UST Career Development Center

WHAT CAN I DO WITH A MAJOR IN...

Engineering

Engineering Programs Available at the University of St. Thomas:
Majors: B.S.E.E. Electrical Engineering, B.S.M.E. Mechanical Engineering
Dual Degree Programs: B.S.E.E. or B.S.M.E. and B.A. in General Business Management, B.S.E.E. and B.A. in Physics, B.S.E.E. and B.A. in Computer and Information Science
Pre-Professional Program: Peace Engineering
Minors: General Engineering, Electrical Engineering, Mechanical Engineering, Engineering Education

Department Website: http://www.stthomas.edu/engineering/

Major Overview:

Engineering is the bridge between the ever expanding technological frontier and today's societal needs. Engineers use design, science, mathematics, creativity and business analysis to create solutions to improve almost every facet of human life. The production of food, energy, clean water, medicine, cars, transportation systems, building materials, robotic machines, computers, communications equipment, electronic devices, paper, plastics, and even clothing fibers is all driven by engineers. Engineering is central to the creation of new technologies such as medical devices, renewable energy, efficient engines, advanced materials, micro-machines, biotechnology, and nanotechnology. Engineers are also leaders in broader fields such as business, medicine, patent law and government.

Our mission is to provide an applied, values-based learning experience that produces well rounded, innovative engineers and technology leaders who have the technical skills, passion and courage to make a difference. Our mechanical and electrical engineering programs are accredited by the Engineering Accreditation Commission of ABET, Inc. Program outcomes and objectives are designed to provide the graduate with a rigorous engineering experience balanced with the perspective of a liberal arts foundation. The educational objectives of each engineering program describes what we expect our graduates to accomplish in their work after graduation, as follows:

1. Create with Engineering Skills: Use engineering skills and principles to create systems, products, and services that meet articulated and unarticulated needs of people and improve the quality of their lives in a sustainable way.
2. Grow in a Learning Profession: Increase personal knowledge and skill through graduate or professional study, appropriate certifications, and work assignments.
3. Contribute through Citizenship: Contribute time, knowledge, and skills to the profession, community, and the world.
4. Lead through one's Work: Serve as a team member or team leader, demonstrating ethical behavior, social sensitivity, and professional responsibility.

University of St. Thomas 2012-2014 Undergraduate Catalog

What do UST Engineering alumni do?

A sample of **entry level** job titles and employers of alumni six to nine months after graduation:

Sample Job Titles: Product Engineer, Mechanical Engineer, Manufacturing Engineer, Electrical Engineer, Field Engineer, Software Engineer, Compliance Engineer, Plant Engineer, Design Engineer

Sample Employers: 3M, Boston Scientific, Anchor Plastics, Cummins, Emerson, Pentair, LasX Industries, Graco, Inc., St. Jude Medical, Starkey Labs, Xcel Energy, Apex Systems, Medtronic, Remmele Engineering

University of St. Thomas 2009, 2010, 2011 Post-Graduate Surveys

Additional Opportunities in Engineering:

Any Engineering Discipline
Research and Development
Design
Production
Operations
Management
Teaching
Consulting
Sales and Marketing
Law
Manufacturing
Healthcare

Industrial
Project, Program or Operations Management
Manufacturing Systems
Supply Chain Management and Logistics
Productivity, Methods and Process Engineering
Quality Measurement and Improvement
Human Factors
Strategic Planning
Management of Change
Financial Engineering
Engineering Management
Six Sigma
Lean

Civil
Structural
Urban Planning
Construction
Environmental
Water Resources
Transportation
Geotechnical

Engineering Physics
Engineering (Process and Testing)
Quality Control
Research
Development
Instrumentation

Computer
Information Protection
Communications and Wireless Networks
Computational Science
Operating Systems
Computer Networks
Computer Systems
Embedded Systems
Computer Vision and Robotics
Circuit Design
Signal, Image and Speech Processing
Bioinformatics

Electrical
Automatic Controls
Bioelectronics
Digital Systems
Electromagnetics
Analog electronics
Power and Energy Systems
Communications and Signal Processing

Mechanical
Machine Design
Systems Design
Manufacturing and Production
Energy Conversion
Energy Resources
Transportation and Environmental Impact
Materials and Structures

Materials Science and Engineering
Metallurgy
Ceramics
Plastics/Polymers
Composites
Semiconductors and Electronic Materials
Optical Materials
Biomaterials
Nanomaterials
Material Research and Development
Extraction/Synthesis
Processing
Structure Analysis
Performance
Failure Analysis
Material Selection

For more information including potential employers and employment strategies visit
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