduate Certificate

STEM for Educators
  - Master of Science in Mathematics for Educators (MMED)
  - Master of Science in Physics for Educators (MPED)

System Dynamics*
  - Master of Science in System Dynamics
  - Master of Science in System Dynamics and Innovation Management
  - Interdisciplinary Ph.D. in System Dynamics
  - Graduate Certificate in System Dynamics

Systems Engineering
  - Master of Science in Systems Engineering
  - Ph.D. in Systems Engineering
  - Graduate Certificate
  - Advanced Certificate

* Fall semester admission only.

At WPI, the Master of Engineering degree is rooted in practice; its aim is to cultivate advanced professional and technical competence. It does not require a thesis and is most appropriate for students who plan pursue careers in industry.

The Master of Science has a stronger theoretical component than the Master of Engineering degree. Its aim is to prepare students for careers in research and development or academia. The M.S. is the more natural precursor to the Ph.D., although students with an M.Eng. can also successfully obtain this credential. WPI offers both thesis-based and non-thesis Master of Science degrees.

The Ph.D. indicates that a student has undertaken original research and has demonstrated mastery of his or her field through the completion of a substantial project. Ph.D. students present their research findings in a dissertation that is subject to review by the faculty and, in some cases, by professional peers outside of WPI.

WPI’s M.B.A. program leverages the University’s technical and scientific strengths, focusing on the integration of business and technology. Some key areas of study include: technology commercialization; data quality; health systems innovation; leading change; and user experience.

Finally, the Professional Master of Science and the Master of Mathematics for Educators degrees are akin to the Master of Engineering degree in that they are practice-oriented in both conception and scope.

Further information and the specific requirements for these advanced degrees may be found in the Graduate Catalog (http://www.wpi.edu/+gradcat).

ADMISSION

Prospective graduate students are encouraged to discuss their academic plans with the graduate coordinator of their desired program.

Students may take graduate courses without being formally admitted to a degree program; that is, as a non-matriculating student. But each department limits the number of courses a non-matriculating student may count towards a degree. In the Robert A. Foisie School of Business, for example, students may not take more than two courses before applying for admission. In some other programs, a student may complete as many as four courses without being admitted. No department permits a student to complete more than four courses before a formal admission decision has been made. If you plan to enroll in classes as a non-matriculating student, be sure to contact your department to learn what restrictions have been placed on course work completed before admission to a degree program.

Students should contact the Office of Graduate Admissions (grad@wpi.edu) if they have questions about their application or the application process. In general, each department requires its applicants to submit a completed application, original transcripts of all previous academic work, and three letters of recommendation. The Graduate Record Examination (GRE) is required in some programs and strongly recommended in others. Be sure to check the website for your program to learn its application requirements.

Once a student’s application is complete, the Office of Graduate Admissions sends it to the department for review. When the faculty have reached a decision, the Office of Graduate Admissions notifies the student with a formal letter. Decisions are usually rendered four to six weeks after the application has been completed.

Applications for graduate study are accepted year-round. WPI alumni and current WPI undergraduate students are exempt from the $70 application fee.

REGISTRATION AND TUITION PAYMENT

Registration for graduate courses begins several months before the beginning of each semester. Students are encouraged to register for their courses as early as possible.

Tuition for courses taken by graduate students is $1,366 per credit hour for the 2015-2016 academic year. Undergraduate courses listed as “one-third unit” are equivalent to two graduate credit hours.

Tuition and fees, including health insurance, must be paid by the due date on the electronic bill (eBill) or at the time of registration.

COMBINED BS/MS PROGRAMS

For information on combined BS/MS programs, see page 208.

FINANCIAL AID

INTRODUCTION

Prospective graduate students who wish to be considered for WPI assistantships and fellowships are strongly advised to submit their applications by January 1st for Fall admission and October 1st for Spring admission. Assistantships and fellowships typically include full or partial remission of tuition and a monthly stipend. Only full-time graduate students are considered for assistantships and fellowships and preference is given to students who are actively conducting research. Students indicate that they want to be considered for funding on their graduate application forms. There is no separate application for assistantship or fellowship support at WPI.
ASSISTANTSHIPS
There are two types of assistantships at WPI. Teaching assistants support the faculty in the grading of papers, the supervision of laboratory sections, and other teaching duties. Research assistants, on the other hand, are usually given some facet of a larger sponsored-research project that typically becomes a part of the student’s thesis or dissertation. Fellowship assignments are made by the faculty in each department and are approved by the Office of the Provost.

NSF GRADUATE RESEARCH FELLOWSHIPS
The National Science Foundation awards multi-year fellowships to promising science and engineering students in the early stages of their graduate careers. These highly-competitive, prestigious awards provide three years of support and are available to both Master’s and Ph.D. students, as long as the degree is research-based. You can learn more at the NSF website: http://www.nsf.gov/funding/.

GEM FELLOWSHIPS
WPI is a member of the GEM consortium. Students who belong to underrepresented minority groups and want to pursue the Master’s or Ph.D. degree in a field of science or engineering may apply for funding from the consortium to continue their studies at a GEM member school. More information can be found at the GEM website: http://www.gemfellowship.org/.

LOANS
Graduate students may also receive additional financial assistance in the form of federal and private student loan funds. In order to apply for these loans, students are required to submit the Free Application for Federal Student Aid (FAFSA) form. This form can be completed online at www.fafsa.gov. For more information you can contact the Office of Financial Aid website at http://www.wpi.edu/+finaid.

SCHOLARSHIPS AND GRANTS FOR GRADUATE STUDY ABROAD

RHODES SCHOLARSHIPS
Rhodes scholarships cover tuition, fees, and a stipend for two years of study in selected fields of science and engineering at Oxford University. They are awarded through state and regional competitions. Students interested in applying for a Rhodes Scholarship should begin to assemble their dossier during the Junior year. Applicants should have completed enough of the Bachelor’s degree to assure its completion before their projected matriculation at Oxford. For more information, contact Prof. Peter Hansen in the Department of Humanities and Arts.

FULBRIGHT GRANTS
A wide variety of grants for graduate study abroad, usually for research toward the doctorate, is available through the federally-funded Fulbright Grants Program. For more information, contact Prof. Peter Hansen in the Department of Humanities and Arts.

PART-TIME GRADUATE PROGRAMS: ONLINE AND CAMPUS-BASED STUDY

Part-time graduate programs provide flexible educational opportunities for working students. Online, evening, and on-site corporate programs are taught by WPI faculty to serve the educational needs of technical and management professionals around the world.

Master of Science degrees for part-time students are offered in applied math, applied statistics, chemistry and biochemistry, computer and communications networks, computer science, financial math, industrial math, information technology, management, marketing and technological innovation, manufacturing management, operations design and leadership, physics, and system dynamics. The part-time MS is also offered in biomedical/clinical engineering, electrical and computer engineering, fire protection, manufacturing, materials science, mechanical engineering, and robotics engineering. The Master of Engineering degree can be completed part-time in biomedical, civil and environmental engineering. The Master of Business Administration (M.B.A.) is also offered on a part-time basis.

Graduate-level certificate programs are also available in some departments. For more details, see the Graduate Catalog.

Although the number of courses in each discipline may be limited in any given year, courses are scheduled so that part-time students are generally able to complete the requirements for the master’s level degree in three to four years. Online and evening courses are offered year-round.

Students may enroll in individual graduate courses without being admitted to a graduate degree program. Those who wish to obtain a degree must apply for formal admission prior to completing two courses for graduate certificate programs and four courses for master’s degree programs. Exceptions to this rule exist, so interested students should verify the actual number of courses they may take prior to matriculation within the specific program department.

A more detailed description of the part-time programs and of specific course offerings is available in the Graduate Catalog. Questions about each program should be related to the department heads or the graduate coordinators.

FIVE YEAR PROGRAMS

WPI offers unique five-year programs in Fire Protection Engineering, Industrial Mathematics, and Financial Mathematics. Each program begins with admission to the freshman year at WPI and ends with both a Bachelor’s and Master’s degree following five years of study.

High school students indicate their interest in one of these programs when they apply for admission to the undergraduate program at WPI. Applicants who are accepted into one of these programs will receive a letter of admission to both the undergraduate and graduate programs. Students in these programs are strongly urged to major in a field closely related to the graduate degree program. For example, most students choosing the Fire Protection Engineering program will have an undergraduate
major in Mechanical or Civil Engineering. An academic advisor will assist students in course selection. Admission to the fifth year of study (i.e., the graduate program) is contingent on successful completion of the undergraduate degree and good academic standing.

For more information about these programs, contact the graduate coordinators or administrators in the Departments of Mathematics or Fire Protection Engineering.

GRADUATE COURSE LISTINGS
Graduate courses of interest to undergraduates are listed by title in the “Course Description” section of this catalog. A complete list is included in the graduate catalog. Most courses meet once per week in a fourteen-week format. The credits applied in either case are as shown to the right of the course title. Undergraduate students taking graduate courses may use the conversion factor: 1 graduate credit = 1/6 undergraduate unit. Students register for research or projects by using an individual program number rather than a course designation.

FOR MORE INFORMATION ON GRADUATE STUDY AT WPI
Consult the graduate catalog for more information about WPI’s graduate programs. The departmental graduate coordinators are available to answer any program-specific questions you may have.

For more information about applying to WPI’s graduate programs, please contact:
WPI Office of Graduate Admissions
www.grad.wpi.edu
grad@wpi.edu
Voice: 508-831-5301
FAX: 508-831-5717
Graduate Catalog online: www.wpi.edu/+gradcat