



ROSE-HULMAN

INSTITUTE OF TECHNOLOGY

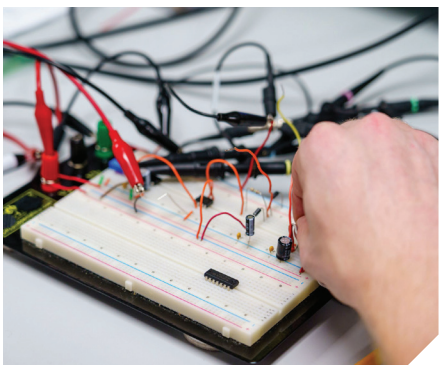
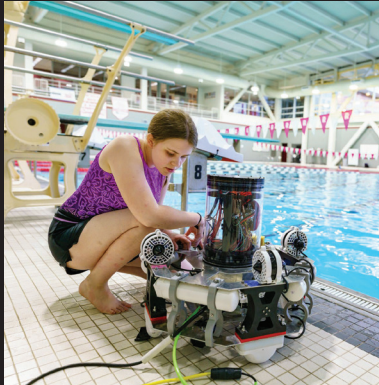


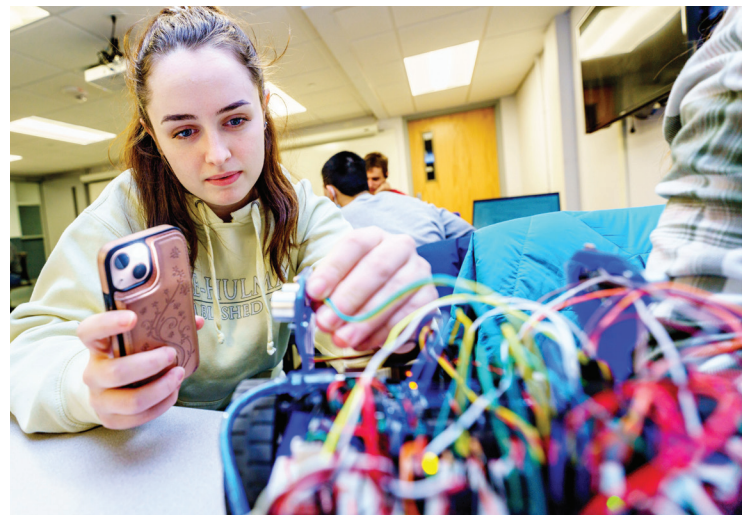
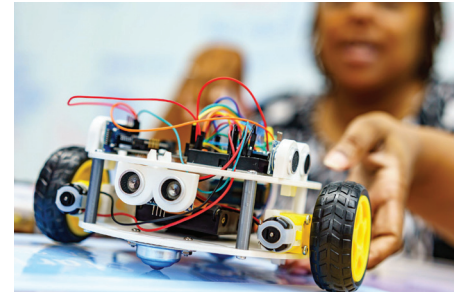
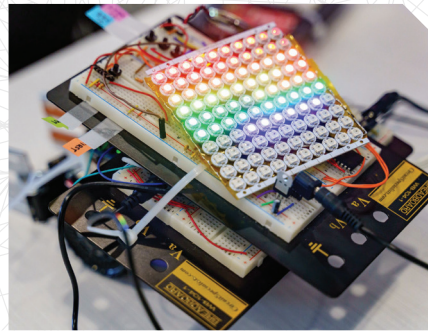
**Electrical and
Computer Engineering**

Smarter, Faster, and More Sustainable

We combine coursework with hands-on lab experience to help you grasp the laws, principles, and concepts of electrical and computer engineering. As an undergraduate in ECE at Rose, you will work closely with our expert faculty using state-of-the-art equipment that is often inaccessible elsewhere. In the lab, you will put theory into practice through both carefully designed experiences and open-ended design problems.

As an electrical engineering or computer engineering major, you have the opportunity for growth through lab classes, design courses, independent study projects, research, competition teams, and other student organizations. And you'll get practical experience solving complex problems for real-world clients in our year-long Capstone experience. Graduate schools and industry leaders recognize the value of our rigorous and ambitious program. Our ECE graduates continuously have top career placement rates and frequently cite Rose as essential to their professional development and ability to "hit the ground running."





Experiential Learning

We are big believers in learning by doing. That is why you'll have plenty of opportunities to apply what you learn in labs, maker spaces, and project work. We're also closely tied to several of Rose-Hulman's coolest competition teams and clubs, including:

- Amateur Radio
- Computer Hacker
- Computer Security
- Design, Build, Fly
- Mars Rover Team
- Robotics Teams
- Rose Rocketry
- Rose GPE

Nearly all of your ECE courses will include hands-on labs. Our undergraduate labs are unequaled. In the Circuits Lab, Communication Lab, Controls Lab, Power Systems Lab, and Texas Instruments Semiconductor Testing Lab, you will work on equipment like, oscilloscopes, logic, spectrum and vector networks analyzers, power meters, dynamometers, and soldering stations.

Real-World Projects

Our ECE coursework will give you the opportunity to work on real design projects. In your first year, you'll work with a team to design and build a robot. Sophomore year, you'll design, build and test an embedded system. As a junior, you'll design and build a rechargeable power supply and control system for an autonomous vehicle. As a senior, you'll do a year-long capstone project for a real client.



Understanding the Difference

Electrical Engineering encompasses a broad array of areas including signal processing, communication systems, electronics, integrated circuits, digital systems, controls, power engineering, and electromagnetics.

Computer Engineering combines elements of electrical engineering and computer science to analyze and design tomorrow's computing systems from both the hardware and software perspectives. Innovations in these areas will enable the inclusion of artificial intelligence in ways that we have not yet dreamed of.

Minors, Certificates and Electives

Many of the ECE students choose to either focus or broaden their degree in the following minors, certificates, or electives:

Common Second Majors and Minors:

- Computer Science
- Software Engineering
- Mathematics
- Data Science
- Engineering Physics
- Optical Engineering

Additional Minors and Certificates:

- Robotics
- Power and Renewable Energy Systems
- Communication Systems
- Semiconductor Testing
- Semiconductor Materials and Devices
- Artificial Intelligence
- Internet of Things

Other Advanced Electives In:

- Cybersecurity
- Electromagnetics
- Computer Architecture
- Embedded Systems



For more information on electrical or computer engineering at Rose-Hulman, scan this code with your smart phone

Get in Touch!

Department of Electrical and Computer Engineering

812-877-8228

www.rose-hulman.edu/ECE

ECE Students at Rose

100%

Placement Rate

\$79,857

Average Starting Salary – Computer Engineering

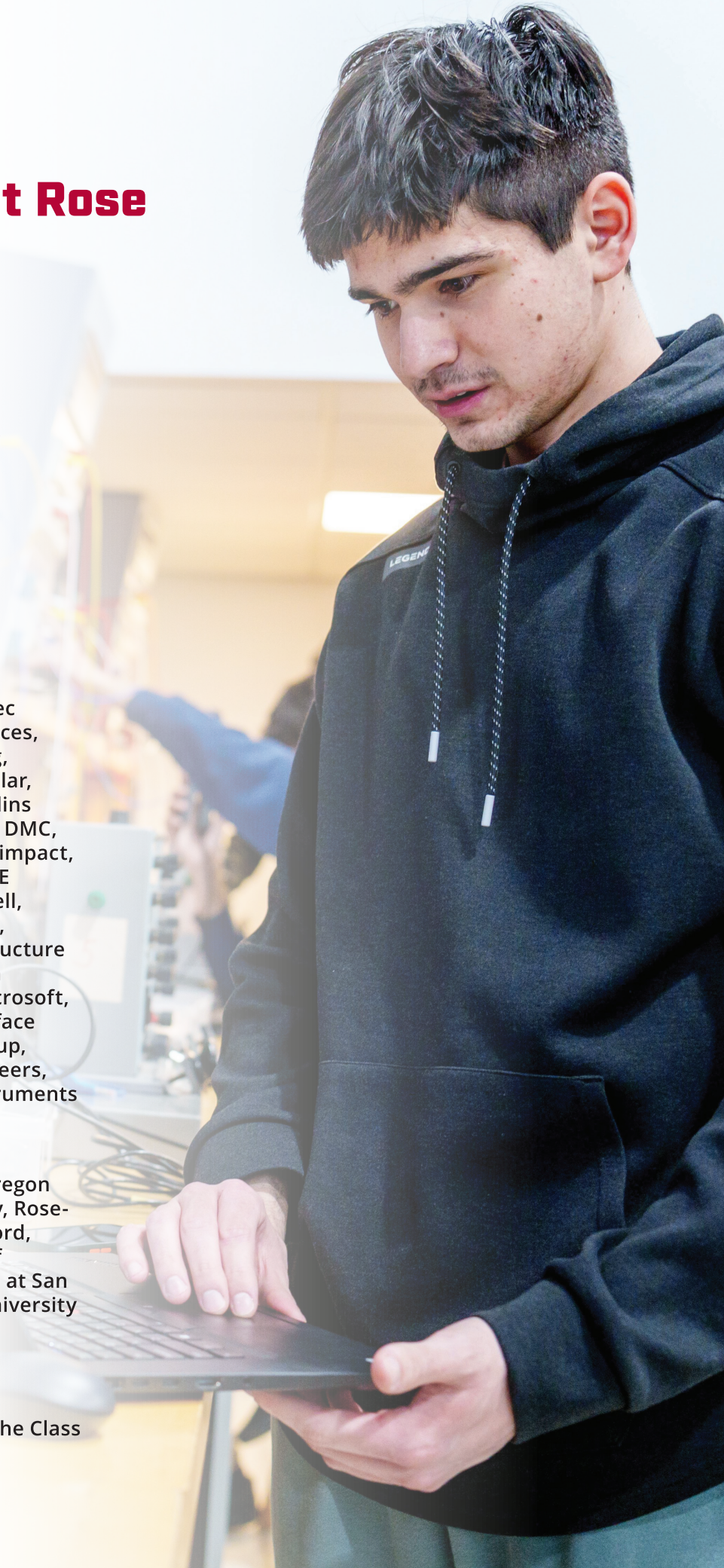
\$78,857

Average Starting Salary – Electrical Engineering

Offers from companies including Actalent Services, AES Indiana, Altec Industries, Amerigent, Analog Devices, Black & Veatch, Belcan Engineering, Blue Ridge Envisioneering, Caterpillar, Citrix Systems, Cleveland Cliffs, Collins Aerospace, Cummins, DLZ Indiana, DMC, Dwyer Instruments, Edgile, Electroimpact, Endress+Hauser, EPE Consulting, GE Aviation, Goldman Sachs, Honeywell, Huntington Inglass Industries, IBM, Indesign, Mercury Systems, Infrastructure and Energy Alternatives, Marathon Petroleum, Micron Technology, Microsoft, Milwaukee Electric Tool, Naval Surface Warfare Center, Nexus Energy Group, Northrop Grumman, POWER Engineers, Quantum Signal AI, and Texas Instruments

Graduate school acceptances from Georgia Institute of Technology, Oregon State University, Purdue University, Rose-Hulman, Rutgers University, Stanford, University of Arizona, University of Minnesota, University of California at San Diego, University of Illinois, and University of Southern California

*Salary and placement data from the Class of 2022.





ABOUT ROSE-HULMAN

Rose-Hulman is the nation's top undergraduate engineering, science, and mathematics school. Our 1,300 acre scenic campus is home to 2,100 students with a passion for STEM and learning. We are consistently rated among the best colleges and universities in the country for return on investment, internships, and career placement.

812-877-1511
rose-hulman.edu

Follow us    @rosehulman