

# WHAT CAN I DO WITH MY MAJOR?

## ELECTRICAL ENGINEERING

Electrical Engineering focuses on the study and application of electricity, electronics, and electromagnetism. This field involves designing, developing, and maintaining electrical systems and components, ranging from small-scale electronics to large power grids.

### COMMON JOB TITLES \* additional education or certification required post graduation

#### ENTRY & MID LEVEL POSITIONS

Circuit Design Engineer  
Controls Systems Specialist  
Electrical Distribution Engineer\*  
Electrical Drafter  
Hardware Engineer  
Robotics Engineer\*

Electrical Power Systems Engineer\*  
Instrumentation Designer  
Network Security Specialist  
Project Engineer  
Systems Engineer  
Telecommunications Engineer

### AREAS OF EMPLOYMENT: WHERE DO ELECTRICAL ENGINEERING MAJORS TYPICALLY WORK?

Automotive Companies: Peterbilt Motors, Tesla, Inc., Ford Motor Company

Steel Businesses: Nucor Steel, Tenaska, Valmont

Telecommunications Companies: Allo, Cox Communications, Lumen

Consumer Electronics: LG Electronics, Sony

Government: NE Dept. of Transportation, NE Public Power District,

Aerospace & Defense: Northrop Grumman, NASA, Dept. of Defense

Computer/Tech Companies: HP Inc., Google, Dell

Energy & Power Businesses: Aurora Cooperative, NextEra Energy Resource

Research Institutions: NE Engineering Innovation Center, PKI

Utility Companies: OPPD, MUD, Black Hills Energy

Medical Companies: Omaha Scientific Inc., Celerion, NAMSA

Robotics: Omaha Automation Inc., Kawasaki, Molex

### IMPORTANT QUALITIES:

#### Transferable Skills Gained:

Creativity  
Analytical Skills  
Communication Skills  
Teamwork & Collaboration  
Critical Thinking  
Problem Solving Skills

#### Concrete Skills Gained:

MATLAB  
Python  
C/C++  
AutoCAD Electrical  
Altium Designer

### HOW TO DEVELOP YOUR SKILLS :

Get involved in an **ECE Student Organization** to learn more about the field, connect with other students, and participate in the community

Explore **ECE Research Opportunities** to collaborate with faculty and pursue your interests

Join **NESCO** to further advance your leadership skills, professionalism, and your future career goals

# WHAT CAN I DO WITH MY MAJOR? ELECTRICAL ENGINEERING

## MAJOR + MINOR SPECIALIZATION: HOW CAN I SPECIALIZE IN SOMETHING BEFORE I GRADUATE?

\* additional education or certification required post graduation

Electrical Engineering + Engineering Leadership minor = Project Engineer/Systems Engineer

Electrical Engineering + Robotics Engineering minor = Robotics Engineer

Electrical Engineering + Environmental Engineering minor = Electrical Power Systems Engineer

## OCCUPATIONAL OUTLOOK:

Electrical & Electronics Engineers

Environmental Engineers

## EMPLOYMENT OPPORTUNITIES:

Check out daily job postings on **Handshake** related to accounting jobs, internships, and opportunities to boost your student experience

## ADDITIONAL EDUCATION:

### Graduate School

Getting a **Masters Degree** or **Doctoral Degree** could be beneficial depending on your career goals or desired area of study, as these advanced degrees can provide deeper specialization, research opportunities, and eligibility for higher-level positions in academia, research, or specialized engineering fields

### More Information:

UNL Engineering Graduate Degree Programs

### Licensure

The **Fundamentals of Engineering (FE exam)** is an exam that is required to pass before achieving licensure as a professional engineer (P.E.), targeting recent graduates and those nearing completion of their undergraduate engineering studies. More information here: FE Exam

To become a licensed Professional Engineer (PE), one must pass the **Principles and Practice of Engineering Exam (PE)**. To learn more about this exam and the licensure process, please visit the **National Council of Examiners for Engineering and Surveying (NCEES)**

## OTHER RESOURCES :

UNL College of Engineering

Career Exploration in Career Services

U.S. Bureau of Labor Statistics: Occupational Outlook Handbook

## NEED SOME EXTRA HELP?


Book an appointment with Career Services

Book an appointment with your Advisor


### Career Services

 EAB 113

 6001 Dodge Street, Omaha, NE 68182

 402.554.3672

 [careers.unomaha.edu](https://careers.unomaha.edu)

 [careers@unomaha.edu](mailto:careers@unomaha.edu)

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