

ELECTRICAL ENGINEERING

TOP INDUSTRIES

1. Automobiles & Parts
2. Technology Hardware & Equipment
3. Civil & Construction
4. Aerospace & Defense
5. Utilities

SAMPLE JOB TITLES

- Applications Engineer
- Battery Engineer
- Controls Engineer
- Electrical Engineer
- Electronic Hardware Engineer
- Embedded Engineer
- Field Application Engineer
- Instrumentation & Controls Engineer
- Power Electronics Engineer
- R&D Engineer
- Systems Engineer
- Test Engineer

TOP HIRING COMPANIES



SOUTHWEST RESEARCH INSTITUTE

SAMPLE HIRING COMPANIES

- ABB
- Abbott
- Ally Financial
- Amazon
- Arup
- Atwell
- BAE Systems
- Bosch
- Burns & McDonnell
- BW Converting
- Caterpillar
- Daifuku
- Dassault Systemes
- Delta Electronics
- DENSO
- eSimplicity
- Ethicon
- First Solar
- Foley & Lardner
- Ford Motor Co
- General Dynamics
- HATCI
- IBM
- IMEG
- IMRA
- Intel
- International
- Invenergy
- Johnson & Johnson
- Marathon Petroleum
- MathWorks
- MGA Research Corp
- NASA
- Navistar
- Nexteer Automotive
- Northrop Grumman
- Optiver
- POWER Engineers
- Pratt Miller
- Procter & Gamble
- Quantum Opus
- R.A. Miller Industries
- Raytheon - RTX
- Samsara
- Sargent & Lundy
- Shure
- Silicon Craft
- SpaceX
- Stanley Consultants
- Subaru
- Subgrid Solutions
- Ternium
- Tesla
- TRC Companies
- U.S. Navy
- UL Solutions
- Volvo
- Wade Trim Group
- Wipro PARI
- Yazaki

FULL TIME STARTING ANNUAL SALARY

Average \$82,603

Min \$50,000 Med \$82,000 Max \$115,000

INTERN HOURLY SALARY

Average \$27.23

Min \$16.25 Med \$26 Max \$57

ELECTRICAL ENGINEERING

SAMPLE ELEVATOR PITCH

Hi, my name is [NAME]. I am a [YEAR] studying Electrical Engineering. I'm interested in your summer internship program.

In my EECS 200 class, I worked together with a team of engineering students to design, build, and test a 2-wheeled robot platform throughout the semester. I applied electrical engineering concepts in circuits, computing, control, sensors, optics, power, signal processing, and wireless communications to achieve competition objectives within defined engineering constraints.

I noticed that the internship posting mentioned working with antenna designers and mechanical engineers on the system. I have worked on complex systems with mechanical engineers before and I enjoyed it. Can you tell me more about the position?

KEY COURSES

EECS 200: Design-oriented introduction to electrical engineering centered around a societally-relevant design challenge for a 2-wheeled robot platform

EECS 300: Design-oriented course allowing for the exploration of more advanced topics as part of a design project with real world relevance

Major Design Experience (MDE) classes:

- **EECS 427:** Learn how to design and lay out an integrated circuit
- **EECS 430:** Learn how to develop and implement practical wireless systems
- **EECS 452:** Learn how to design systems that monitor and control physical processes in real time

SAMPLE IMPACT STATEMENT

Before: Designed circuit components

After: Designed and tested circuit components for higher electrical efficiency using a PCB simulator to reduce assembly time

KEY SKILLS

Python: Coding language

R: Coding language predominantly used in the statistical world

SQL: Coding language for DBMS's

Data Visualization Tools: Tableau, D3, Qlikview, Microsoft Power BI, Datawrapper, Plotly, etc.

SAMPLE EXTRACURRICULARS

Student Organizations: AborHacks
Code-M, Eta Kappa Nu (Honors Society), Michigan Hackers, Institute for Electrical & Electronics Engineers (IEEE), Girls in EECS (GEECS)

Design Teams: STARX, Michigan Autonomous Aerial Vehicles, M-Fly, Michigan Data Science Team

QUESTIONS?

Want to learn more information?

Contact us at: ecrc-info@umich.edu

Schedule an appointment: careerforge.com/login