



## Wichita State University Wichita, Kansas

### Graduate Programs in Electrical and Computer Engineering

WSU's Department of Electrical and Computer Engineering offers courses of study leading to the Master of Science in Electrical Engineering MS EE and the Doctor of Philosophy in Electrical Engineering PhD EE.

Courses of study leading to the MS or PhD degrees are available with specializations in any of the following six fields: (1) control systems/theory, (2) communications systems/theory, (3) signal processing, (4) computers and digital systems, (5) computer/wireless networking, and (6) energy and power systems.

#### PhD EE Degree Requirements

The PhD EE degree requires the satisfactory completion of a program approved by the student's doctoral advisory committee and the dean of the Graduate School. The program normally contains at least 30 hours of post-master's graduate course work. A doctoral student must pass a comprehensive examination, a dissertation approval exam, and a final oral presentation and defense of dissertation.

#### MSEE Degree Requirements

The MSEE degree requires the satisfactory completion of a Plan of Study, which must be filed within the first 12 credit hours of graduate course work, approved by the student's advisor and the department graduate coordinator. Three options are available:

(1) the thesis option requires a minimum of 24 hours of course work plus a minimum of 6 hours of thesis,

(2) the directed project option requires a minimum of 30 hours of course work plus a minimum of 3 hours of directed project,

(3) the course work option requires a minimum of 33 hours of course work and an exit exam.

#### PhD EE Admission

Admission to the PhD EE program requires the completion of a master's degree in engineering or physical science with a graduate grade point average (GPA) of at least 3.5 on a 4.0 scale in the major field. Official scores from the General Test of the Graduate Record Examination (GRE) are required. Non-native speakers of English must provide an official TOEFL score of at least 213 on the computer-based test or 79 on the Internet-based test. Evidence of the ability to carry out independent research and present it in written English is highly desirable. Students with deficiency in certain areas may be required to take additional courses. Each applicant is evaluated individually with consideration to the applicant's plans.

#### MSEE Admission

To be admitted to the MSEE program, students must have completed the equivalent of an undergraduate degree in engineering or a related field. Students with deficiency in certain areas may be required to take additional courses. For full-standing admission, a minimum GPA of 3.0 in a 4.0 scale is required for the last two years or approximately 60 credit hours of undergraduate work. Students with a GPA less than 3.0 may be considered for probationary admission. Official scores from the General Test of the Graduate Record Examination (GRE) are required. Non-native speakers of English must provide an official

TOEFL score of at least 213 for the computer-based test or 79 the Internet-based test.

### Financial Aid

Several financial aid opportunities are available on a competitive basis to the best qualified students in the form of doctoral fellowships, teaching fellowships, teaching and research assistantships. Furthermore, the University at large provides several campus employment opportunities for students.

### The Admission Process

All admissions to graduate study at Wichita State University are processed and finally determined by the Dean of the Graduate School of the University. The admission process starts by filing an official WSU application for admission and application fee, as well as two copies of official transcripts of all previous academic work. These materials should be sent directly to the Graduate School Office. International students also are required to file additional official documents, such as the official financial support certification and official TOEFL scores. Upon request by the Graduate Dean, the department graduate coordinator performs an academic and admissibility evaluation of the materials submitted and makes an admission recommendation to the Dean of the Graduate School. Final action on each case and notification of action is handled in the Graduate School Office.

### Faculty

**Coskun Cetinkaya**, Assistant Professor, PhD, Rice University, 2002. Computer and wireless networking systems

**Ward T. Jewell**, Professor. PhD, Oklahoma State University, 1986. Power systems, power quality, sustainability

**Preethika Kumar**, Assistant Professor, PhD, Wichita State University, 2007, Quantum computing architectures

**Hyuck M. Kwon**, Professor. PhD, University of Michigan, 1984. Communication systems/theory, wireless communications

**Kameswara Rao Namuduri**, Assistant Professor. PhD, University of South Florida,

Tampa, 1992. Computer systems, information security, video communications

**Larry D. Paarmann**, Associate Professor. PhD, Illinois Institute of Technology, 1983. Signal processing, system modeling/identification, VLSI

**Ravi Pendse**, Professor. PhD, Wichita State University, 1994. Computer engineering, computer networking

**M. Edwin Sawan**, Professor. PhD, University of Illinois, 1979. PE, control theory

**Steven R. Skinner**, Professor and Chair. PhD, University of Iowa, 1991. Nonlinear optics, quantum computing

**Asrat Teshome**, Associate Professor. PhD, Cornell University, 1980. Power systems, power electronics

**John M. Watkins**, Associate Professor, PhD. The Ohio State University, 1995, Control systems

### For More Information

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### Apply On-Line

<http://webs.wichita.edu/ielc/banner/gateway.htm>