MASTER OF SCIENCE IN ELECTRICAL AND COMPUTER ENGINEERING

The master's degree allows students to pursue advanced work in electrical and computer engineering technical interest areas including bioengineering, computer systems and software, digital signal processing, electrical energy, electromagnetics, electronic design and applications, microsystems, optics and photonics, systems and controls, telecommunications, and VLSI systems and digital design.

The master's degree program requires 30 credit hours beyond the bachelor's degree, including a minor outside ECE. Both thesis and non-thesis options are available. Courses are offered all three terms; however, full-time students planning to complete the MS degree in 12 months should start their programs in the fall semester.

MS Information

Program of Study

General Requirements (for non-thesis and thesis)

- Students are required to complete all degree requirements within 6 consecutive years and maintain a 2.7 GPA.
- The Institute permits up to 3 hours to be pass/fail (P/F) and up to 6 hours of transfer credit to be used toward a master's degree. ECE specifies that the 3 P/F hours must be ECE seminars (ECE 8001, ECE 8002, and ECE 6792). ECE 8022 (Professional Communication Skills) is also offered on a pass/fail basis and can be used. **Pass/fail hours can only be used toward the M.S. non-thesis option.**

Non-Thesis Option:

General Information for Non-thesis

- Classes used toward the M.S. degree must have grades of "C" or higher.
- At least 21 hours must be at 6000 level or above; no more than 6 hours may be Special Problems; the electives may include up to 3 ECE seminar hours.

Code	Title	Credit Hours
Group I [1]		9
Group II [2,4]		9
Group III [3,4]		9
ECE 6001	Technology Entrepreneurship: Teaming, Ideation, Entrepreneurship, Intrepreneurship, and Leadership	3
Total Credit Hours		**30**

1. 6000-level of higher ECE classes in one or two Technical Interest Areas (TIAs)
2. 6000-level or higher ECE classes, at least two of which come from Technical Interest Area(s) other than those in Group I. These six hours may not be cross-listed with the technical interest area(s) from Group I.
3. Courses can be outside ECE. No more than nine (9) hours of 4000 level courses. No more than three (3) hours of approved Pass/Fail seminars.
4. A combined maximum of 6 VIP (Group II and/or III) or special problems (Group III) credits can count toward the degree requirements. Additional VIP or special problems credits cannot be applied. Non-thesis students can count up to 6 credits of VIP coursework toward Group II and Group III as follows:
   - The first 3 credits of 6000-level VIP courses can count as Group III (electives)
   - The second 3 credits of 6000-level VIP courses can count as Group II or Group III (electives), and
   - Students must submit a publication-quality paper. All six credits must be with the same VIP Team

Thesis Option:

Code	Title	Credit Hours
Group I [1]		6
Group II [2]		6
Group III [3]		3
ECE 6001	Technology Entrepreneurship: Teaming, Ideation, Entrepreneurship, Intrepreneurship, and Leadership	3
Thesis Research		12
Responsible Conduct of Research (see paragraph below)		
Total Credit Hours		**30**

1. 6000-level of higher ECE classes in one or two Technical Interest Areas (TIAs)
2. 6000-level or higher ECE classes, at least two of which come from Technical Interest Area(s) other than those in Group I.
3. Three (3) hours of coursework may be outside of ECE--not required to be in same discipline.

Responsible Conduct of Research (RCR) Requirement for M.S. Thesis

The Responsible Conduct of Research (RCR) Academic policy requires Masters students enrolled in 7000 thesis hours to complete the appropriate RCR training requirement before the Request for Approval of Master's Thesis Topic Form can be processed.

First Option - Successfully complete the online CITI RCR course

Second Option - Successfully complete an in-person requirement - PHIL 6000 has been approved for ECE doctoral students and may also be used for M.S. Thesis students. ECE does not have its own in-house RCR course but will accept an academic program's in-house RCR training approach (Please see the Ph.D. section of this handbook for approved courses).

More information pertaining to this new RCR policy can be found online.

Dual MS Program in ECE GT Lorraine and European Partner Universities

Georgia Tech offers several dual master's degree programs for students interested in a global educational experience. Each program leads to two MS degrees, one from Georgia Tech and the other from a partner school.

Programs coordinated by Georgia Tech-Lorraine include partner schools in France such as Supelec, ENSEEIHT, Institut d'Electronique de Microélectronique et de Nanotechnologies, and Groupe des Ecoles des Mines and a partner school in Germany, TU-Munich. These programs

typically entail three semesters of coursework and a required internship in an industrial setting.

Georgia Tech-Europe

MS Information

Dual MS Program in ECE Georgia Tech & Korea Advanced Institute of Science and Technology

Students may pursue dual MS degrees from the Korea Advanced Institute of Science and Technology (KAIST) and from Georgia Tech. KAIST offers one of the top engineering programs in Korea and the Far East. All lectures at KAIST are given in English to better serve a growing number of students from overseas. While earning their dual degrees, students spend two semesters each at both Georgia Tech and KAIST. Students completing this dual degree program earn the MSECE from Georgia Tech and the MS in Electrical Engineering from KAIST.

MS Information

Dual MS Program in ECE with the Politechnico di Torino (Italy)

Georgia Tech offers several dual master's degree programs for students interested in a global educational experience. Each program leads to two MS degrees, one from Georgia Tech and the other from a partner school.

The Politecnico di Torino is Georgia Tech's newest European Dual Master's Degree partner. Students from Georgia Tech and from the Politecnico di Torino can pursue dual master's degrees from both institutions: a non-thesis master's degree from the School of Electrical and Computer Engineering at Georgia Tech and a thesis master's degree from the School of Information Technologies at the Politecnico di Torino located in Torino, Italy. Both degrees can be earned in two years with two semesters spent at Georgia Tech.

MS Information