Electrical Engineering (Ph.D.)

Elevate your knowledge and expertise to help design and build the next generation of new component and device technologies.

Tomorrow’s powered components and devices demand the highest level of knowledge, skills and innovation. A doctoral degree in electrical engineering from UND offers a customizable curriculum that helps you develop the expertise to research and design a variety of electrical-based technologies and advances. And, for those seeking a career in higher education, the electrical engineering doctoral program provides a clear path.

Program Snapshot

Program type: Doctoral Degree
Format: On-campus or online
Est. time to complete: 4+ years
Credit hours: 90

Why Earn a Ph.D. in Electrical Engineering at UND?

From wireless devices, to electronic security, the smart grid and embedded systems, the future will be powered by electrical engineering. Those with the highest expertise will impact everything from the next generation of computing platforms, to the circuits that power a myriad of devices, as well as future innovations.

With the UND doctoral program in electrical engineering, you'll benefit from a curriculum that advances your electrical engineering education to the highest level, with opportunities to:

- Customize the curriculum, research and training to meet your strongest interests and professional career goals.
- Engage in both traditional engineering and complementary multidisciplinary studies.
- Experience strong interaction between fellow engineering students, and high-quality research to advance teamwork skills to the highest level.
- Gain advanced research expertise with the skills and knowledge to identify needs, define context and execute on applications.

Application Deadlines

**FALL:** MAR 1* | MAY 1
**SPRING:** AUG 1* | OCT 1
**SUMMER:** DEC 1* | FEB 1

*designates priority deadline

Doctoral Program Highlights

- Learn the advanced skills and knowledge needed to invent and develop the next generation of powered components, computer platforms and devices.
- Gain a deep expertise in electrical engineering, along with a breadth of knowledge in related areas, such as computers, aerospace or biomedical, to achieve your goals and objectives.
- Develop a strong research methodology and apply it to a specific engineering problem, as directed by an adviser.
- Be well-prepared for advanced professional practice, teaching or a career in research and creative activities.
Careers in Electrical Engineering

132K
Electrical engineer salaries for the highest 10% are more than $132,210.*

500
The demand for those with advanced electrical engineering degrees is high, especially in both Fortune 500 companies and start-ups.

*U.S. Bureau of Labor Statistics

Electrical engineers comprise the second largest branch of the U.S. engineering community (behind software engineers). For many top companies, electrical engineers with the highest education are in high demand. A Ph.D. in electrical engineering from UND can put you in a good position to be considered by some of today's global leaders, or a teaching position in a higher learning institution.

UND electrical engineering doctoral graduates can expect a broad range of opportunities, including senior-level management or consulting. A very small sampling includes:

- Senior research engineer
- Senior electronics design engineer
- Senior electrical engineer
- Senior process engineer
- Senior systems engineer
- College professor or researcher

When You Earn a Ph.D. in Electrical Engineering

A doctorate 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
- Air Force
- NASA
- NIST