

MECHANICAL ENGINEERING



KEY SKILLS

- Analytical
- Critical Thinking
- Complex Problem Solving
- Data Interpretation
- Decision-Making
- Mathematics Operations
- Project Management
- Research
- Writing



CONCENTRATIONS/SPECIALIZATIONS

- Acoustical/Audio
- Aerospace
- Biomechanical
- Industrial
- Manufacturing & Design/Drafting
- Materials Science
- Metallurgical
- Nanotechnology
- Nuclear
- Robotics & Mechatronics
- Thermodynamics, Energy, & Fluid Mechanics
 - HVAC
 - Power Plant/Energy
- Vehicle
 - Automotive
 - Marine/Naval



SAMPLE DEGREES

- Applied Science & Technology (BA)
- Civil Engineering (BS, MS, PhD)
- Engineering Management (DEng, MS, PhD)
- Mechanical Engineering (BS, BS/MS, MS, PhD)
- Systems Engineering + Engineering Management (BS/MS)



SAMPLE OCCUPATIONS

- Acoustic Consultant
- Automotive Designer
- Engine Designer
- Heating & Cooling Systems Engineer
- Manufacturing Engineer
- Materials Engineer
- Mechatronic Engineer
- Patent Law Expert
- Power Plant Controls Specialist/Manager
- Principal Mechanical Engineer
- Product Engineer/Designer
- Project Manager
- Robotics Technician/Engineer



POSSIBLE WORK SETTINGS

- Architecture Firm
- Automotive Designer/Manufacturer
- Construction Company
- Consulting Firm
- Engineering Consulting Firm/Company
- Federal Government
- Local Government
- Machinery Manufacturer
- Micro & Nanotechnology Firm/Company
- Navigational Manufacturer
- Private Defense Contractor
- R&D Department
- Thermodynamics Company



SAMPLE STUDENT ORGS

- Engineers Without Borders
- GWU National Society of Black Engineers
- Pi Tau Sigma (Mechanical Engineering)
- Society of Asian Scientists & Engineers
- Society of Women Engineers
- Tau Beta Pi (Eng. Honor Society)
- Theta Tau (Co-ed Eng. Fraternity)



SAMPLE EMPLOYERS

- Alion Science & Technology
- BAE Systems
- Barone Consulting
- Boeing
- Booz Allen Hamilton
- Brown and Caldwell
- CACI International
- Calpine
- Cenergy International Services
- Concurrent Technologies
- DART Machinery
- Exelon Corporation
- EYP Architecture & Engineering
- Ford Motor Company
- General Electric (GE)
- Holtec International
- Honda Motor Company
- Interface Performance Materials
- LB&B Associates Inc
- Leidos
- Lockheed Martin
- Mitsubishi Motors
- NASA
- NV5
- Parsons Corporation
- Pilkington
- Pratt & Whitney
- Raytheon
- Riebdon Group
- SAIC
- Siemens AG
- Stanley Black & Decker, Inc.
- TKDA
- Toyota Motor Corporation
- US Army Corps of Engineers
- US Department of Defense
- US Department of the Interior
- WSP



PROFESSIONAL ORGS

- American Society of Mechanical Engineers
- Institution of Mechanical Engineers
- International Academy for Production Engineering (CIRP)
- Society for Experimental Mechanics
- Society of Automotive Engineers
- Society of Manufacturing Engineers

