

WHAT CAN I DO WITH MY ELECTRICAL ENGINEERING DEGREE?



Using the Major Sheet:

- Large headings indicate **industry** area and subheadings indicate **employers** within that area.
- Use the titles to search for careers and related careers in order to explore your options within different areas of industry. Note that some career titles have multiple names for similar positions.
- An asterisk (*) notes that additional training (certification, graduate school, high level of experience) may be needed in order to obtain this career. Make sure to thoroughly research career pathways.

PROGRAMMING

Computer Service Co., Large Corp. / Organizations, Software Development Firms, Computer Manufacturers

Operating Systems

- Systems Programmer
- Programmer Trainee
- Software Development Specialist
- Systems Software Developer
- Software Engineer
- Software Integration Engineer
- Computer Programmer
- Software Developer

Applications

- Computer Programmer
- Applications Software Developer
- Scientific Applications Programmer
- Associate Applications Developer
- Software Development Specialist
- Information System Programmer
- Field Systems Technician
- Programmer Trainee
- Software Engineer
- Software Integration Engineer
- Firmware Engineer
- Process Control Programmer
- Applications Analyst
- Applications Engineer
- Applications Programmer
- Software Developer
- Software Specialist
- Software Technician
- Virtual Reality Developer

Data Communication

- Data Comm. Programmer
- Data Comm. Analyst
- Data Comm. Specialist

Hardware

- Computer Chip Designer
- Hardware Designer
- Hardware Engineer
- Design Engineer

NETWORK ADMINISTRATION

- LAN Specialist
- Network Administrator
- Communications Specialist
- Systems Administrator
- LAN Administrator
- LAN Analyst
- Systems Consultant
- Network Designer

SYSTEMS ANALYSIS

Management Consulting Firms, Computer Manufacturers, Computer Service Co.

- Systems Analyst
- Computer Analyst
- Programmer Analyst
- Associate Analyst
- Systems Manager
- Digital Systems Analyst
- Associate Systems Analyst
- Assistant Analyst

DATA PROCESSING MANAGEMENT

Hospitals, Educational Institutions, Manufacturers, Government, Financial Co.

- Data Processing Installer
- EDP Manager
- EDP Systems Sales Rep.
- Data Processing Director
- Data Processor
- Data Processing Manager
- EDP Systems Analyst

SECURITY

Data Processing Co., Banks, Credit Co., Computer Consulting Firms

- ATM Specialist
- Computer Security Consultant
- Computer Security Specialist
- Encryption Specialist
- Security Specialist

DATABASE MANAGEMENT

- Database Administrator
- Data Retrieval Specialist
- Database Specialist
- Database Manager
- Data Administrator
- Data Control Manager

HUMAN RESOURCES

- Technical Recruiter
- Software Talent Agent
- High Tech Headhunter

DOCUMENTATION / PUBLISHING

Comp. Trade Magazines, Hardware/Software Manufacturers, Publishing Houses

- Technical Writer
- Technical Librarian
- Assistant Textbook Editor
- Desktop Publisher
- Author
- Documentation Specialist
- Trade Magazine Reporter

PRODUCT SUPPORT

Hardware/Software Manufacturers

- Service Engineer
- Computer Help Desk Technician
- Field Service Rep.
- Computer Support Specialist
- Computer Repair Specialist
- Product Designer
- Senior Engineer*
- Test Engineer
- Technology Engineer
- Power Distribution Engineer
- Power System Engineer
- Controls Designer
- Customer Engineer
- Technical Support Rep.
- Technical Support Specialist
- Customer Support Specialist
- Software Support Specialist
- Electrical Engineer
- Project Engineer
- Software Engineer
- Systems Designer
- Circuit Designer
- Illuminating Engineer
- Outside Plant Engineer
- Product Support Rep.
- Systems Engineer
- Product Support Specialist
- Technical Support Analyst
- Technical Support Engineer
- Design Engineer
- Software Engineer
- Junior Engineer
- Cable Engineer
- Electronic Drafter
- Semiconductor Developer
- Instrumentation Technician

INTERNET

- Web Site Engineer
- Web Site Analyst
- Cyber Journalist
- Internet Consultant
- Web Master/Mistress
- On-Line Services Sales Rep.
- Web Page Designer
- Web Site Programmer
- Internet Artist
- On-Line Researcher

DIGITAL IMAGING

Software Dev. Co., Educational & Publishing Co., Cable Co., TV Networks, Gov't

- Digital Graphic Artist
- GUI Designer
- Technical Director
- Special Effects Programmer
- Computer Game Programmer
- Multimedia Producer
- Computer Animator
- Interactive Multimedia Assoc.
- CD ROM Producer
- Clip Art Production Assistant
- Graphics Programmer
- Marketing Representative

EDUCATION

In-house Training Dept., Computer Learning Centers, Computer Training Firms

- Computer Education Specialist
- Internet Instructional Designer
- Teacher & Technician
- Training Specialist
- Computer Teacher
- Systems Engineer & Professor
- New Product Instructor
- Internet Instructor

Preparation for a Competitive Job Market:

- **Focus on transferable skill sets** as you pursue a degree in Electrical Engineering.
- **Obtain relevant internship, co-op, or volunteer experiences.**
- **Supplement Electrical Engineering coursework** with **classes relevant** to your career.
- **Meet with a Career Specialist** to explore options, make decisions, and prepare for career choices.

Additional Career Center Resources:

- **Major Sheets (ENCH, BIOC, BTEC, CHEM, GEOG):** <https://careers.umbc.edu/tools/majors/>
- **The Vault:** <https://careers2.umbc.edu/tools/vault/>

- Use the top search bar to find these relevant guides:

["Vault Guide to Engineering Jobs"](#)

["Vault Guide to Nanotechnology Jobs"](#)

["Vault Guide to Telecommunications Jobs"](#)

["Vault Guide to Computer Hardware Jobs"](#)

• **Professional Associations:**

American Institute of Chemical Engineers: <http://www.aiche.org/>

National Society of Professional Engineers: <http://www.nspe.org/>

National Society of Black Engineers: www.nsbe.org

Society of Women Engineers: <http://societyofwomenengineers.swe.org/>

American Chemical Society: <http://www.acs.org/content/acs/en.html>