



Welcome to your first year at WPI

You have joined a creative, growing, high-energy, hard-working, learning community. You are here because we believe you can succeed, but also because we believe you will make WPI a better university.

Get off to a good start at New Student Orientation. You will meet many people who really love what they are doing, from the

Community Advisor who will introduce you to campus to the faculty member who will be your Insight Advisor. You'll learn about some of the resources designed to help you succeed. More important, you will learn about the members of your class and the people who will be with you through the next four years.

Your First Year Experience is one that **you** will create. WPI has exciting academic programs, such as the Great Problem Seminars that will connect you to the project experience in the first year. Many departments have other special programs to welcome you and to help you learn more about their majors. We encourage you to take advantage of these opportunities and also spend some time navigating through this booklet to learn more about WPI, the people, and the programs inside and outside of the classroom that make this a great place to learn.

Art Heinricher, PhD Associate Dean for the First Year

"I chose WPI because it gave me the chance to have personal interaction with the faculty, who are proven scientific researchers. Moreover, its campus size is not overwhelming. WPI's community members are very welcoming—they make you feel at home."



"The GPS gave me a great introduction to projects at WPI. After completing GPS, I know that when it comes time to do my MQP, I will be ready."

"I enjoyed the freedom of choice for the project topics and the way that the range of topics provided review of important ideas."

"The GPS gave me an understanding of how groups function and how to work in a group."



Great Problems Seminars (GPS)

This two-course introduction to university-level research and project work focuses on themes of current global importance. Everything you do will be tied to current events, societal problems, and human needs. GPS is all about important problems. The skills you'll develop are exactly what you'll need to be successful in your project work at WPI and in your future career. Four seminars are planned for the Class of 2012:

Feed the World is built around a sequence of projects—team and individual—tied to food. Topics range from the biology of genetically engineered corn to the ethics of price supports and fair trade. Each of the following sample questions could be the beginning of a research project that just might change the way you think about the food you eat, and the impact your choices can have on cultures around the world:

- Where does the food you see in the grocery store come from?
 ...where does the money you spend for that food actually go?
- What does the food we waste tell us about people today? ...what will waste look like in 100 years?
- What are the promises and dangers of genetically modified foods?
- What are the physiological and psychological effects of hunger?

Power the World focuses on various forms of energy resources and the history of their technologies. Energy is both the cause and the solution to a vast array of society's problems:

- What can the laws of thermodynamics tell us about where to seek improvements in existing technologies?
- How have changes in energy sources radically transformed politics, society, and the natural environment over time?
- Do successful energy technologies always have a down side?
- Can we expect alternative energy sources to both sustain human population growth and improve living standards?







Great Problems Seminars (continued)

Heal the World is new for 2008. This seminar will start with the biology of infectious disease and move on to the management of disease control. Students will work in teams of 3 to 5 to complete a major research project, and make a public presentation. Sample questions that will guide the seminar:

- What is the biology of viral diseases and how does your body fight them?
- How does a vaccine work and how are vaccines created, manufactured, and distributed?
- How do we identify possible epidemics early and how can we react to control them?

"I liked the group projects that got us to learn outside the classroom, including the ethnic market and the Heifer International projects. It was good to see how the skills we were learning could be directly applied to real life."



Making Our World: Sustainable Development for the 21st Century is also new for 2008. This seminar will be built around a

21st Century is also new for 2008. This seminar will be built around a sequence of team and individual projects tied to major challenges facing engineering in the 21st century: energy, transportation, housing, food distribution, recycling, and health care. In all cases, material science and sustainability will be a unifying theme. Here are some specific questions that will guide your work:

- How do different types of manufacturing contribute to green house gas (GHG) emissions? What new material processing technologies can capture and sequester GHG emissions?
- How do you measure the environmental impact of engineering decisions? (Which causes more damage to the environment: a Toyota Prius or a Hummer H3?)
- Are recycling technologies energy efficient and how much energy is really saved?

Project-based Learning Community (PLC)

If you enjoy working in teams, and want to take charge of your own learning, consider PLC for your first year at WPI. PLC is a totally integrated version of three fundamental courses built around a sequence of team projects. Students enrolled in this program are a part of a learning community in which a small group of first year students builds a foundation for success at WPI. In the recent past, project teams have

- replicated Galileo's experiments to measure acceleration, using the only technology available to the great astronomer and physicist;
- studied the mathematics of plagues and compared the spread of biological viruses to the spread of computer viruses;
- studied the engineering and the ecological and social impact of dams;
- measured how opinions and attitudes have changed over time through an analysis of General Social Survey data.

PLC is the full course load for your first two terms. You will receive credit for Calculus I and Calculus II, Physics I and Physics II, and two courses in the humanities. Students in the PLC cover the standard topics in Calculus I and II and Physics I and II; they use the same text and take the same final exams. The PLC is special because you own the room (24/7) for the first two terms—this is more like a family room than a traditional classroom. The faculty and students really do form a learning community.

Insight Program

What is it?

We recognize that first year students often face a difficult and sometimes stressful first semester as they transition from high school to college. To help alleviate some of the stress associated with this transition, WPI has developed a wonderful first year advising and mentoring program, known as Insight, that provides the first year students with a strong support network of faculty, staff and students.

All first year students are grouped together by floors in the residence hall or by their designations as commuter or transfer students. Each group is assigned to an Insight team, which consists of a Faculty Advisor, and student leaders called Community Advisors (CA) and Resident Advisors (RA). The members of the Insight team are there every step of the way to guide the first year students in their first semester as they adapt to college life.

What do we do in Insight?

Each Insight Team plans academic and non-academic activities for our first year students on team building, healthy lifestyles, community service, time and stress management, student involvement, relationship building, selecting your major, and academic skills workshops. These programs enable first year students to develop and improve the skills that they need for the fast-paced environment of WPI's seven-week terms. First year students may also elect to be part of a small study group or attend help sessions to assist them in preparing for classes and exams. They also participate in various community building events, and have an opportunity to attend various social events.

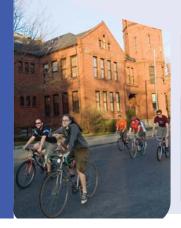
"My Insight team gave me advice about college life, choosing a major, and what classes I should take. My Insight team cared about my success at WPI."

"Incoming freshmen are thrown into college lifestyle and routine without experience, and the Insight program made the transition so much easier than I could have imagined; my Insight Team was fun and entertaining, with a willingness to welcome even the most timid individuals, and help them break out of their comfort zone to try new, exciting things."

The Benefits

Insight is a unique opportunity for our incoming students to develop close relationships with their fellow students, upperclassmen, and faculty through shared learning and social experiences. This program helps incoming students develop a deep appreciation for teamwork and cooperation, and provides the opportunity to establish a bond with all members of the campus community. Most important, it's a memorable and fun experience that students will always remember.

"All of us are really good friends. As a group, it seems we are a lot closer now."







Selecting Your Major? Still Undecided?

You may have already chosen the major you are interested in pursuing, or you may still be undecided, and that's OK. Resources offered through our Career Development Center help students decide on a major include job shadowing opportunities, academic department presentations, and current WPI students who serve as peer advisors. Visit www.wpi.edu/Admin/CDC/index.html.





Resources to Help You Succeed

The Office of Academic Advising in Daniels Hall is a great resource that you will want to become familiar with here at WPI. If you have questions about Advanced Placement credit, your academic standing, course selection, major selection, struggling with a class, or changing your academic advisor, we are here to help. You can also reach us at academic-advising@wpi.edu or AIM: FirstYrAdvising.

Academic Resource Center

WPI's Academic Resource Center provides support services designed to enrich and enhance the learning experience of all WPI undergraduate students. Any student who wishes to ensure academic success can benefit from the resources available through the ARC. Students may obtain assistance in such areas as learning styles, effective study strategies, time management, problem solving, and critical thinking skills.

Academic Coaching

Academic coaching is an individualized, supportive partnership that helps students identify and successfully pursue their academic goals. The program helps students develop the skills and strategies necessary to be academically successful at WPI.

Writing Assistance Tutors

Trained undergraduate writing tutors are available to help WPI students with their writing five days a week in one-hour appointments. Any WPI student may sign up for help with projects, course papers, oral presentations, document design, or personal writing.

M*A*S*H and Peer Tutor Program

The M*A*S*H (Math and Science Help) leaders and Peer Tutors are upperclass students who have been particularly successful in their academic work. They have excellent study habits and strong communication skills and are committed to helping other students succeed by providing assistance, feedback, and encouragement. They help students help themselves by offering study tips and reinforcing learning by reviewing concepts and problems. The leaders' job is to help students think about what they heard in the lecture or read in their textbooks; they help them master new concepts, learn new vocabulary, and put ideas into perspective.

Student Development and Counseling

The Student Development and Counseling Center (SDCC) is located in the West Street House (157 West Street). The SDCC staff provide educational programming and training as well as counseling, referral, and crisis intervention services. Educational and training programs for student groups include leadership, interpersonal communication, teamwork, and academic success. Counseling services aim at helping students thrive. Short-term counseling, consultation, and referral services address situational problems, such as academic performance, loss of an important relationship, roommate disputes, and general stress; more serious crisis issues, such as physical or sexual assault, suicidal thoughts, loss of a loved one; or simply gaining a better understanding of oneself.

SDCC staff members are sensitive to students' concerns regarding confidentiality. Services are available at no charge to currently enrolled students. Appointments may be made by calling 508-831-5540 or visiting West Street House.

For more information about the First Year Experience at WPI, please contact Art Heinricher, heinricher@wpi.edu, or Connie Peppes, cpeppes@wpi.edu, 508-831-6107, or visit www.wpi.edu/+fye.



Develop teamwork, critical thinking, presentation skills.

Jump-start your project experience at WPI.

Build a learning support network that will last all four years.

Develop teamwork through interdisciplinary projects.

Learn by doing, talking, discussing, and presenting your work.

Engage in discussion and develop solutions to current events, societal problems, and human needs.

Treat learning as a cooperative enterprise among students, faculty, and staff.

Forge new lifetime friendships.

Worcester Polytechnic Institute 100 Institute Road Worcester, MA 01609-2280 508-831-6107 cpeppes@wpi.edu AIM: FirstYRAdvising www.wpi.edu/+fye