

**The University of Iowa College of Engineering
Student Development Center/Engineering Professional Development**

**ME Co-op/Internship Employers
Locations and Descriptions, 2002-06**

AbelConn, LLC New Hope, Minnesota
Working with Shipping/Receiving and Engineering, develop and write new instructions for packaging product. Drafting reviews, Lean Manufacturing/Six Sigma studies, component database development

Alcoa Davenport, Iowa
Engineering intern; process/production support with engineering staff

Allsteel Muscatine, Iowa
Production support; quality assurance and documentation; design

American Profol Cedar Rapids, Iowa
Lead cost reduction team, act as project manager, maintain De-bottlenecking Phase II Plan

A.Y. McDonald Dubuque, Iowa
Engineering intern; process and design; fixtures

Bobcat Company Gwinnet, North Dakota
Production engineering and support; various projects design and quality

Boeing IDS Philadelphia, Pennsylvania
Systems Engineer with Ch 47 Chinook rotor blade overhaul/design group

Brook, Borg, Skiles Architecture Engineering Des Moines, Iowa
Consulting engineering, project and site work, records and documentation

Burlington, Northern, and Santa Fe Railroad West Burlington, Iowa
Computer network maintenance/Audit team/Workspace redesign

CAE Technology Livonia, Michigan
Support vehicle program development, build, validate, and exercise models, validate designs

Cargill, Inc. Cedar Rapids, Iowa
Updating piping and instrumentation diagrams/Work on team charged with reducing energy use/Coordinate installation of steam and gas meters

Case-New Holland Burlington, Iowa
Engineering Intern in the product management department, linking engineering and marketing, competitive research, product definitions, and analysis

Caterpillar Inc. Peoria, Illinois
Develop and implement project for technology transfer for welding best practice, process and quality control based on six-sigma principles

Centro, Inc. North Liberty, Iowa
Database development, time and cost studies, design and fabrication of safety guides

Civco Medical Instruments Kalona, Iowa
AutoCAD updates and revisions, verification and efficiency activities, quality assurance

Eagle Alloy Muskegon, Michigan
Plant engineering intern; foundry quality assurance; various projects

Eaton Corporation Shenandoah, Iowa
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

Elgin Sweeper Elgin, Illinois
Will assist with lab tests and documentation, quality control, research and development

Elkay Mfg. Broadview, Illinois
Manufacturing Intern

Emerson-Fisher Marshalltown, Iowa
Data Analysis and product marketing, technical support

Engineering Mechanics Corporation Columbus, Ohio
Research Engineer, various projects including structural reliability of electronic packaging, assisting in corporate operations as needed

Engineering Ministries International India
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

Engineering Plastic Components Grinnell, Iowa
Research and design of injection molded parts, costing of parts, understanding of plant processes/efficiencies

Feed and Grain Systems Tipton, Iowa
Design and build of grain storage and processing facilities, associated programming of electronic components, on-site design and fabrication

GE Consumer & Industrial Selmer, Tennessee
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

GM Chassis Center Troy, Michigan
Analysis and optimization of suspensions using software, Motionview

GM Powertrain Romulus, Michigan
Design new layout for CNC milling machines, evaluate material flow, machine and operator cycle times, production requirements and capacity, and other factors

HDR Corpus Christi, Texas
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

Hendrikson Mfg. Woodridge, Illinois
Manufacturing and Production Engineering, research and design

HNI Muscatine, Iowa
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

HON Technology Center Muscatine, Iowa
Product development for office environment

IAESTE: NorskHydro Bergen, Norway
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

Ideal Industries Sycamore, Illinois
Design Engineering Intern, electrical connectors and associated products, various projects for national and overseas clients to specific specs and requirements

IPSCO Steel Inc. Muscatine, Iowa
Implement modifications to rolling mill machine design, assist vendors with specifications and details of current mill machine design, plant improvement and safety projects

Integrated DNA Technology Coralville, Iowa
Process engineering intern

International Truck and Engine Melrose Park, Illinois
Manufacturing engineering, component quality analysis and design

Iowa Department of Natural Resources—Dial Corporation Ft. Madison, Iowa
Project to reduce kilowatt peak demand/reduction in operational costs and coal consumption of power company

Iowa Department of Natural Resources P2 Program: Woodharbor Doors Mason City, Iowa
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

John Deere Agricultural Management Solutions Urbandale, Iowa
Part of the AutoTrac Universal Steering Kit product verification team, responsible for correlating stepper motor torque, voltage and temperature

John Deere Construction and Forestry Dubuque, Iowa
Backhoe fabrication, materials inventory, weld fixture layout and adjustment, robot system programming, hydraulics system design

John Deere Des Moines Works Ankeny, Iowa
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

John Deere Harvester Works East Moline, Illinois
Research Intern, study is related to the dynamic mechanical behavior of the combine harvester cleaning system

John Deere Product Development Center Moline, Illinois
Validation of experimental testing machine, formulation of future directions in machine traction research

John Deere Waterloo Waterloo, Iowa
Engine production, quality control and testing, records and documentation

Johnson Controls Cedar Rapids, Iowa
Instrumentation and building environmental controls; monitoring and installation

Johns Hopkins University Baltimore, Maryland
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

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

MPC Products Corp. Niles, Illinois
Team member on development and design of rotary DC and AC motors

MacLean Power Systems Franklin Park, Illinois
Part of manufacturing engineering team, tooling and fixture design, other projects

Maytag-Amana Appliances, Inc. Amana, Iowa
Design engineering of parts, analysis of current designs, and taking data/Manufacturing processes and quality assurance on production lines

Maytag-Newton Newton, Iowa
Design R&D Team/Various projects relating to new and existing products

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, Iowa
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 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 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 – Marshall Space Flight Center Huntsville, Alabama
Advanced engine systems team, research and design, testing and analysis

Oral B Laboratories Iowa City, Iowa
Redesign/restructure of production facilities and 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 Cedar Rapids, Iowa
Support controls-automation effort, graphic and system checkout process control, piping project design and implementation

Pure Fishing, Inc. Spirit Lake, Iowa
Manufacturing process engineering, maintenance and safety, quality control

Ricardo Inc. Burr Ridge, Illinois
Consulting engineering, thermodynamic analysis and CAD design analysis

Rock Island Arsenal Rock Island, Illinois
Engineering Aid, manufacturing engineering department

Rockwell Collins, Inc. Coralville/Cedar Rapids, Iowa
Design and implementation of process equipment tooling, process development, and documentation, producing Labview code, support and training

Seaquist General Plastics Poincy, France
Analysis of parameter influence on plastic part deformation, creation of ANOVA system

Shive-Hattery Iowa City, Iowa
Consulting engineering intern

Silgan Plastics Corporation Norcross, Georgia
Production plant layout and design update, research and implement recommendations for design change in customer packaging

Skill-Bosch Power Tool Chicago, Illinois
Team member working on design of new line of tools relating to reciprocating saw power tool

St. Croix of Park Falls Park Falls, Wisconsin
Engineering intern in fishing gear manufacturing; design and technical support

Terex Cedar Rapids, Iowa
AutoCAD/Inventor revisions and updates

The Weidt Group

Minneapolis, Minnesota

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

TURCK

Plymouth, Minnesota

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

University of Iowa College of Engineering ME Lab

Iowa City, Iowa

Laboratory assistant

University of Iowa College of Engineering Metal Fatigue/Fracture Lab

Iowa City, Iowa

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 variable amplitude loads

UI College of Engineering Orientation Services

Iowa City, Iowa

Orientation advisor to 1st year students; advising, mentoring, and training

University of Iowa Facilities Management

Iowa City, Iowa

Construction engineering intern

University of Iowa IIHR—Hydroscience and Engineering

Iowa City, Iowa

Construction and design of models for various research projects

UI Power Plant

Iowa City, Iowa

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

UI Water Treatment Plant

Iowa City, Iowa

Environmental Systems Technician

University of Maine

Orono, 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

Vital Images, Inc

Plymouth, Minnesota

Research and implement wavelet based 3D large volume data compression

Whirlpool-Amana

Amana, Iowa

Manufacturing Engineer Co-op, time studies, quality assurance, manufacturing processes