

DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING GRADUATE EDUCATION DIRECTIVE

At Hacettepe University, Graduate School of Science and Engineering, Department of Electrical and Electronics Engineering, two levels of graduate programs are conducted:

- Master of Science (M.S.)
- Doctor of Philosophy (Ph.D.)

Students who successfully complete these programs are awarded diplomas and certificates indicating their achievements, in accordance with the requirements of the program in which they are enrolled.

The objective of the programs is to equip students with the ability to access, evaluate, and interpret knowledge, conduct research in fields related to Electrical and Electronics Engineering, and gain advanced knowledge and skills.

This directive has been prepared in accordance with the relevant provisions of the Hacettepe University Graduate Education and Examination Regulations to define the fundamentals of graduate education in the Department and to ensure the proper execution of graduate programs within this framework.

ADMISSION TO PROGRAMS

The Academic Department Board determines the student quotas for each academic term. Applications, entrance exams, and registration procedures are carried out in accordance with the aforementioned regulation.

Master's Program:

In addition to meeting the general application requirements of the HU Graduate School of Science and Engineering, candidates applying to the MS program must meet the following preliminary evaluation criteria:

1. A bachelor's degree (or expected graduation status) in Electrical and Electronics Engineering is required. Candidates from other bachelor's programs overlapping with subfields of Electrical and Electronics Engineering, as determined by the Academic Department Board, may also apply.
2. A minimum undergraduate GPA of 2.5 out of 4.0.
3. A minimum score of 70 in the Quantitative section of the ALES exam.
4. A minimum score of 60 in the YDS English language exam.*
5. Two academic letters of reference.

The number of candidates to be evaluated is limited to four times the student quota set by the Academic Department Board. If the number of applicants fulfilling the criteria exceeds this limit, candidates are ranked by the HU Graduate School of Science and Engineering based on their undergraduate GPA and ALES Quantitative score, and only the top candidates (up to four times the quota) are invited to the general evaluation.

In the general evaluation, the following are considered:

- Undergraduate GPA
- ALES Quantitative score
- Results of a written scientific assessment and/or interview

Candidates are admitted to the program according to their success ranking and within the announced quota.

Doctoral Program:

In addition to meeting the general application requirements of the HU Graduate School of Science and Engineering, candidates applying to the Ph.D. program must meet the following preliminary evaluation criteria:

1. A master's degree (or expected graduation status) in Electrical and Electronics Engineering is required. Candidates from other master's programs overlapping with subfields of Electrical and Electronics Engineering, as determined by the Academic Department Board, may also apply.
2. A minimum master's GPA of 3.0 out of 4.0.
3. A minimum score of 70 in the Quantitative section of the ALES exam.
4. A minimum score of 70 in the YDS English language exam.*
5. An academic statement of purpose written by the candidate.
6. Two academic letters of reference.

The number of candidates to be evaluated is limited to four times the student quota set by the Academic Department Board. If the number of applicants fulfilling the criteria exceeds this limit, candidates are ranked by the HU Graduate School of Science and Engineering based on their master's GPA and ALES Quantitative score, and only the top candidates (up to four times the quota) are invited to the general evaluation.

In the general evaluation, the following are considered:

- Master's GPA
- ALES Quantitative score
- Results of a written scientific assessment and/or interview

Candidates are admitted to the program according to their success ranking and within the announced quota.

GRADUATE PROGRAM STRUCTURE

Master's Program:

The master's student fulfills the course requirements specified in the Hacettepe University Graduate Education and Examination Regulations under the supervision of the Department Chair and with the approval of the course advisor. Course advisement is conducted in accordance with the fields of study determined by the Academic Department Board.

Students are required to successfully complete at least two of the following courses:**

- ELE 701 Linear Systems Theory
- ELE 704 Optimization
- ELE 708 Numerical Methods in Electrical Engineering
- ELE 709 Probability Theory and Stochastic Processes

New students must meet with faculty members by the end of their first semester to select a potential thesis topic. During the course registration period of the second semester, the faculty member who proposed the seminar topic is assigned as the student's thesis advisor.

Detailed graduation requirements are provided in the relevant articles of the Hacettepe University Graduate Education and Examination Regulations.

Each semester's course offerings are determined by the Academic Department Board. With approval, students may take courses from other departments or universities, but these cannot exceed half of the total number of required courses in the program.

Doctoral Program:

The doctoral student fulfills the course requirements specified in the Hacettepe University Graduate Education and Examination Regulations under the supervision of the Department Chair and with the approval of the course advisor.

Students are required to successfully complete at least two of the following courses:** (Those who have already completed these or equivalent courses during their master's studies are exempt.)

- ELE 701 Linear Systems Theory
- ELE 704 Optimization
- ELE 708 Numerical Methods in Electrical Engineering
- ELE 709 Probability Theory and Stochastic Processes

A course advisor is assigned to assist the student with course selection following admission to the program. By the beginning of the second semester, the faculty member the student will work with must be identified.

Further graduation requirements are provided in the relevant articles of the Hacettepe University Graduate Education and Examination Regulations.

Each semester's course offerings are determined by the Academic Department Board. With approval, students may take courses from other departments or universities, but these cannot exceed half of the total number of required courses in the program.

After successfully completing their coursework, the student must take a qualifying exam to assess their comprehensive knowledge and synthesis ability in their doctoral research area and core disciplinary topics. The qualifying exam is conducted in accordance with the procedures outlined in the relevant regulation.

Students who pass the doctoral qualifying exam are expected to complete a doctoral dissertation, under the supervision of their advisor and the Thesis Monitoring Committee, that fulfills at least one of the following:

- Introduces a scientific innovation,
- Develops a new scientific method,
- Applies a known method to a new area.

Before the thesis defense, the student presents their work in a public seminar within the department.

The thesis defense and other procedures not specified in this directive are conducted in accordance with the Hacettepe University Graduate Education and Examination Regulations.

** Equivalent scores from other national or international English exams recognized by YÖK and ÖSYM are also accepted.*

*** For students who completed ELE 670 Statistical Signal Processing and ELE 770 Statistical Signal Processing before this directive came into effect, these courses will be counted among the required courses.*