PhD Degree (Third Cycle) Programme in Electrical and Electronics Engineering

General Information

The Electrical and Electronic Engineering Department of the Nigde University launched its education activities in 1994, by recruiting its first graduate students, and then undergraduate students in 1995-1996 educational term. Doctorate program in the department was started in 2006. The Department has a young, dynamic and complete academic staff of 19 people, consisting of 1 Professor, 3 Associate Professors, 7 Assistant Professors, 1 Lecturer and 7 Research Assistants.

The Electrical and Electronic Engineering Department carries out prestigious academic and scientific studies in the field and offers a competent education with its dynamic and young academic staff conducting various scientific projects supported by The Scientific and Technology Research Council (TUBITAK) of Turkey, State Planning Organization (DPT), Ministry of Industry and Trade.

Thanks to the bilateral agreements with EU countries and other countries, some of our graduate students continue their education abroad within the framework of Erasmus Program.

The Department consists of six Divisions: Circuits and Systems, Electromagnetic Fields and Microwave Techniques, Electrical Machines, Electronics and Energy Systems and Communication. Some undergraduate students are welcome to participate and some graduate students can work as scholarship students in the projects conducted by our faculty members.

With project-supported, private-purpose research and development laboratories, the Electrical and Electronic Engineering of Department in today's technology will contribute to the graduate students to train as a qualified telectrical and electronic engineers.

Through the PhD (Third Cycle) programme, students develop skills to participate in scientific activities, and share the results with scientific community and they may continue their academic career in the universities in Turkey or abroad.

Aims and Objectives

Aims :

- **To provide the students the skills to apply the advanced knowledge of mathematics, science and engineering especially for solving complex problems in their specialization area, to operate and conduct inter-disciplinary studies and to work with others, in professional and social settings and to organize and participate creative and integrative design activities effectively**
- **To offer advanced level education for engineers for taking part in research and making contributions to research and development in the field of science and technology**
- **To raise scientists in PhD level that has vision, analytic thinking skill and ethical values**

Objectives :

- **To promote research and development studies in the fundamental areas of electrical and electronics engineering such as communication, circuits and systems, Electromagnetic Fields and Microwave Techniques, Electrical Machines and Power Electronics, Electronics and Energy Systems that are needed by the industry both in national and international arena**
- **To play a role to contribute to the universal science in the field of Electrical and Electronics Engineering**
- **To create knowledge and technologies in a level that will contribute national development**

- To develop scientific thinking and create projects that will enhance technological developments

Qualification Awarded

Upon successful completion of this program, students are awarded with the qualification of DOCTORATE DEGREE in ELECTRICAL and ELECTRONICS ENGINEERING.

Level of Qualification

PhD Degree with thesis in ELECTRICAL and ELECTRONICS ENGINEERING is a four-year (8 semesters) program with 240 ECTS credits. The program meets the requirements both for ECTS credits and level descriptors of the "Third Cycle" degree qualifications of the Overarching Framework of European Qualifications Framework HE (QF-EHEA) and the "8th Level" qualifications of the Turkish Qualifications Framework for HE (TYYÇ, NQF-HETR), as well as the "8th Level" requirements of the qualifications of the European Qualifications Framework for Lifelong Learning (EQF-LLL) in terms of the level descriptors.

Specific Admission Requirements

Admission requirements are determined in line with the regulations set by Higher Education Council of Turkey. Information on application for PhD programs and access requirements are announced on the web page of the university at the beginning of each academic year. The following requirements are applied for both national and foreign students:

- To have a First Cycle (BSc) degree in electrical and electronics engineering
- To have ALES (Entrance Exam for Academic Personnel and Postgraduate Education) with minimum score of 55 (or equivalent)
- To have a foreign language proficiency from national exams such as YDS (Foreign Language Proficiency Test), UDS (The Interuniversity Foreign Language Examination) or KPDS (The Foreign Language Examination for Civil Servants) or from international exams such as IELTS (International English Language Testing System) or TOEFL (Test of English as a Foreign Language) accepted by Interuniversity Board. Students who do not have a foreign language proficiency might apply yet their foreign language score is evaluated as 0.
- The candidates with a Bachelor's Degree from abroad must have the certificate of equivalence from the Council of Higher Education (YOK).
- ALES score is valid for 3 years.
- The candidates must apply in person. The applications with incomplete documents will not be evaluated.

For further and detailed information please visit General Admission Requirements and Registration Procedures in the menu items of the Information on the Institution.
For further information on the admission requirement for foreign students, please contact to Nigde University International Office.

Contact:

International Office
Niğde Üniversitesi, Kampüs, Bor Yolu, Niğde, TÜRKİYE

Phone: 0 388 225 21 48
Fax: 0 388 225 23 85
E-mail: erasmus@nigde.edu.tr
Web: http://www.nigde.edu.tr/uluslararasi/index.php?ln=en

Specific Arrangements for Recognition of Prior Learning

With an understanding of lifelong learning, Nigde University recognizes the previously taken courses in another institution and exempt them from graduation credit, as long as the courses match with the learning outcomes of the registered PhD (Third Cycle) programme in Electrical and Electronics Engineering at Nigde University.

Profile of the Programme

PhD program in Electrical and Electronics Engineering has been established with a vision that introducing innovative products can only be achieved by specialization and by combining creativity and engineering experience. Thus program is organized to provide the students the opportunity to specialize in circuits and systems, electromagnetic fields and microwave techniques, electrical machines and power electronics, electronics and energy systems and communication. The students also develop skills to participate in scientific activities, and share the results with scientific community and they may continue their academic career in the universities in Turkey or abroad.

Doctorate Degree program in Electrical and Electronics Engineering ("Third Cycle" in QF-EHEA and "8th Level" in TYYÇ) is an academically-oriented program giving access to research programs and professional practice demanding advanced levels of knowledge, skills and competencies. The program can be classified in regards to ISCED (The International Standard Classification of Education) 2011 and NQF-HETR (The Turkish Qualifications Framework for HE) profiles and fields of education as follows:

- **ISCED Field of Education: 52 - Engineering And Engineering Trades**
- **ISCED 2011 Level: 8, Orientation (Profile): 74, Subcategory: 747, Academically-oriented "Third Cycle" degree**
- **NQF-HETR Field of Education: 52 - Engineering And Engineering Trades**
- **NQF-HETR Profile of Education: Academically-oriented "Third Cycle" degree**

Learning and Teaching Methods

The most frequently used instructional methods of the educational programs of Nigde University are given below. Programmes commonly apply these methods as appropriate instructional approaches in accordance with their aims and objectives.
The instructional methods applied for achieving the goal of meeting the expected learning outcomes of the Phd Degree program in Electrical and Electronics Engineering program at large are indicated in the section of 'program learning outcomes', and those methods utilized for individual course units are indicated in the relevant section of " description of indivusal course unit'.

Learning and Teaching Methods

- **Lecture & In-Class Activities**
- **Land Surveying**
- **Group Work**
- **Laboratory**
- **Reading**
- **Assignment (Homework)**
- **Project Work**
- **Seminar**
- **Web Based Learning**
- **Implementation/Application/Practice**
- **Thesis Work**
- **Field Study**
- **Report Writing**

Occupational profiles of graduates with examples

The global natures of the electrical and electronics industries ensure many career opportunities in Turkey as well as in Europe and beyond. Our graduates can be engaged in many fields such as research and development, design, production, marketing, after-sale services, project development, according to their individual interests and preferences.

The employment opportunities for our graduates may be in Small and Medium Enterprises, in large scale companies and multinational companies operating in consumer electronics, communication systems, embedded systems, industrial control and automation applications, energy systems and defense electronics.

PhD program in Electrical and Electronics Engineering can take part in national and international projects which are not routine applications of everyday engineering problems and research and development activities. They can work as academic staff in higher education institutions.

Qualification Requirements and Regulations

Doctorate program (third cycle) in Electrical and Electronics Engineering is awarded to students who have scored a Cumulative Grade Point Average (CGPA) of not less than 2.50 /4.00, defended his/her thesis successfully, and have completed all the courses (240 ECTS) with at least a letter grade of CB or S in the program.

For detailed information: Please see "Nigde University's Rules & Regulations for Graduate Education"

Access to Further Studies

Upon successful completion of PhD degree programme, students can pursue an academic career in releted fields.

Examination Regulations, Assessment and Grading

The methods applied for assessment of the achievement of the expected program learning outcomes for the entire Third Cycle program of ELECTRICAL and ELECTRONICS ENGINEERING are shown below and those for the individual course units are given in the relevant section of the course description with their contribution to the final grades.

- **Mid-Term Exam**
- **Final Exam**
- **Make-up Exam**
- **Homework Assessment**
- **Presentation of Report**
- **Computer Based Presentation**
- **Presentation of Thesis**
- **Presentation of Document**

Mid-term and final examinations are conducted in dates, places and times determined and announced by the University. The students' final semester grade is given by their instructors based on mid-term examination, homework evaluation, final examination results taking into account the students' compliance with attendance to the course activities.

The contribution of assessment grades of the in-term activities to the final grade is 40% and that of the final exam is 60% for all the course units.

Grading:

The success of a student for each assessment (in-term and final) defined for each course unit is evaluated by the instructor. Evaluations are made over a scale of 100 points and converted to the letter grades at the end of the semester.

A student is considered to be successful in a course if he/she gets one of the following grades: AA, BA, BB, CB or S (Successful). The student's academic standing is calculated in the form of a Grade Point Average (GPA) out of a scale of 4.00 and announced at the end of each semester. The total grade point of a course is obtained by multiplying the grade point by the course ECTS credit. The semester GPA is calculated by dividing the total amount of grade points of courses gained in that semester by the total amount of ECTS credits of courses taken in the semester. The yearlong courses are included in the spring semester GPA. Cumulative Grade Point Average (CGPA) is calculated by dividing the total amount of grade points of all the courses in the curriculum to be taken by the total amount of 240 ECTS credits. For each course taken, the student is given one of the following letter grades and grade points:

Course Score	Course Grade	Grade Points
90-100	AA	4.00
85-89	BA	3.50
80-84	BB	3.00
75-79	CB	2.50
70-74	CC	2.00
65-69	DC	1.50
60-64	DD	1.00
50-59	FD	0.50
0-49	FF	0.00

Classification of the qualification

A student who obtains a CGPA of 2.00-2.99 is considered as a Satisfactory Student, the one who obtains a CGPA of 3.00-3.49 is considered as a Honours Student, and the one who obtains a CGPA of 3.50-4.00 is considered as a High Honours Student.

Graduation Requirements

In order for a student to graduate from PhD Degree (Third Cycle) Programme in ELECTRICAL and ELECTRONICS ENGINEERING, he/she has

- **Completed 240 ECTS credits with passing grades**
- **A cumulative grade point average (CGPA) of at least 2.50 out of 4.00.**
- **Prepared and defended a thesis successfully.**

Mode of Study:

PhD Programme in Electrical and Electronics Engineering at Nigde University is a full time / face to face programme.

Contact (Programme Director or Equivalent):

Position	Name Surname	Phone	E-Mail
Head of Department	Assist.Prof.Dr. Bekir Sami TEZEKİCİ	+90 388 2252278	bstezekici@nigde.edu.tr
Deputy Head of Department	Assoc.Prof.Dr. Ulaş EMINOGLU	+90 388 2252352	ueminoglu@nigde.edu.tr
ERASMUS and ECTS Coordinator	Assist.Prof.Dr. Kamil Fatih DILAVER	+90 388 2252289	k.fatih.dilaver@nigde.edu.tr