

CAREER DEVELOPMENT AND GRADUATE SCHOOL

S E C T I O N

SIX

Career Development	209
Graduate School	209
WPI Graduate Program	210

The Career Development Center (CDC) at WPI is here to assist students in the development of life-long skills related to careers and the job search process. CDC serves not only undergraduate students but graduate students and alumni as well. Information and guidance is provided in the areas of full-time employment, graduate school, part-time employment, Cooperative Education and summer positions.

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

1. **ON-CAMPUS RECRUITMENT**—The CDC office coordinates a busy schedule of interviews by recruiters from over 200 private, government, civic, and professional companies and organization. To give you an idea, here are just a few organizations which have employed WPI graduates in recent years:

Andersen Consulting	Kiewit Construction
Clairol	Lockheed Martin
Compaq Computer	Microsoft
Data General Corporation	Quantum
Eastman Kodak	Polaroid Corporation
Exxon	Teradyne
General Dynamics/Electric Boat	Raytheon
General Electric Company	Saint Gobain (formerly Norton)
GTE	Turner Construction Company
General Motors	U.S. Govt./Naval Underwater Systems Center
IBM	Xerox

2. **JOB OPPORTUNITIES**—The CDC office posts full-time co-op, part-time, and summer opportunities. In fact, current students and alumni can be updated on professional full-time job openings through the office's **WEB JOB LISTING SYSTEM**. This service is available 24 hours a day, 7 days a week.
3. **CAREER LIBRARY**—CDC maintains a large library of literature and information about the various companies that recruit on campus so that students will be well prepared for their interviews and have a reasonably good idea whether they would be interested in a particular company. CDC also provides vocational resources for student researching and exploring various careers. For those students considering graduate school, the office provides information on graduate education at WPI and elsewhere. The office also houses standard examinations required by many graduate schools such as Graduate Record Exam (GRE), Graduate Management Admissions Tests (GMAT), Medical College Admission Test (MCAT) and Law School Admission Test (LSAT).

4. **CAREER WORKSHOPS**—Throughout the year a variety of workshops are offered to students. Topics have included: Resume/Cover Letters, Job Search Strategies, Summer Job Search, Alternatives to On-Campus Recruitment, Plant Interviews, Job Offer Decision Making, and Graduate School.
5. **INDIVIDUAL CAREER COUNSELING**—Students can arrange to meet a Career Counselor by appointment or on a drop-in basis. Help is provided in many areas including resumes, devising a job search plan, interviewing, graduate school, and evaluating and making career choices.
6. **COMPANY PRESENTATIONS**—Information sessions are provided by recruiters so that students have an opportunity to evaluate and learn more about the companies interviewing on campus.
7. **MAJOR SELECTION PROGRAM**—This program offers a variety of services to students trying to choose the major that's best for them.
8. **CAREER FAIRS**—Each year CDC organizes job fairs for students to obtain information on full-time, part-time, summer, and co-op opportunities.
9. **COMPUTERIZED RESUME DATABASE**—All students that register with the CDC office for on campus interviews or off campus referral will submit their resume via the web to the office. Employers access the resumes through the various Web Resume Books which the CDC maintains.

Even after students graduate from WPI, the CDC office provides assistance to alums seeking new employment or facing a change in career goals.

Location: The Career Development Center is located in the Lower Level of the Project Center. The phone number is (508) 831-5260.

GRADUATE SCHOOL

Many students enroll in graduate school on a full- or part-time basis, realizing that a graduate degree can open the door to certain kinds of job opportunities (such as advanced research or development, college teaching, law or medicine). Graduate study is merely another step in the self-learning process begun at WPI, a process that will last a lifetime.

Most graduate schools require applicants to take a standard examination such as the Graduate Record Examination (GRE) or Graduate Management Admission (GMAT). Information on such examinations is available from the Graduate Admissions Office or CDC.

The Graduate Admissions Office and CDC can provide information on graduate education at WPI or elsewhere.

INTRODUCTION

For students who wish to continue their education after receiving the bachelor's degree in the same or a related field, the WPI graduate program offers the opportunity either to specialize or to broaden one's preparation. The M.S. degree generally means advanced formal education in a fundamental area and professional experience through thesis or project work in a current field. Several graduate departments offer the Master of Engineering, a non-thesis option to the M.S. degree. The M.B.A. degree provides preparation for careers in the management of technological enterprises. In addition to master's programs, graduate-level certificates are offered by select departments.

Graduate study represents a natural extension of education beyond the WPI undergraduate Plan. With proper planning, WPI students may shorten the time required to earn the master's degree as described in the "Combined Bachelor's/Master's Program" section, page 211.

The Ph.D. represents recognized original and independent professional work in the form of research for a dissertation and peer-recognized competence in the technical aspects of the profession.

In all cases, students have been introduced to the role of working with established professional people and have had their performance evaluated at the professional level.

ADMISSION

Admission to the Graduate Program of any department is made by that department. Students generally may enroll for a maximum of four graduate courses without formal admission to a degree program. Because numerous exceptions to this rule do exist, students are asked to check with their specific program head for exceptions to this rule.

Prospective students who desire an advanced degree should write to the Graduate Admissions Office specifying the department in which they intend to do their major work. In general, a complete application, transcripts of all college work, and three letters of recommendation are needed for admission to a graduate program. The Graduate Record Examination (GRE) is required in some programs and, for others, is highly recommended; for the MBA, the GMAT is required. The required \$50 application fee is waived for WPI alumni.

REGISTRATION AND TUITION PAYMENT

Graduate students are expected to enroll in courses on the registration days designated in the college calendar.

Tuition for courses taken by graduate students is \$661 per credit hour for the year 1999-00. (Undergraduate courses listed as "one-third unit" are equivalent to three credit hours.)

Tuition and fees (including health insurance) must be paid to complete the registration process.

FINANCIAL AID

GRADUATE ASSISTANTSHIPS

Assistantships are of two types—teaching and research. Generally, teaching assistants are assigned duties supporting faculty in the grading of papers and the supervision of laboratory sections. Research assistants usually are involved in sponsored-research projects that become a part of their theses or dissertations.

The basic stipend for all assistants is between \$10,440-\$13,950 for the 1999-00 academic year. In some cases this may be supplemented by a summer stipend or by special funds for the academic year.

The normal assistantships also provide tuition for up to 10 credits for each of two semesters.

FELLOWSHIPS

Several fellowships are available for students in particular departments.

The Backlin Fund, administered by the Associate Provost for Academic Affairs provides assistance for students nearing completion of their degree requirements who are recommended by a faculty member and their department chairman.

Competition for the prestigious Goddard Research Fellowship is open to U. S. citizens. Preference is given to those students who have not attended WPI.

APPLICATION DEADLINES

Although applications for financial aid are considered at any time, the major distribution of aid is based upon complete applications submitted by February 15.

SCHOLARSHIPS AND GRANTS FOR GRADUATE STUDY ABROAD

RHODES SCHOLARSHIPS

Rhodes Scholarships, covering tuition, fees and a stipend for two years of study in selected fields of science and engineering at Oxford University, are assigned through state and regional competitions. Students interested in applying for the Rhodes Scholarships should begin to assemble documentation during the junior year. Applicants should have achieved academic standing sufficiently advanced to assure completion of a bachelor's degree before their projected matriculation at Oxford. See Prof. K. Ljungquist, Salisbury Labs 106, for details.

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. Contact the Graduate Admissions Office for more information.

DEGREES AND REQUIREMENTS

WPI offers master's degrees in applied math, applied statistics, biology and biotechnology, biomedical sciences, chemistry and biochemistry, computer and communications networks, computer science, management, mathematics for educators, and physics, biomedical/clinical, chemical, civil and environmental, electrical and computer, fire protection, manufacturing, materials science, and mechanical engineering.

The doctorate is offered in biotechnology, computer science, chemistry, physics, materials science and engineering, mathematical sciences, and in biomedical/clinical, chemical, civil and environmental, electrical and computer, manufacturing, mechanical engineering, and fire protection. There is also a research Ph.D. in biomedical science offered through a consortium.

Further information and specific requirements for these advanced degrees may be found in the *Graduate Catalog*. Several departments have special brochures describing their programs.

EVENING GRADUATE PROGRAM

The Evening Graduate Program provides the opportunity to engage in part-time study leading to the master's degree. The evening program is operated by WPI to serve the educational needs of technical and management professionals in central New England.

Master of science degree capability for part-time students is offered in applied math, applied statistics, chemistry and biochemistry, computer and communications networks, computer science, operations and information technology, marketing and technological innovation, manufacturing management, and physics, biomedical/clinical, civil and environmental, electrical and computer, fire protection, manufacturing, materials science, and mechanical engineering. The master of engineering for part-time students is offered in biomedical/clinical, civil and environmental and mechanical engineering. The master of business administration (M.B.A.) is also offered.

Although the number of courses in each discipline may be limited in any given year, the schedule of courses is such that students taking two courses per semester are able to complete the course requirements for the master of science or master of engineering degree in about three years or the M.B.A. in four years.

Students may enroll in individual evening 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 four courses. Exceptions to the four-course rule exist. Therefore, interested students should verify the actual number of courses allowed prior to matriculation with the specific program department. Graduate-level certificate programs are also available in some departments (see Graduate Catalog for details).

A more detailed description of the program and specific course offerings is available in a bulletin issued by the Graduate Admissions Office. Questions relating to the program should be referred to the discipline department heads or to the Graduate Admissions Office.

COMBINED BACHELOR'S/ MASTER'S PROGRAM

The Combined Bachelor's/Master's Program is a unitary program leading a student to a bachelor of science degree and to a master of business administration, master of engineering, or master of science degree. The purpose of the Combined Bachelor's/ Master's Program is to give WPI undergraduates an opportunity to earn a bachelor's and a master's degree from WPI concurrently in less time than would be required if the student were to complete work on the bachelor's degree before beginning work on the master's degree. To gain the full benefit of this program, a student should apply for the Combined Program well before the bachelor's degree is completed. Application at the beginning of the junior year is recommended.

For the master of science and master of engineering degrees, the Combined Program typically allows a student to complete requirements for both degrees in about one more year of full-time study than would be required to earn the bachelor's degree. With careful planning, a student can obtain a similar reduction in the amount of time required to earn an M.B.A.

PROGRAM REQUIREMENTS

Only registered WPI undergraduates may enter the Combined Program. To enter, a student must apply to the WPI Graduate Program. Admission to the Combined Program is made by the faculty of the program that awards the graduate degree. A student in the Combined Program continues to be registered as an undergraduate until the bachelor's degree is awarded.

While in the Combined Program, a student may continue to take courses or projects toward the undergraduate degree; the student may also register for graduate courses, projects, directed research or thesis credits toward the master's degree.

To obtain a master's degree via the Combined Program, the student must satisfy all requirements for that master's degree, including any requirements of the graduate degree-awarding program for satisfactory completion of specified courses or a master's thesis. To obtain a bachelor's degree via the Combined Program, the student must satisfy all the requirements for that bachelor's degree, including distribution and project requirements.

A student in the Combined Program, may, within the program limit and with prior approval, use the same courses toward the bachelor's and master's degrees. The limitation is computed from the graduate credit hours for each course. Courses, whose credit hours total no more than 40% of the credit hours required for the master's degree, and which meet all other requirements for each degree, may be used to satisfy requirements for both degrees. Such courses are recorded on the transcript using the credit hours/units and grades appropriate at the graduate or undergraduate levels. For students in the Combined Program, approved undergraduate courses are assigned graduate credit with a conversion rate of 1/3 WPI undergraduate unit = 3 credit hours, while graduate courses applied toward the undergraduate degree are awarded undergraduate credit with a conversion rate of 1 credit hour = 1/9 undergraduate unit.

Students in the Combined Program may use advanced undergraduate courses to satisfy graduate degree requirements. The department decides which courses may be used in this way. Faculty members teaching these advanced undergraduate courses may impose special requirements, appropriate to an undergraduate course being used for graduate credit, on Combined Program Students.

If the programs awarding the bachelor's and master's degrees are not the same, the program awarding the graduate degree may require that the student's Major Qualifying Project relate in some way to the graduate program's discipline. The graduate program may also make other requirements as it deems appropriate in any individual case. These requirements take the form of a written agreement (obtain Course Selection Form from the Graduate Admissions Office) between the student and the graduate program, which must be completed and filed with the registrar before the student may be matriculated in the Combined Program.

The Combined Program is a full-time program of study. Once admitted to the Combined Program, a student must register every fall and spring semester until the graduate degree is completed. A student in the Combined Program who, during the fall or spring semester, has no registered activities is automatically terminated from the Combined Program, and may only be readmitted to the Combined Program by the Committee for Graduate Studies and Research via petition showing extenuating circumstances. Termination from the Combined Program does not affect a student's ability to continue toward the bachelor's degree.

Some graduate-degree-awarding programs impose additional restrictions on students in the Combined Program. Consult the degree requirements of individual programs for details.

Questions relating to the program should be referred to the discipline department heads or to the Graduate Admissions office.

OFF-CAMPUS GRADUATE STUDY

In response to the changing needs of technical professional people, WPI offers a growing number of graduate courses off campus. Off-campus graduate courses can be used in fulfilling degree requirements and residence requirements at WPI.

These course offerings are open to all interested students, although in some instances enrollments are limited.

GRADUATE COURSE LISTINGS

Graduate courses of interest to undergraduate students are listed by title in the "Course Descriptions" section of this catalog. A complete list may be obtained from the Graduate Admissions Office. Some courses are offered in the seven-week format, meeting four times a week, but most meet one or two times 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: 3 credit hours = 1/3 unit. Registration for research or projects is accomplished using an individual program number rather than a course designation.

For more information about WPI's Graduate Programs, please contact:

Graduate Admissions Office

Voice: 508-831-5301

Fax: 508-831-5717

gao@wpi.edu

www.wpi.edu

The complete Graduate Catalog and application form are available on-line through our website.