

## HAMPTON ROADS, A Great Place to Live and Work

Old Dominion University is located in Norfolk, an area also known as Hampton Roads. The region is rich with American history from periods and events that helped shape the United States—like the first European settlers in the “New World,” and the American Revolution. Old Dominion is only 20 minutes from the sunny sands of the vacation destination Virginia Beach, with other great attractions and activities like Busch Gardens and Colonial Williamsburg in close proximity. Of course, the hub of American history can be found three hours away in Washington, D.C., where some of the greatest museums and monuments in the world are located.

“Increasingly, a graduate degree is the most reliable pathway toward greater career success and personal fulfillment. ODU offers graduate degrees and certificates in a variety of fields that can help you to achieve your goals.”

Associate Vice Provost for Graduate Studies  
Old Dominion University

## APPLICATION DEADLINES AND REQUIREMENTS

### Domestic

Fall June 1  
Spring November 1  
Summer March 1

### International

Fall April 15  
Spring October 1  
Summer February 1

Complete an online application, submit official transcripts from all colleges and universities attended, GRE test scores, letters of recommendation, current CV/resume, and an essay outlining graduate education goals and interests.

### CALL OR VISIT OUR WEBSITE FOR MORE INFORMATION:

Graduate Program Director  
231 Kaufman Hall, Norfolk, VA 23529  
Phone: 757-683-3741  
Fax: 757-683-3220 or [www.odu.edu/ece](http://www.odu.edu/ece)

## GRADUATE PROGRAMS in ELECTRICAL and COMPUTER ENGINEERING



**OLD DOMINION UNIVERSITY**

Frank Batten College of Engineering and Technology

IDEA FUSION

## GRADUATE PROGRAMS IN ELECTRICAL AND COMPUTER ENGINEERING

With the rapid expansion of technology in sectors like transportation, defense, manufacturing, systems integration, and healthcare—the demand for those who can create, understand and alter electrical and computer systems has risen accordingly. As technology evolves, engineers with graduate degrees are needed to offer unquantifiable benefits to society. *Electrical and computer engineers equipped with graduate degrees benefit from better job prospects and higher average salary growth.*

The Department of Electrical and Computer Engineering (ECE) in the Frank Batten College of Engineering and Technology at Old Dominion University offers master's and doctoral graduate degree programs.

- **Master of Science:** obtain expertise in research in a specific ECE area
  - Eight courses beyond BS degree
  - Research under direct advising of an ECE faculty member in chosen area of specialization
  - Write and defend an original thesis
- **Master of Engineering:** get a broader knowledge in ECE
  - Option 1: Ten courses beyond BS degree and pass Master Comprehensive Exam
  - Option 2: Nine courses beyond the BS degree and complete a master project with ECE faculty mentor
- **PhD:** gain in-depth understanding of a specific ECE topic and make an original contribution to knowledge in their chosen field of specialty
  - Eight courses beyond master's degree, five of which must be doctoral (800) level
  - Pass diagnostic and candidacy exams
  - Work on advanced research under direct advising of an ECE faculty member
  - Write and defend an original dissertation

**Financial assistance** is available for qualified graduate students through teaching and research **assistantships**. A limited number of graduate **fellowships** are also available to students pursuing doctoral degrees. Please contact the Graduate Program Director or visit our website ([www.odu.edu/ece](http://www.odu.edu/ece)) for details.

## ECE GRADUATE PROGRAM HIGHLIGHTS

- Courses are offered in **traditional and online** formats
- **Full-time and part-time** students
- Classes are small and personal, with **one-on-one** experiences with dedicated faculty
- **Theoretical and practical** aspects of electrical and computer engineering
- Professional faculty with teaching and research **expertise**
- Department labs and university institutes in the Hampton Roads area
- **Cutting-edge research** projects provide research experiences and financial support
- Participation at international conferences and research competitions
- **State-of-the-art equipment** and personal software licenses, such as Matlab® and Wolfram Mathematica®
- Preparation for leadership roles in **engineering careers** in industry, research and academia

After graduation, our MS, ME and PhD graduates are employed as electrical and computer engineers supporting **industries** in automotive, manufacturing, systems integration, shipbuilding, aerospace, defense and telecommunications. Graduates are also employed as engineers and researchers by private research and development labs and by federally funded organizations such as Jefferson Lab, NASA or the Naval Research Laboratories. Some of our former doctoral students have gone into **academic careers** doing postdoctoral fellowships or are working in universities as faculty members.



## DEPARTMENT RESEARCH AND PARTNERSHIPS

Old Dominion University is in the Carnegie Classification category of doctoral universities with higher research activity. The ECE department has been ranked in the top 25 percent nationally by the NSF for federally funded research.

ECE faculty performs world-class research in the following areas:

- **Cyber-Physical Systems**
  - Computer vision and computational modeling
  - Controls
  - Communications and networking
  - Security
  - Hardware
- **Medical/Biological Systems, Methods and Devices**
  - Signal processing for medical and biological applications
  - Plasma medicine
  - Bioelectrics
  - Medical image processing and analysis
- **Solid State and Physical Electronics**
  - Thin films and nanotechnology
  - Photovoltaics
  - Plasma processing

ECE department research laboratories:

- Advanced signal processing in engineering and neuroscience
- Applied plasma technology
- Communications and networking
- Computer vision
- Cyber security
- Medical imaging, diagnosis and analysis
- Systems research

Old Dominion University Electrical and Computer Engineering (ECE) faculty work in collaboration with:

- Applied Research Center
- Frank Reidy Research Center for Bioelectrics
- Laser and Plasma Engineering Institute
- Virginia Institute for Photovoltaics
- Virginia Institute of Vision Analysis
- Virginia Modeling, Analysis and Simulation Center
- NASA Langley Research Center
- Thomas Jefferson National Laboratory