Industrial Engineering

What is Industrial Engineering?
Industrial engineers design, improve, and install integrated systems of people, materials, and technology. As examples, industrial engineers design the best flow of material through a factory; design a storage system and find the best location for a new warehouse; improve the arrangement and design of controls in a cockpit; design a tool to reduce worker injuries; use computer models to simplify business processes; and improve a product’s safety and durability as well as making it easier to use and produce. Industrial engineers often take on the role of project leader or engineering manager.

To solve problems, industrial engineers work with people to combine engineering science and design principles with their knowledge of mathematics, statistics, and physical and social sciences. Industrial engineers deal with people at all levels within an organization as well as with outside clients, vendors, and regulatory agencies. Industrial engineers improve productivity and quality within an organization by determining the most effective use of personnel, equipment, information, and energy.

Today’s industrial engineers are employed in a wide variety of settings including manufacturing, distribution, consulting food processing, entertainment, insurance, communication, and financial organizations. Specialties within industrial engineering include ergonomics, facilities planning, engineering management, inventory systems, material handling, simulation, safety, work measurement and design, and robotics. Industrial engineering offers a variety of career choices.

Industrial Engineering at UW-Platteville
Since 1988, UW-Platteville has offered an ABET accredited industrial engineering program. The curriculum is designed to prepare new engineers to practice at the frontiers of engineering knowledge and professional practice upon graduation. All industrial engineering students study a core of professional topics including ergonomics, work design, inventory analysis, facilities planning, quality, operations research, and engineering management. Each industrial engineering student completes at least one area of specialization within industrial engineering through careful selection of technical electives related to either engineering management, production, human systems, or information systems. A capstone design course requires students to utilize their skills on a project sponsored by an area company. In addition to their engineering studies, students are encouraged to pursue a minor field of study.

Career Opportunities
There is a great demand for UW-Platteville’s engineering graduates. Most industrial engineers are employed by manufacturing companies. However, they are more widely distributed throughout the diverse manufacturing sector than other engineering branches. Industrial engineers are employed in automobile, tractor, and construction equipment assembly; metal, plastic, and electronic component manufacturing; food and beverage processing; paper product manufacturing; commercial printing; and, textile and furniture manufacturing. Additionally, industrial engineers from UW-Platteville are employed by distribution companies, public utilities, government agencies, hospitals, and insurance companies. Some UW-Platteville industrial engineering alumni work as consultants. Others become entrepreneurs.

The average starting salary for UW-Platteville industrial engineering graduates historically equals or exceeds national averages. Employers of recent UW-Platteville industrial engineering graduates include John Deere, Rockwell-Collins, Oshkosh Truck, Greenheck Fans, General Electric, Frito-Lay, and Hormel.

Faculty and Facilities
All of the industrial engineering faculty have terminal degrees in industrial engineering. The faculty members are committed to providing an excellent education to undergraduate students.

The engineering facilities in Engineering Hall rank among the finest undergraduate facilities in the country. Laboratories specifically designed for the industrial engineering students provide access to state-of-the-art equipment and experimentation as well as opportunities for skill development. These labs support instruction in computer integrated manufacturing, human performance, and computer applications.

Internship/Co-op
UW-Platteville advocates an education in which students combine classroom learning with planned field experiences. Students in the cooperative education program spend one or more semesters with companies in jobs closely related to their major and career objectives. Students may also select a summer internship opportunity in their field. Either option allows students to gain valuable experience as well as income.
Engineering Advising Office
The engineering advising office provides a comprehensive set of services to assist engineering students in maximizing their educational experience at UW-Platteville while working through a challenging curriculum. The advising office supports both faculty advisors and students to ensure completion of degree requirements. The advising office support is especially advantageous to students in transition or non-traditional students.

Women in Engineering
The Women in Engineering Program in the College of Engineering, Mathematics and Science provides support to women enrolled in the college through a variety of programs and services. Networks with other students as well as engineering professionals allow students to gain insight into the field. For more information about the Women in Engineering Program, contact the Director, Women in Engineering Program, 1 University Plaza, Platteville WI 53818-3099 or call 608.342.1563.

Student Organizations
Industrial engineering students are very involved in both social and professional organizations on campus. Student chapters of Alpha Pi Mu, Institute of Industrial Engineers, and Society of Women Engineers are all active in campus, regional, and national events.

For More Information
For more information about a career in industrial engineering and the program at UW-Platteville, write to the Coordinator, Industrial Engineering Program, UW-Platteville, 1 University Plaza, Platteville WI 53818-3099, call 608.342.1431, fax 608.342.1566, or e-mail kunzd@uwplatt.edu.

For general information on the university and its programs, consult the website at www.uwplatt.edu or contact Admission and Enrollment Services, UW-Platteville, 1 University Plaza, Platteville WI 53818-3099, or call toll-free 1.877.897.5288 or locally 608.342.1127.

The University of Wisconsin-Platteville does not discriminate on the basis of age, race, creed, color, handicap, sex, sexual orientation, developmental disability, national origin, ancestry, marital status, arrest record, or conviction record.

Suggested Course of Study

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*Recommended Social Science Electives: Econ 2230, Econ 3330, and Psych 1130. Consult advisor about new general education requirements.

** Each student should consult with his/her advisor before scheduling any technical electives.

Technical Elective 9**
Humanities or Social Science Electives 6*

Total Credits 130