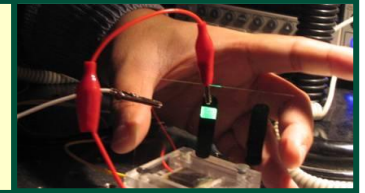


The ECE Department Offers Three Graduate Degree Options:

- Master of Science (MS)
- Master of Engineering (MEng),
- Doctor of Philosophy (PhD).



The **MS program** prepares students for development-oriented engineering careers and/or continuation onto doctoral studies by providing:

- Increased depth in an area of specialization
- Expanded breadth in supporting areas
- Focused study of recent advances in your area of specialization

The MS program provides a balance of advanced theory and practical engineering knowledge necessary to prepare its graduates for professional practice and/or for continuation into a PhD program. The program culminates with either a thesis or a project report through which students develop their ability to perform independent investigation of recent advances and present the results in a written document. The typical time for completion is 18 – 24 months of full-time study.

The **MEng program** prepares students for engineering practice & management through:

- Broad study in several technical areas
- Specialization in one or more areas
- Studies in various business-related areas (if desired)

The MEng program is a 10-course-only program that requires no thesis or project. It can be completed in 12 months of full-time study. This makes it especially well-suited to students who seek to enhance their job marketability by extending their skills beyond the BS degree. The flexibility in the MEng program makes it especially attractive to part-time students.

The **PhD program** is a research-focused program that prepares students for R&D careers in corporate, academic, and research lab environments by providing:

- A flexible program of course work to support your research area
- Extensive independent research on a cutting-edge research topic

Some ECE Department Numbers

- ▶ ≈ 20 Faculty in 5 Research Areas
- ▶ ≈ 4.5 Papers per Faculty per Year
- ▶ ≈ 130 Graduate Students
- ▶ ≈ \$2 Million Research Awards per Year

Award-Winning ECE Faculty...

- ▶ 7 SUNY Chancellor's Awards
- ▶ 2 NSF CAREER Awards
- ▶ 1 Air Force PECASE Award
- ▶ Numerous "Best Paper" Awards w/ Grad-Student Coauthors



MS in Electrical Engineering

- Specialization Courses:
 - ▶ 3 courses in a single area of specialization:
 - ▶ Control Systems, DSP & Communications, Computer Engineering, Information Assurance, VLSI-Microelectronics-Optoelectronics
- Breadth Courses:
 - ▶ Two (for thesis) or Three (for project) ECE Courses in two areas outside specialization
- Math Methods Course: EECE506 or 507 Mathematical Methods in EE or in Computer Engineering,
- Electives: 2 Courses – Can be from ECE or other departments (e.g., Math, Science, Business)
- Thesis Option or Project Option:
 - ▶ EECE 599 Research Thesis (6 credits)
 - ▶ EECE 598 Project (3 credits)

MEng with Specialization in Electrical or Computer Engineering

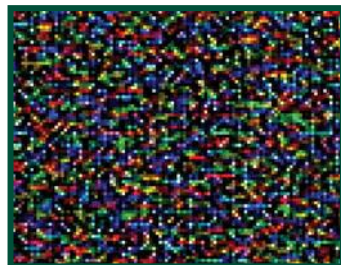
- EECE Courses:
 - ▶ 6 EECE courses; with 3 from each of two areas of specialization;
 - ▶ For Specialization in EE, one of the areas of specialization must be selected from
 - Control Systems, Signal Processing & Communications, VLSI & Micro/Opto-electronics
 - ▶ For Specialization in CoE, one of the areas of specialization must be selected from
 - Computer Engineering, Information Assurance & Communications, VLSI & Microelectronics
- Electives: 4 Courses – Can be from ECE or other departments (e.g., Math, Science, Business)

PhD in Electrical Engineering

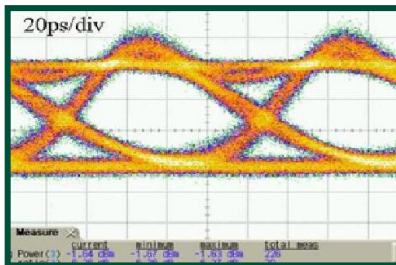
- 24 Credits of Course Work... All Focused in Research Area
 - ▶ Tailored classroom & independent study to build a solid research foundation in selected area
- Cutting-Edge Research in One of Many Areas
 - ▶ Steganography & Watermarking
 - ▶ Signal Processing in Sensor Networks
 - ▶ Optoelectronics & Laser Communication
 - ▶ Low-Power VLSI & Computers
 - ▶ Speech Signal Processing
 - ▶ Computer & Network Security
 - ▶ Signal Processing for Communications
 - ▶ Reconfigurable Analog Electronics
 - ▶ Fault-Tolerant Control Systems
 - ▶ Solar Cell Devices & Systems



Laser Communication



Noise of Digital Cameras



Optoelectronic Measurements



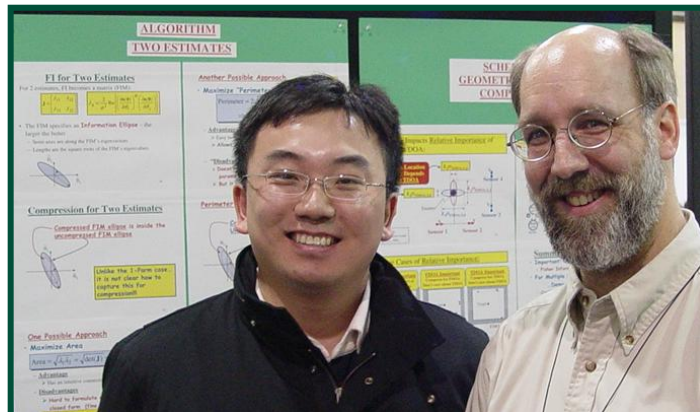
Computer Security Testbed

For More Information

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Student & Professor Presenting Work at IEEE Conference