GRADUATE STUDIES

Powering, connecting, digitizing & automating a better future.
In my grad school decision process, having an advisor that I connected with and felt would support my abilities, as both a student and a rising researcher, was critical. I chose to accept NDEE’s offer because I found that both my advisor and the academic environment here were very welcoming and fostered a sense of open collaboration. In addition, it’s hard to beat the low cost of living in South Bend. You don’t have to worry about having enough money to survive comfortably and financially through grad school.

John Haug
2nd year
researching plasmonics and optical antennas with the Nanophotonics group, advised by Professor Anthony Hoffman

At NDEE I’ve connected with many people across ranks and disciplines who generously and enthusiastically share their time and knowledge. Their collaborative and inclusive spirit fosters scientific advancement while also celebrating diversity. This close-knit community has afforded me several good friendships with peers from around the world.

Karla Gonzalez-Serrano
5th year
studying nanobiotechnology with the NDnano group, advised by Professor Alan Seabaugh
Through graduate studies in the Department of Electrical Engineering at the University of Notre Dame (NDEE), you will join a vibrant academic community of students, faculty, staff, and alumni. This community is powering, connecting, digitizing, and automating a better future through cutting-edge research and commercialization in the context of Notre Dame’s distinctive mission.

NDEE will prepare you, like so many of our graduate alumni, for top-tier careers in industry, academia, and government.

The mission of the Biomedical Photonics Lab is to improve medical care, particularly cancer care, by developing advanced imaging technologies. Our students create innovative medical devices that use safe levels of light to noninvasively interrogate tissue deep beneath the skin. This work, while applicable to many diseases, is presently focused on breast cancer risk assessment, screening, differential diagnosis and predicting individual response to chemotherapy.

The goal of the Discover (Distributed Cooperative Systems Research) Lab is to build foundations toward scalable formal design theory to enable complex systems—such as Internet of Things (IoT), smart manufacturing, future transportation networks, and power grids—to function reliably in uncertain and dynamic environments. Using multi-robot systems and human-machine collaboration as working examples, students test design principles for complex systems.
And being a part of Notre Dame’s passionate alumni family will provide you with unmatched professional networking and career development opportunities for the rest of your life.

In addition to world-class faculty, who spend one-on-one time with students to ensure their research is productive and impactful, and state-of-the-art facilities and work areas, you will find a warm and inclusive environment of supportive professionals. NDEE interacts closely throughout the University to serve the whole student, in every student. For example, the Graduate School provides specialized advising on both professional development and grant writing, and the IDEA Center promotes entrepreneurship, protection of intellectual property, and incubation of Notre Dame startups.

Personally, you will enjoy a rich quality of life through a combination of NDEE’s generous stipends, Notre Dame’s emphasis on personal and professional growth, and the many benefits of the “Michiana” region. Students appreciate the region’s low cost of living; four-season arts, athletics, and recreational opportunities; proximity to larger Midwestern cities such as Chicago and Indianapolis; and convenient access to nearby train stations and international airports.

The Notre Dame Nanofabrication Facility (NDNF) houses a comprehensive suite of state-of-the-art equipment for designing and manufacturing integrated circuits and devices with geometries as small as a few nanometers. Our researchers—which include internal and external academic and corporate users—explore a wide range of electronic and emerging materials and processes. The NDNF also supports technologies beyond electronics, such as microfluidic technologies for medical applications and micron-scale mechanical device fabrication.

The Wireless Lab provides an environment for students, faculty and industry to collaborate on evolving wireless technologies and applications. Developing advances in system design, prototyping, data collection and analytics are at the forefront of the lab’s research mission.

Learn more: ee.nd.edu/graduate

Start your application: gradconnect.nd.edu/apply
What I appreciate about NDEE is the diverse research and expertise that faculty and staff bring to the table. This, paired with the supportive educational environment of the department, as well as state-of-the-art, well-maintained facilities, contributes to the academic growth of NDEE graduate students.

Ola Salahaddin Alfahal Abdalsalam
3rd year
researching and developing a new structured interrogation technique for frequency-domain diffuse optical imaging, in the Biophotonics Lab with Professors Thomas O’Sullivan and Scott Howard

NDEE’s generous stipends coupled with South Bend’s low cost of living allows us to live comfortably as graduate students. Further, fellowships such as mine and professional development grants are widely available. For both internal and external opportunities, we can work closely with the Office of Grants and Fellowships to ensure our application stands out, so that we maximize our chances of success.

Nayara Aguiar
4th year
researching electricity markets in the presence of intermittent renewable generation, advised by Professor Vijay Gupta

NDEE’s generous stipends coupled with South Bend’s low cost of living allows us to live comfortably as graduate students. Further, fellowships such as mine and professional development grants are widely available. For both internal and external opportunities, we can work closely with the Office of Grants and Fellowships to ensure our application stands out, so that we maximize our chances of success.
For more information about the graduate program in electrical engineering, waiving of application fees and items regarding graduate life at the University of Notre Dame, please contact our Director of Graduate Studies.

J. Nicholas Laneman
Director of Graduate Studies
275C Fitzpatrick Hall
Notre Dame, IN 46556
E-mail: jnl@nd.edu
Phone: 574.631.8034