



Through internships and co-ops, Auburn ISE students gain valuable hands-on work experience while earning their undergraduate degrees.

From the classroom to the work force

Cooperative education jobs and internships have proven to be an excellent way for students to gain work experience in teams with talented engineers. They simultaneously provide for the development of fundamental principles of engineering and their applications. Students have the opportunity to find the type of work and organization in which they can best apply their individual abilities while gaining an appreciation of the challenges of labor and management by first-hand experience. As a student develops mature judgment by coping with everyday problems, an employer of a co-op or internship student has the ability to train and select a student whose abilities and aptitudes can be adapted to the needs of the organization's technical staff requirements. Many seniors receive permanent job offers from the same companies that hired them as a co-op student or intern.

Benefits for employers

Co-ops and internships are win-win opportunities for employers and students alike. Employers benefit from co-ops and internships by gaining qualified and motivated student employees who offer creativity, hard work and a professional attitude in the workplace. Co-op and internship employers have the inside track to recruit their student employees for full-time employment upon graduation. Employers also have increased visibility among Auburn students and faculty because their organization's student employees return to campus and share their work experiences with academic colleagues.

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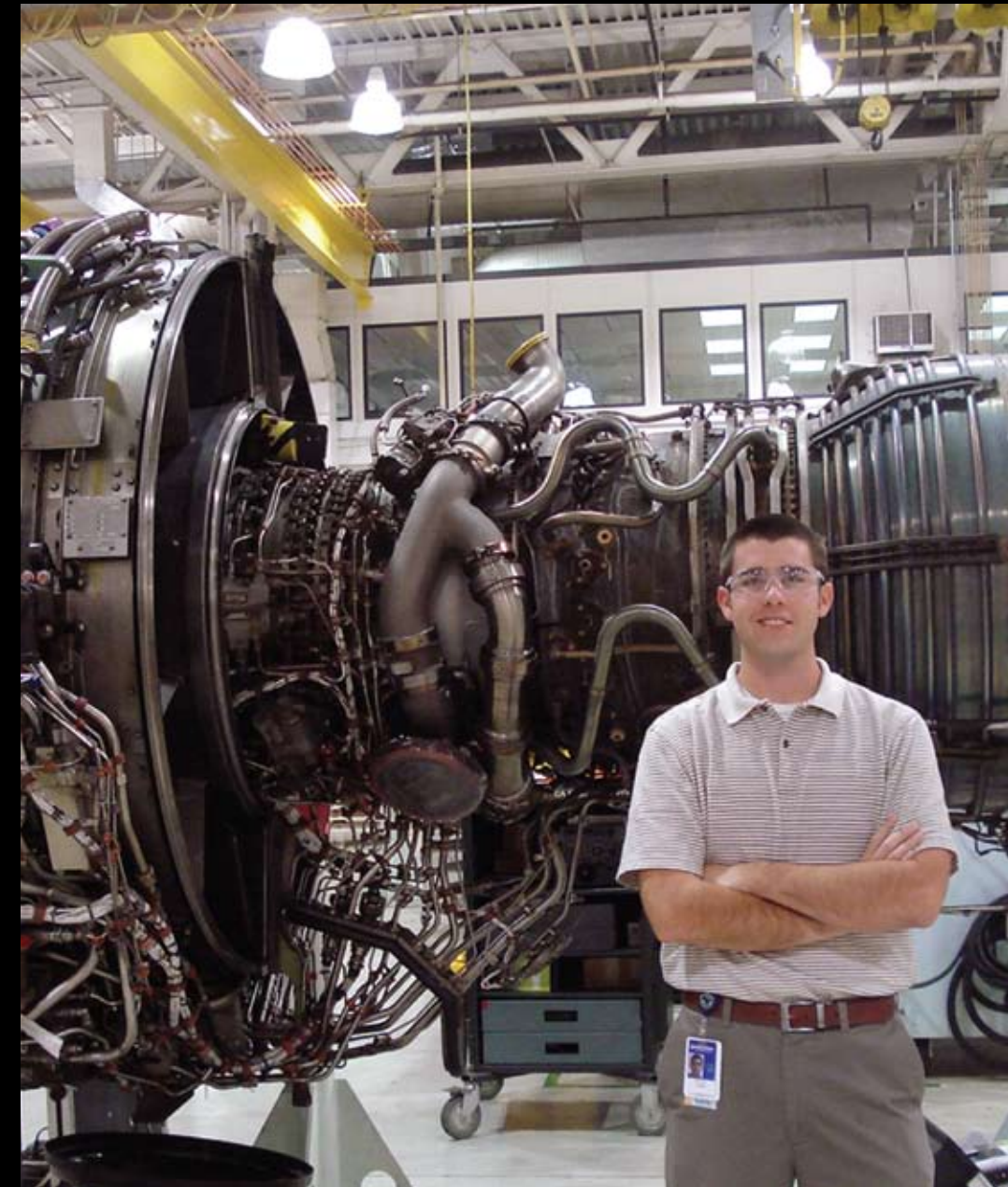
AUBURN UNIVERSITY

SAMUEL GINN
COLLEGE OF ENGINEERING

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Auburn University is an equal opportunity educational institution/employer.

Industrial and Systems Engineering Internship and Co-op Program



Auburn University

Program

Industrial and systems engineering students find work experience through two main channels:

- **Internships**
- **Cooperative Education (Co-op)**

Students find jobs throughout the Southeast and beyond, working in enterprises such as manufacturing, logistics, transportation, automotive, utilities, defense, health care, consulting and energy. Well-known companies that have recently hired industrial engineering students for these positions include: Southern Company, AT&T, Honda, Toyota, U.S. Steel, NASA, BMW, Milliken, General Electric, ExxonMobil, Delta Airlines, UPS and Donaldson. Many organizations hire both interns and co-ops.

Factors When Choosing an Internship or Co-op

	Internship	Co-op
Graduation Date	On time	One year later
Work Experience	2-3 months each summer	12-14 months total
Hourly Income	\$14 - \$22	\$14 - \$22
Job Search	Independent search	Placement
Semester	Summer	Spring, Summer, Fall
Job Offer after Graduation	Possible	Probable

Internships

Internships are stand-alone work experiences over a semester, which usually take place in the summer but occasionally in the fall or spring. These are usually full-time employment situations but can sometimes be part time. Internships provide students with an opportunity to see what the working world is like while earning money. Internships prepare students for classes they will take in the future, provide excellent pay and create an enjoyable break from tests and classes. The Department of Industrial and Systems Engineering helps students find internship positions through a network of alumni and repeat employers. Also, the Auburn University Career Expos, one held in the fall and one in the spring, provide students with the opportunity to meet companies who are looking for ISE interns. There is also an Internship and Summer Job Fair, which takes place in January.



Co-ops

Co-ops are structured, repeated full-time employment experiences, which in total provide a full year of work experience, alternating with semesters at school. Co-op is an education program that prepares students for professional careers by combining academic training with practical work experience in industry, business and government. Co-op information sessions are held in September and February. Working in a co-op position usually delays graduation one year. For more detailed information concerning co-op jobs, salaries and registering to co-op, visit www.auburn.edu/co-op.

ISE Internship Experiences

Jessica McCauley interned with General Electric's Oil and Gas Division in Houston. She worked alongside a Master Black Belt in Quality on the transactional side of sales and services to improve the quotation process. When asked about the benefits of this internship, Jessica responded, "I learned a lot about quality before even taking the quality class and really learned a lot about working for a major corporation. The internship provided me with opportunities to work with different levels of management and taught me interaction skills as well. One of the most beneficial points includes the contacts I made while interning there."

Katie Wiley interned with BE&K's Government Group in Birmingham. She wrote procedures for assembling safety manuals, accident prevention plans and quality control manuals. "My internship with BE&K gave me the chance to get into the working world and use what I had been learning in my industrial engineering classes. It also provided me with a view of engineering life outside of academia. After interning with BE&K, I had a clear vision of the type of job I was looking for after graduation that I knew would make me happy."

ISE Co-op Experiences

LaToya Rogers co-oped with U.S. Steel in Birmingham. The nature of her work was safety engineering and industrial hygiene. Her duty was to conduct plant audits and handle safety issues, including plant safety, employee safety, safety meetings and hygiene meetings for the plant and its employees. She also gained valuable knowledge about manufacturing skills. LaToya said the experience changed her view of the working world and challenged her to think outside the box.

Jameson Page co-oped in Rheem's Division Quality Department in Montgomery. His job was to ensure the quality of Rheem products as well as the quality of the products supplied to Rheem. He was responsible for audits of Rheem's production lines and the development of the company's suppliers. When asked

about his day-to-day tasks, he said, "I am responsible for the general upkeep of Rheem's online database called Reliance. I keep up with problems, internally and externally, that are associated with this system. I also generate monthly reports that I present to management concerning our products."

Paul Crane co-oped with Southern Company in Birmingham. Paul gained experience on the business side of the company using database and cost-saving techniques. He designed a user-friendly macro in Excel that calculated load forecasts. His new design saved the company four weeks of time annually. Paul also learned the ins-and-outs of a power plant. His co-op experience got his foot in the door for a full-time position upon graduation.



Sample ISE Co-op Curriculum

	Freshman	Sophomore	Junior	Senior	5th Year
Summer			Social Sci. 1	Co-op Semester	
			Linear Algebra		
			World Lit. 2		
Fall	Calculus 1	Calculus 3	Co-op Semester	Spreadsheet/ VB	Quality Control
	Chemistry 1	World Lit. 1		Deterministic OR	Professional Practice
	Chemistry 1 Lab	Differential Eqs.		Mfg. Processes	Business Ethics
	English Comp. 1	Physics 2		Stochastic OR	Mfg. Systems
	History 1	Physics 2 Lab		Fund. Electrical Eng.	INSY Elective
	Intro to Engineering	Prob. & Stats. 1			
Spring	Eng. Orientation		Prob. & Stats. 2	Simulation	INSY Elective
	Calculus 2	Co-op Semester	Applied Stats. Lab	Ops. Planning	Technical Elective
	Physics 1		Occup. Safety Ergo.	Social Sci. 2	Fine Arts
	Physics 1 Lab		Methods Eng.	Eng. Economics	ENGR Elective
	English Comp. 2		Intro Material Sci.		Senior Design
	History 2				
Intro Computer Prog.					