Electrical Engineering (M.S.E.E. or M.Eng.)

Master the critical components, devices and electrical systems that make our world work.

Expand your career opportunities in engineering with a master's degree in electrical engineering from a Carnegie Doctoral Research Institution. As a graduate student, you'll have the opportunity to conduct cross-disciplinary research in aerospace, energy, chemistry, and medicine.

Program Snapshot

**Program type:** Master's Degree  
**Format:** On-campus or online  
**Est. time to complete:** 2+ years  
**Credit hours:** 30

Why Earn a Master's in Electrical Engineering at UND?

Those with electrical engineering expertise are well-positioned to be a crucial talent in a society that is increasingly powered. Strong trends like energy efficiency, sustainability, security and health advocacy are powered by those with the right expertise to solve electrical problems. Through our electrical engineering master's program, you will develop:

- A comprehensive and in-depth understanding of electrical engineering through graduate-level challenging coursework.
- Critical thinking skills through research and project-focused activities.
- Preparation for rewarding careers at top global companies in a range of major industries.
- Skills to communicate the results of your research in an effective and professional manner.

Tailor your electrical engineering graduate degree to match your career goals. Choose courses in applied electromagnetics, biomedical engineering, power and energy systems, signal and image processing, wireless communications, cyber security, or unmanned systems.

Top Online Graduate Engineering Program

UND consistently rank among the best for educational quality, affordability, and career outcomes. We are recognized by U.S. News & World Report as a top online graduate engineering program in the nation.

M.S.E.E. vs. M.Eng. in Electrical Engineering

UND offers both Electrical Engineering Master of Science (M.S.E.E.) and Master of Engineering (M.Eng.) degrees. It is recommended you connect with the Department of Electrical Engineering before making a final decision. However, in general, a M.Eng. program is more course-based, while the more popular M.S. program includes a thesis or research project/independent study.

Application Deadlines

**Fall:** March 1* | May 1  
**Spring:** Aug. 1* | Oct. 1
Electrical Engineering at UND

- Collaborate on research opportunities with UND’s Department of Mechanical Engineering, Department of Chemical Engineering, College of Nursing & Professional Disciplines, School of Aerospace, and School of Medicine & Health Sciences.
- Gain the broad and practical electrical component and device engineering knowledge valued in the job market.
- Participate in the annual NASA Robotics competition at the NASA Kennedy Space Center in Florida.
- Gain support from the U.S. Department of Energy’s National Renewable Energy Laboratory (NREL).

Careers in Electrical Engineering

96K  Median annual wage for electrical engineers in 2016*

13%  Engineers in various fields with a master's degree had a median salary up to 13% higher than their counterparts with a bachelor's degree.*

*U.S. Bureau of Labor Statistics

As an electrical engineer, you can work in a variety of industries such as electric utilities, aerospace manufacturing, telecommunications, engineering consulting firms, and the federal government.

University of North Dakota graduates of the master's program in electrical engineering have gone on to work at:

- Apple
- Amazon
- Emerson
- IBM
- John Deere
- Microsoft
- Rockwell Collins
- Siemens
- UTC Aerospace Systems

Beyond preparing you to work in private industry or government, your graduate electrical engineering degree will prepare you for doctoral studies in electrical engineering or related fields.

When You Earn a Master's degree in Electrical Engineering

A master's degree in Electrical Engineering gives you the strategic skills you need, including:

- MATLAB
- Java (Programming Language)
- C++ (Programming Language)
- LabVIEW
- Electronics

UND Electrical Engineering Alumni

Electrical Engineering alumni can expect a range of opportunities in electrical engineering, and many have recently gone onto careers in top regional and global engineering firms like:
● 3M
● Boeing
● Hitachi
● IBM
● Rockwell Collins
● Raytheon