

# Electrical and Computer Engineering

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## Department Information

- **Department Chair:**  
Benjamin Braaten, Ph.D.
- **Graduate Coordinator:**  
Sudarshan Srinivasan, Ph.D.
- **Department Location:**  
101 Electrical Engineering Building
- **Department Phone:**  
(701) 231-7019
- **Department Web Site:**  
[www.ndsu.edu/ece/](http://www.ndsu.edu/ece/) (<http://www.ndsu.edu/ece/>)
- **Application Deadline:**  
February 28 for fall and October 15 for spring (openings may be very limited for spring)
- **Credential Offered:**  
Ph.D., M.S., M.Engr.
- **Test Requirement:**  
GRE
- **English Proficiency Requirements:**  
TOEFL ibT 71, IELTS 6, Duolingo 105; To qualify for teaching assistantship TOEFL ibT 100, IELTS 7, Duolingo 125

### **Omid Beik, Ph.D.**

McMaster University, 2016

Research Interests: Power and Energy Systems, Renewable Energy Systems, Power Electronics, Electric Machines, Transportation Electrification

### **Benjamin Braaten, Ph.D.**

North Dakota State University, 2009

Research Interests: Applied Electromagnetics, Electromagnetic Compatibility and Signal Integrity

### **Farhad Shirani Chaharsooghi, Ph.D.**

University of Michigan, 2017

Research Interests: Privacy and Security, Wireless Communications, Information Theory, and Learning Theory

### **Shuvashis Day, Ph.D.**

Monash University, 2018

Research Interests: Microwave Devices and Antennas, Metamaterial and Terahertz Devices, RFID Based Sensing, Chipless RFID Based Tag and Sensor, Internet of Things (IoT), Microwave Sensors for Biomedical Applications, Smart Sensing Materials, Machine Learning

### **Daniel L. Ewert, Ph.D.**

University of North Dakota, 1989

Research Interests: Biomedical Engineering

### **Sumitha George, Ph.D.**

Pennsylvania State University, 2020

### **Jacob Glower, Ph.D.**

The Ohio State University, 1988

Research Interests: Control Systems, Digital Systems

### **Roger Green, Ph.D.**

University of Wyoming, 1998

Research Interests: Signal Processing, Array Processing, Time-frequency Analysis

### **Ivan T. Lima Jr., Ph.D.**

University of Maryland, Baltimore County, 2003

Research Interests: Photonics

### **Dharmakeerthi Nawarathna, Ph.D.**

University of Houston, 2005

Research Interests: Lab-on-a-chip Technologies, Single-cell Genomics, Nanobio-engineering, Tissue Engineering, Novel Imaging Techniques for Biology and Computational Simulations.

**David A. Rogers, Ph.D.**

University of Washington, 1971

Research Interests: Microwave Engineering, Electromagnetics, Fiber Optics

**Sudarshan Srinivasan, Ph.D.**

Georgia Institute of Technology, 2007

Research Interests: Computer Engineering

**Dali Sun, Ph.D.**

University of Tokyo

Research Interests: Bioengineering, Electrical Engineering, Software Engineering

**Umamaheswara Rao Tida, Ph.D.**

University of Notre Dame, 2019

Research Interests: Device- and System-Level Modeling and Design of 3-D Integrated Systems, Machine Learning Design Frameworks, Hardware Design for Edge Computing, Power Delivery Networks and, Low-Power Circuit Designs

**Danling Wang, Ph.D.**

University of Washington, 2013

Research Interest: Development of Sensor Devices Based on Novel Nanostructured Materials and Advanced Techniques. Focusing on Sensor Design, Fabrication, and Application of Early-Stage Human Disease Monitoring and Diagnosis, Such as Breath Analyzer for Diabetes; Industrial, and Military Safety, Such as Environmental Explosive or Toxic Gas Detection

**Di Wu, Ph.D.**

Polytechnic University of Turin, 2011

Zhejiang University

Research Interests: Renewable Energy Integration, Application of Complex Network Theory in Power Grids, Cascading Failure Analysis, Power System Dynamics and Stability

**Qifeng Zhang, Ph.D.**

Peking University, 2001

Research Interests Electric Materials and Devices for Energy Conversion and Storage, involving Solar Cells, Lithium Batteries, and Solid State Electrolytes; Nanomaterials for Sensor and Biomedical Applications; and Nanotechnology