

Ph.D. Program, International Program of Electrical Engineering and Computer Science(IEECS)

Course Map (Academic Year 2025)

Program Overview

Total: 32 Credits (14 Required + 18 Elective)

Electrical Engineering

Power and Energy Control System
Power Electronics Communications
Computer System

Electronic Engineering


Computer Engineering
Communication and Signal Processing
Electromagnetic Engineering
Integrated Circuits and Systems

Computer Science & Information Engineering



Software Engineering and Systems
AI and Multimedia Systems
Information Security and Network Systems

Electro-Optical Engineering

Optical Communications Display
Technology Optical Engineering
Optoelectronic Materials and Devices

 **▲ Required Courses**

 **★ Elective Courses**

  **Flexible Arrangement**

  **Milestones**

First Year (Year 1)

Fall Semester

Graduate Seminar
1 credits

Elective Course 
3 credits

Elective Course 
3 credits

Spring Semester

Graduate Seminar
1 credits

Elective Course 
3 credits

Qualification
Exam
Preparation

Second Year (Year 2)

Fall Semester

Dissertation
3 credits

Elective Course 
3 credits

Elective Course 
3 credits

Spring Semester

Dissertation
3 credits

Elective Course 
3 credits

Qualification
Exam
If not completed

Third Year (Year 3) & Beyond

Fall Semester

Dissertation
3 credits

Spring Semester

Dissertation
3 credits

Dissertation Oral
Defense
Upon Completion

Research & Dissertation Phase (Years 3-7)

Students continue dissertation research, writing, and defense preparation.

Duration varies based on research progress and dissertation complexity.

Qualifying Examination Regulations

- Schedule:** Held **once per semester** in **May (Spring)** and **December (Fall)**
Application deadline: Within 2 weeks after the semester begins
- Format:** **Written examination** covering two graduate-level courses from the EECS College full-time faculty
Passing grade: $\geq 70/100$ for each course
- Timeline:** Must be completed **within 3 years** of entering the doctoral program
 *Failure to meet this deadline results in expulsion*
- Retake Policy:** Each subject can be taken **maximum twice** (initial attempt + 1 retake)
 *If failed twice on the same subject, must choose a different subject*

Important Notes [List of Credits for Graduation](#)

- Coursework Credits:** 32 credits (14 Required + 18 Elective) - typically completed in the first 2-3 years
- Total Program Duration:** 2-7 years (coursework + research + dissertation)
- ▲ Required Courses (14 credits):**
 - Graduate Seminars: 2 credits (1+1) - First and second semesters
 - Dissertation: 12 credits (3+3+3+3) - Third through sixth semesters
- ★ Elective Courses (18 credits):**
From doctoral-level courses in English from all departments of the EECS College. Courses for both doctoral and master students are considered doctoral-level.
- 🎓 Graduation Requirements:**
 - Qualification Exam (timing varies by department, must complete within 3 years)
 - Dissertation Research (typically Years 3-7)
 - Dissertation Oral Defense
- Language Requirement:** All courses must be taught in English (Chinese and English combined courses not included). Courses not taught in English need advisor approval.
- Inter-College Option:** Up to 6 credits out of 18 can be obtained from inter-college master- and doctoral-level courses upon advisor approval.
- Additional Regulations:** For requirements not specified here, follow the regulations of the advisor's department.

Flexible Course Scheduling:

The elective course arrangement shown (6+3+6+3+0+0) is just one example. Students can distribute their 18 elective credits across semesters based on:

- Course availability each semester
- Personal academic planning
- Research focus and interests
- Advisor recommendations