

**The University of Iowa College of Engineering  
Student Development Center/Engineering Professional Development  
Cooperative Education and Internship Program**

**Mechanical Engineering Co-op/Internship Employers  
Employers and Positions, 2005-09**

3M Corporate Research Process Laboratory (CRPL) Molding Lab...generate suitable models in Pro/E and to simulate the molding process using ABAQUS	Woodbury, Minnesota
Accenture Business consulting intern...project analysis and review	Chicago, Illinois
Acergy Seabed-to-surface engineering and construction contracting for the offshore oil and gas industry	Houston, Texas
Alcan Packaging Engineering Plant Intern...water piping layout and efficiencies...other plant and process engineering projects	Des Moines, Iowa
Alcoa Engineering intern; process/production support with engineering staff	Davenport, Iowa
Alliant Energy Intern in gas engineering department...analyzing different pipe systems...learning how to use CAD to draw up the different systems...	Cedar Rapids, Iowa
Alliant Energy Experienced flood recovery in one of the affected plants...working with a unit whose personnel was impacted by the flooding... application of a chemical onto coal to determine if it would reduce emissions of mercury	Madison, Wisconsin
Allsteel Production support; quality assurance and documentation; design	Muscatine, Iowa
American Profol Lead cost reduction team, act as project manager, maintain De-bottlenecking Phase II Plan	Cedar Rapids, Iowa
Amana Commercial Products Manufacturing engineer intern...quality and production on mfg. line	Cedar Rapids, Iowa
ASV Inventions Manufacturing and Quality Intern...manufacturer of brake and clutch levers for ATVs, off-road motorcycles and street bikes	Huntington Beach, California
A.Y. McDonald Engineering intern; process and design; fixtures	Dubuque, Iowa
BPC Group Stream Gauging and Flow Calibration at New Flow Sites in Upper Kissimmee River Basin	Orlando, Florida

Bobcat Company Production engineering and support; various projects design and quality	Gwinnet, North Dakota
Boeing IDS Systems Engineer with Ch 47 Chinook rotor blade overhaul/design group	Philadelphia, Pennsylvania
Burlington, Northern, and Santa Fe Railroad Computer network maintenance/Audit team/Workspace redesign	West Burlington, Iowa
CB&I Project engineering intern	Chicago, Illinois
CFD Research Engineering research and applications	Huntsville, Alabama
Cargill, Inc. Updating piping and instrumentation diagrams/Work on team charged with reducing energy use/Coordinate installation of steam and gas meters	Cedar Rapids, Iowa
Cargill Engineering Intern	Vernon, California
Carnegie Mellon University Develop a graphical avatar or robot with a virtual face that can assist people in their home between visits to the therapist	Pittsburgh, Pennsylvania
Case-New Holland Engineering Intern in the product management department, linking engineering and marketing, competitive research, product definitions, and analysis	Burlington, Iowa
Caterpillar Manufacturing engineering internship...heavy mining and construction...motor graders...	Decatur, Illinois
Caterpillar Inc. Develop and implement project for technology transfer for welding best practice, process and quality control based on six-sigma principles	Peoria/Mossville, Illinois
Centro, Inc. Database development, time and cost studies, design and fabrication of safety guides	North Liberty, Iowa
Civco Medical Instruments AutoCAD updates and revisions, verification and efficiency activities, quality assurance	Kalona, Iowa
Charles Industries Fabrication and project engineering...shop drawings...quality assurance...process flow	Rantoul, Illinois
Crystal Group Design engineer intern...electrical design and fabrication...quality review	Hiawatha, Iowa
Dominion Energy Plant engineer...power generation facility...operation and maintenance projects	Hammond, Indiana

Eagle Alloy Plant engineering intern; foundry quality assurance; various projects	Muskegon, Michigan
Eaton Corporation Quality Engineering Intern in heavy duty transmission manufacturing facility, main projects include reduction of air leaks and nital etch in transmissions as a whole and component assemblies and design	Shenandoah, Iowa
Eicher Engineering Solutions Design Verification and Test Simulation...Field Load Data Acquisition, Data Analysis, Component Testing, Test System Design and Development, Simulation S/w Customization, System Integration & Process Automation	Gurgeon, India
Elgin Sweeper Will assist with lab tests and documentation, quality control, research and development	Elgin, Illinois
Elkay Mfg. Manufacturing Intern	Broadview, Illinois
Emerson-Fisher Data Analysis and product marketing, technical support	Marshalltown, Iowa
ESCO Automation Consulting and project engineering intern	Marion, Iowa
Exelon Engineering Intern in nuclear power generating station	Cordova, Illinois
Engineering Mechanics Corporation Research Engineer, various projects including structural reliability of electronic packaging, assisting in corporate operations as needed	Columbus, Ohio
Engineering Ministries International Assist in the design and development of various projects, AutoCad and other assignments as required, projects are varied and worldwide, requiring experience in the home office in Colorado Springs, and assignment to foreign locales	India
Engineering Plastic Components Research and design of injection molded parts, costing of parts, understanding of plant processes/efficiencies	Grinnell, Iowa
Feed and Grain Systems Design and build of grain storage and processing facilities, associated programming of electronic components, on-site design and fabrication	Tipton, Iowa
Florida Power, Light, & Energy – Duane Arnold Nuclear Plant Configuration Control Design Engineering department working on the Calculation Accessibility Project... ongoing effort to reference all calculations, which number over 4,000, in an organized manner into a database	Palo, Iowa
GE Consumer & Industrial Design and build of GE's Busway product for heavy duty electrical transmission, working with mechanical and electrical engineers on parameters for new elbow design	Selmer, Tennessee

GE Gas Turbines Manufacturing and design engineering intern	Greenville, SC
General Mills Plant engineering intern...plant maintenance and process improvements on manufacturing lines	Lodi, California
HDR Ports and harbors, and ocean, engineering, collecting data and research on new and existing projects from clients, regulatory agencies, and municipalities, creating spreadsheets of the data for use by company engineers	Corpus Christi, Texas
HNI Development Technologies Engineering Intern, work with various departments in the rapid prototyping area, including the model shop, SLS (Selective Laser Sintering) lab, QA (Quality Assurance) lab, machining area, and sheet metal fabrication sections	Muscatine, Iowa
HNI – Allsteel Plant engineering intern...plant moves, cost savings projects, installations of new equipment and launch of a new product line	Muscatine, Iowa
HNI - Hearth and Home Technology Three projects...reducing energy used in powder coat system...work on reducing the downtime of presses in the fabrication department...creating a new way to get the whole plants scrap to the recycling dumpsters without the use of fork lifts	Mt. Pleasant, Iowa
HNI - HON Technology Center Product development for office environment	Muscatine, Iowa
IAESTE: NorskHydro Petroleum Engineering Intern, working on the analysis of the completion downtime of all of the offshore rigs operated by Norsk Hydro ASA, working with drilling technology department, visiting offshore platforms	Bergen, Norway
Ideal Industries Design Engineering Intern, electrical connectors and associated products, various projects for national and overseas clients to specific specs and requirements	Sycamore, Illinois
Intel Graphics Development Group intern... responsibilities include finding bugs in 3d interactive applications such as games, modeling software, CAD software etc running on prototype 3d graphics hardware; determining possible solution fixes and reporting the bug to the direct3D graphics driver development team	Folsom, California
IPSCO Steel Inc. Implement modifications to rolling mill machine design, assist vendors with specifications and details of current mill machine design, plant improvement and safety projects	Muscatine, Iowa
Integrated DNA Technology Process engineering intern	Coralville, Iowa
Iowa Department of Natural Resources P2 Program - Dial Corporation Project to reduce kilowatt peak demand/reduction in operational costs and coal consumption of power company	Ft. Madison, Iowa

Iowa Department of Natural Resources P2 Program: Electrolux Review waste streams, improve recycling programs, and reduce hazardous waste disposal...areas that were focused on were the waste water area and the paint lines...large opportunities for improvement environmentally and economically	Webster City, Iowa
Iowa Department of Natural Resources P2 Program: NB Medical Center Energy Management Intern...facilities management and environmental cost reduction projects...construction project oversight	Omaha, Nebraska
Iowa Department of Natural Resources P2 Program: Quaker Oats Waste reduction in solid waste, energy and process...food manufacturing	Cedar Rapids, Iowa
Iowa Department of Natural Resources P2 Program: Woodharbor Doors Pollution Prevention Intern, main project was reduce the source of the wood waste produced from company's door and cabinet-making processes, as well as analyze alternative methods for disposal of wood waste	Mason City, Iowa
John Deere Agricultural Management Solutions Part of the AutoTrac Universal Steering Kit product verification team, responsible for correlating stepper motor torque, voltage and temperature	Urbandale, Iowa
John Deere Construction and Forestry Backhoe fabrication, materials inventory, weld fixture layout and adjustment, robot system programming, hydraulics system design	Dubuque, Iowa
John Deere Des Moines Works Quality Engineering Intern, on cotton harvesters, main project was a quality sprint, to gather and analyze warranty data for the model year 2006, and hold a meeting with design engineers, manufacturing engineers, assemblers, quality personnel, supply management personnel, and examine all the warranty claims from last year and see what can be done to prevent the same claims being made for the model year 2007	Ankeny, Iowa
John Deere Harvester Works Research Intern, study is related to the dynamic mechanical behavior of the combine harvester cleaning system	East Moline, Illinois
John Deere Product Development Center Validation of experimental testing machine, formulation of future directions in machine traction research	Moline, Illinois
John Deere Waterloo Engine production, quality control and testing, records and documentation	Waterloo, Iowa
Johnson Controls Instrumentation and building environmental controls; monitoring and installation	Cedar Rapids, Iowa
Johns Hopkins University Work on team defining metrics for assessing surgeons' skills in order to establish means of evaluating learning processes/Develop robotic & human-machine haptic (touch) interfaces	Baltimore, Maryland
KJWW Engineering Mechanical engineering intern...HVAC maintenance and consulting engineering...heat exchangers, boilers...	Chicago, Illinois
Kinze Manufacturing Design Engineering department intern...design, construction, and testing of new and current planters and grain wagons	Williamsburg, Iowa

Lear Corporation	Iowa City, Iowa
Production support; quality assurance and documentation; various plant engineering projects	
Loparex	Iowa City, Iowa
Plant engineering; manufacturing support and various maintenance projects; AutoCad	
Loram	Medina, MN
Engineering Design Intern...redesign rail loader train, to help improve functionality and ergonomically improve the existing machine	
MacLean Power Systems	Franklin Park, Illinois
Part of manufacturing engineering team, tooling and fixture design, other projects	
MidAmerican Energy	Bettendorf, Iowa
Gas engineering interns...inspect, test, and troubleshoot the cathodic protection systems on natural gas pipes	
MidAmerican Energy	Council Bluffs, Iowa
Engineering intern...project analysis and review	
MidAmerican Energy	Sioux City, Iowa
Gas Engineering intern... creating many CAD drawings, communicating with other engineers, researching the pipeline's history, and networking with other interns and engineers	
MidAmerican Energy	Urbandale, Iowa
Gas Engineering intern...cathodic protection acquiring voltage potential reads on natural gas distribution lines in order to verify that the potential falls within the required interval set by federal and state utility boards	
Minarik Corporation	South Beloit, Illinois
Time studies; design and vendor research; resourcing projects	
Mitsubishi Motors	Normal, Illinois
Plant engineering; production support and design; quality assurance and documentation	
Motorola	Arlington Heights, Illinois
Mechanical Engineering Intern in Broadband Communications sector, specific project is WiMAX, involving the design of base controller units that enable various forms of communication, i.e. wireless and broadband	
Motorola	Libertyville, Illinois
Work with the Mobile Devices Supply Chain Mechanical Engineers on current GSM phone projects..main areas of concentration include prototype build support and in-depth analysis of product design and supplier issues.	
Motorola	Plantation, Florida
Mechanical Engineering Intern in IDEN, developing all Motorola radio cell phones for Nextel and Sprint, project is to take a prototype with several problems and turn it in to a completed cell phone that is ready for the consumer through building a series of prototypes while adjusting design and manufacturing parameters	
MPC Products Corp.	Niles, Illinois
Team member on development and design of rotary DC and AC motors	

MPC Products	Skokie, Illinois
Aerospace engineering, Flight Deck Department intern, projects included determining what diameter indentations should be made in a cam for throttle that had a spring with a ball bearing attached that needed to fit into the indentation and throttle re-design to avoid interference with switches	
NASA – Langley	Hampton, Virginia
Langley Aerospace Summer Scholars (LARSS) Program...evaluate images of reaction control thruster system tested in Langley's 31-inch Mach 10 wind tunnel...took high-speed camera images and enhanced them using image processing software...calculated the appropriate averaged test parameters...put them all into a technical report...NASA Johnson Space Center will use to determine which thruster configuration works best...the system will eventually be implemented on the new Crew Exploration Vehicle which will replace the current space shuttle fleet	
NASA – Marshall Space Flight Center	Huntsville, Alabama
Advanced engine systems team, research and design, testing and analysis	
Natural Source Energy Systems	Wheeling, Illinois
Working with...lead engineer to assist in converting a Class-A recreational vehicle to run completely on bio-diesel and solar power	
NextERA Energy (FPL)	Palo, Iowa
Nuclear Power Engineer Intern...design projects relating to power generation...regulatory compliance	
Northwest Airlines	Minneapolis, Minnesota
Work in A319/A320 Fleet Engineering, which is a subset of NWA's Airbus Engineering under the direction of Technical Operations...provide high-level component and aircraft configuration support for Maintenance Control and Operations, technical analysis for reliability and maintenance, and advanced troubleshooting for various problems or situations that are beyond the scope of in-house maintenance	
Novatech	Wilmar, Minnesota
Design, fabrication, hands-on testing of energy extraction systems, data collection and analysis of system performance for the bio-energy project	
Oral B Laboratories	Iowa City, Iowa
Redesign/restructure of production facilities and equipment	
PMX Industries	Cedar Rapids, Iowa
Manufacturing Design intern...assist with the design of mechanical and electromechanical metal process manufacturing equipment	
Pacific Earthquake Engineering Research	Berkeley, California
Research on highway bridge behavior during and after earthquakes	
Parr Instrument Company	Moline, Illinois
Work with 3D CAD software to create new models and drawings, as well as revise old ones, design various component and custom orders	
Pella Corporation	Pella, Iowa
Engineering Intern, manufacturing and design projects as assigned.	

Penford Products Support controls-automation effort, graphic and system checkout process control, piping project design and implementation	Cedar Rapids, Iowa
Polo Custom Products Time studies and work load balancing, assist in the development of engineering plans and designs, and assist in the investigation and analysis of new material and engineering practices	Monticello, Iowa
Product Development Technologies Engineering intern...working with Pro/E modeling parts, making changes to drawings, and assembling and testing prototypes	Lake Zurich, Illinois
Pure Fishing, Inc. Manufacturing process engineering, maintenance and safety, quality control	Spirit Lake, Iowa
Ricardo Inc. Consulting engineering, thermodynamic analysis and CAD design analysis	Burr Ridge, Illinois
Rock Island Arsenal Engineering Aid, manufacturing engineering department	Rock Island, Illinois
Rockwell Collins, Inc. Design and implementation of process equipment tooling, process development, and documentation, producing Labview code, support and training	C'ville/Cedar Rapids, Iowa
Root Engineering Consulting engineering intern	Gurnee, Illinois
Sargent and Lundy, LLC Power Plant Consulting Engineering intern...emissions control design...CAD drawing...client presentations	Chicago, Illinois
Schlumberger Oil industry...Field Engineer Intern...well drilling and support...global opportunities...	Houston, Texas
Schneider Electric Mechanical Engineering Intern...manufacture and design of circuit breakers...industrial and commercial	Cedar Rapids, Iowa
Seaquist General Plastics Analysis of parameter influence on plastic part deformation, creation of ANOVA system	Poincy, France
SEC Design Design and build assembly line machinery...range from semi-automated to fully automated...design new tooling sets for 12 ton deflection machine	Lake Forest, Illinois
Shive-Hattery Consulting engineering intern	Iowa City, Iowa
Silgan Plastics Corporation Production plant layout and design update, research and implement recommendations for design change in customer packaging	Norcross, Georgia

Skill-Bosch Power Tool Team member working on design of new line of tools relating to reciprocating saw power tool	Chicago, Illinois
St. Croix of Park Falls Engineering intern in fishing gear manufacturing; design and technical support	Park Falls, Wisconsin
Terex AutoCAD/Inventor revisions and updates	Cedar Rapids, Iowa
Trane Plant engineering intern with air conditioning manufacturer	Sioux Falls, South Dakota
The Weidt Group Sustainability firm of engineers and architects, consulting intern on various projects to optimize energy use in clients' buildings to conform to regulations and restrictions, including lighting take-offs and database development, comparison and application	Minneapolis, Minnesota
TURCK Research and Development Intern, product qualification testing, building of prototypes and test fixtures, generation of drawings and Bills of Materials using AutoCAD and the generation of 3-D models using Autodesk Inventor	Plymouth, Minnesota
University of Iowa College of Engineering ME Lab Laboratory assistant	Iowa City, Iowa
University of Iowa College of Engineering Metal Fatigue/Fracture Lab Research study to measure the effectiveness of two metal surface treatments, shot peening and laser peening, on welded pieces of cold-rolled 1010 steel, main assignment was measure how well the pieces of steel could withstand an array of high and low loads, known as variable amplitude loads	Iowa City, Iowa
UI CoE OPL Research and analysis of engineering systems	Iowa City, Iowa
UI CoE Orientation Services Orientation advisor to 1 <sup>st</sup> year students; advising, mentoring, and training	Iowa City, Iowa
UI Dept. of Physics Radio and Plasma Wave Group...database creation and management	Iowa City, Iowa
University of Iowa Facilities Management Construction engineering intern	Iowa City, Iowa
University of Iowa IIHR—Hydroscience and Engineering Construction and design of models for various research projects	Iowa City, Iowa
UI Power Plant Remap the plant's entire infrastructure working to create accurate and detailed drawings of the piping system using AutoCAD, historical documents of improvements and renovations, and painstaking inspection of existing systems, equipment, and processes	Iowa City, Iowa
UI Water Treatment Plant Environmental Systems Technician	Iowa City, Iowa

UTC Power Engineering Intern...project consulting and analysis	South Windsor, Connecticut
University of Maine Research properties of wood-plastic composites for structural applications/develop testing methods and fixtures for column & posts made of WPC/Conduct tests, analyze results, determine design values	Orono, Maine
US Army Corps of Engineers Manufacturing and Construction engineering intern...project oversight and development	Mobile, Alabama
Vital Images, Inc Research and implement wavelet based 3D large volume data compression	Plymouth, Minnesota
Walt DisneyWorld Cast member...process evaluation and improvement...customer service	Orlando, Florida
Whirlpool-Amana Design engineering of parts, analysis of current designs, and taking data/Manufacturing processes and quality assurance on production lines	Amana, Iowa