

PROGRAM HIGHLIGHTS

The ECE graduate program continues to move up in the U.S. News & World Report rankings.

Our graduate students consistently receive job offers with salaries above the national average.

Internships are frequently available to our graduate students and many lead to employment.

Qualified PhD students are financially supported upon admission or within their first year in the program.

ECE faculty continues to pioneer research cultivating highly skilled scientists, innovators and leaders in the field of electrical & computer engineering.

AWARDS & SCHOLARSHIPS

Various scholarships, fellowships and assistantships are awarded to graduate students through the University, College of Engineering and ECE Division. All new applicants to ECE are considered for any available awards. Available awards are posted to www.lsu.edu.

ENROLLMENT

Fall 2014: **110** (48 MS, 62 PhD)
Spring 2015: **119** (31 MS, 66 PhD)

DEGREES

21 MS and 6 PhD average per year

FACULTY

11 Professors (3 IEEE Fellows, 1 AAAS Fellow)
9 Associate Professors
5 Assistant Professors

FOR MORE INFORMATION

School of Electrical Engineering & Computer Science

LOUISIANA STATE UNIVERSITY
Division of Electrical & Computer Engineering
102 S. Campus Drive, Electrical Engineering Bldg.
Baton Rouge, Louisiana 70803
Ph: 225-578-5241 Fx: 225-578-5200
www.ece.lsu.edu

ECE Graduate Program Office

Electrical Engineering Bldg., Room 150-D
E-mail: eceapply@lsu.edu
www.ece.lsu.edu/grad/

College of Engineering

225-578-5731
www.eng.lsu.edu

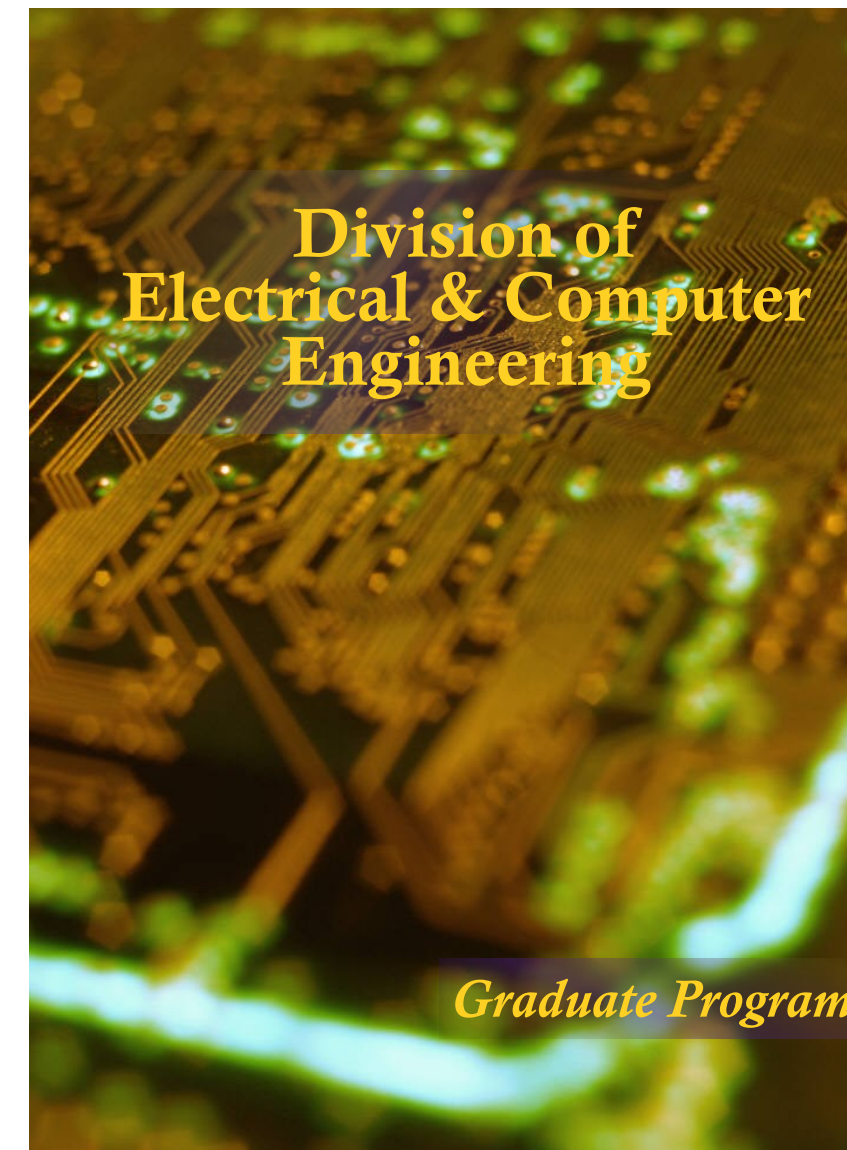
LSU Graduate School Admissions

Phone: 225-578-2311
E-mail: gradadm@lsu.edu
225-578-2311

APPLY ONLINE:

<http://gradlsu.gs.lsu.edu>

LOVE PURPLE **LIVE GOLD**



LSU

College of
Engineering
School of Electrical Engineering
& Computer Science

RESEARCH AND AREAS OF SPECIALIZATION

The Division offers both a Master of Science and a Doctor of Philosophy in Electrical Engineering. Technically equipped and maintained experimental and computational facilities support research funded by federal and state grants, and industrial sources such as NSF, NIH, LASPACE, AFRL, ONR, U.S. Military and LA Board of Regents. **The ECE Graduate Program consists of 5 broad areas of specialization**, however our faculty frequently engage in cross-disciplinary interaction within the College of Engineering and with other units on campus. For a listing of our faculty research activities and interests visit our webpage at: www.ece.lsu.edu.

ELECTRONICS

Research areas include MEMS & BioMEMS, biosensors & bioelectronic devices, single cell analysis, cellular biomechanics, bioanalytic instrumentation, microsystems, microfluidic devices & systems, lab on a chip systems, nanoscale transducers, growth and characterization of bandgap engineered compound semiconductor heterojunctions, characterization of III-V nanostructures, phototransistors and bipolar transistors using III-V semiconductors avalanching devices, acoustic charge transfer & surface-acoustic wave devices, superconducting devices, low power VLSI design, nanoelectronics, applied optics, analysis of novel optoelectronic structures and devices, theory and simulation of photonic materials and nanoscale photonic devices, plasmonics, computational electromagnetics, X-ray lithography, and micromachining.



COMPUTERS

Research areas include advanced computer architectures (including parallel systems, interconnection networks, accelerators (GPU, many-core, FPGA), low power computing), computer communications (including networking, traffic modeling, internet-of-things, cybersecurity), Computer graphics and vision (including geometric modeling, animation, human computer interaction, image/video processing and understanding, medical imaging), distributed computing (including massively multiplayer games, sensor systems, coordination and scheduling), hardware subsystems and embedded systems (including logic testing, reliability, reconfigurable computing, robotics) high performance computing (including energy efficiency, optimizing compilers, runtime systems, algorithm-architecture codesign) algorithms and modeling, spanning all of the above areas.



CONTROL SYSTEMS

Research areas include system theory, robust and optimal control, modeling and system identification, multi-rate digital systems, complex multi-agent systems, wireless communication applications, digital signal processing, fault diagnosis and fault tolerant control applications of advanced control theory.



POWER

Research areas include powers and compensation in nonsinusoidal systems, design and control of power electronics, converters, electric drives, plug-in/hybrid/fuel-cell electric vehicles, renewable energy systems, AC/DC/hybrid microgrids., Power systems stability, renewable energies, smart grid, energy conversion, and nonlinear, adaptive, and decentralized control, and electrical machines ship power systems.



COMMUNICATIONS/DSP

Research areas include signal, audio, image, and video processing, wired and wireless communications, information theory, coding, cryptography, advanced algorithms for detection, estimation, machine learning, and optimization, networks, embedded solutions to pervasive digital signal processing and telecommunications technologies.

