

ELECTRICAL & COMPUTER ENGINEERING



KEY SKILLS

- Analytical
- Attention to Detail
- Clear Communication
- Complex Problem Solving
- Continual Learning
- Mathematics & Science
- Multitasking & Time Management
- Project Management



CONCENTRATIONS/SPECIALIZATIONS

- Computer
 - Artificial Intelligence & Robotics
 - Computational
 - Computer Architecture & Design
 - Cybersecurity
 - Hardware & Embedded Systems
 - Human-Computer Interaction (HCI)
- Electrical
 - Circuits
 - Control
 - Electromagnetics & Instrumentation
 - Microelectronics/Photonics
 - Nanotechnology
 - Power/Energy
 - Signal Processing
 - Telecommunications



SAMPLE DEGREES

- Computer Engineering (BS, BS/MS, MS, PhD)
- Computer Eng. + Electrical Eng. (BS)
- Computer/Electrical Eng. + Eng. Management (BS/MS)
- Electrical Engineering (BS, BS/MS, MS, PhD)
- Telecommunications Engineering (MS)



SAMPLE OCCUPATIONS

- Audiovisual Engineer
- Broadcast Engineer
- Circuits Engineer
- Computer Hardware Engineer
- Electrical Controls Engineer
- Lead Java Developer
- Network Engineer
- Photonics Engineer
- Power Electronics Design Engineer
- Project Manager
- Software Developer/Engineer
- Test Engineer
- Validation Engineer



POSSIBLE WORK SETTINGS

- Broadcasting/Media Company
- Federal Government
- IT Company
- Power Plant
- Production Company
- Robotics Manufacturing Company
- R&D Company/Startup
- Software Developer
- Telecommunications Company
- University/College
- Utilities Company
- Waste Management Company



SAMPLE STUDENT ORGS

- Energy Club GW
- Engineers Without Borders
- GWACM (Computing Machinery)
- Institute of Electrical & Electronics Engineers (IEEE)
- Systems Hacking Club
- The Engineers' Council



SAMPLE EMPLOYERS

- ABB Group
- Alcoa
- Aliant Energy
- Apple
- Boeing
- Eaton Corporation
- Emerson Electric
- Federal Bureau of Investigation
- Flextronics
- Fox News Channel
- General Electronic (GE)
- Goddard Space Flight Center
- IBM
- Institute of Electrical & Electronic Engineers
- IRS Information Technology
- Jacobs
- Leidos
- Mathworks
- NASA
- National Security Agency (NSA)
- Naval Research Laboratory
- Northrop Grumman
- Pacific Gas & Electric Company
- Panasonic Avionics Corporation
- Randstad Engineering
- Rockwell Collins
- RS&H
- Schneider Electric
- Shell Oil Company
- Sinclair Broadcast Group
- Teledyne Technologies
- TMEIC
- Trinity Industries
- US Department of Defense
- US Department of Treasury
- VariQ
- Verizon



PROFESSIONAL ORGS

- Audio Engineering Society
- Association for Computing Machinery
- Institute of Electrical & Electronic Engineers (IEEE)
- National Society of Professional Engineers

