



KIRIKKALE UNIVERSITY

DIPLOMA SUPPLEMENT

Kırıkkale Üniversitesi Rektörlüğü
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Diploma Date : 28.01.2013

Diploma No : [REDACTED]

This Diploma Supplement follows the model developed by the European Commission, Council of Europe and UNESCO/CEPES. The purpose of the supplement is to provide succinct independent data to improve the international "transparency" and fair academic and professional recognition of qualifications (diplomas, degrees, certificates, etc). It is designed to provide a description of the nature, level, context, content and status of the studies that were pursued and successfully completed by the individual named on the original qualification to which this supplement is appended. It should be free from any value-judgments, equivalence statements or suggestions about recognition. Information in all eight sections should be provided. Where information is not provided, an explanation should give the reason why.

1. INFORMATION IDENTIFYING THE HOLDER OF THE QUALIFICATION

- 1.1. Family Name(s) : [REDACTED]
1.2. Given Name(s) : [REDACTED]
1.3. Date of Birth : [REDACTED]
1.4. Student Identification Number : [REDACTED]

2. INFORMATION IDENTIFYING THE QUALIFICATION

- 2.1 Name of the Qualification
Elektrik-Elektronik Mühendisliği Lisans Derecesi
2.2 Main field(s) of study for the qualification
Electrical & Electronics Engineering
2.3 Name and Status of Awarding Institution
Kırıkkale Üniversitesi, Devlet Üniversitesi
2.4 Name and Status of Awarding Institution Administering Studies
Same as 2.3
2.5 Language(s) of Instruction / Examination
Turkish

3. INFORMATION ON THE LEVEL OF THE QUALIFICATION

- 3.1 Level of Qualification
First Cycle (Bachelor's Degree), Level 6 in the Turkish Qualification Framework for Higher Education
3.2 Official Length of Program
4 years, 240 ECTS
3.3 Access Requirements
(1) High School Diploma (2) Placement through centralised nation-wide Student Selection and Placement Examinations (YGS & LYS). Candidates gain access to the programme based on their composite scores consisting of the scores on the selection examinations and their high school grade points averages. (3) For holders of short-cycle degree diplomas of related programmes of vocational schools(MYOs); placement through a centralized, nation-wide Vertical Transfer Examination(Dikey Geçiş Sınavı)

4. INFORMATION ON THE CONTENTS AND RESULTS GAINED

- 4.1 Mode of study Full-time
4.2 Program Requirements This degree is awarded to the students who have successfully completed all the courses in the curriculum and have a Cumulative Grade Point Average CGPA of 60/100 and 240 ECTS.

Objectives Our graduates will have possessed a solid foundation in electrical and electronics engineering with a strong underpinning in mathematics, science, and engineering, and will have demonstrated their specialized competence in one or more electrical and electronics engineering areas. Our graduates can work individually or in interdisciplinary teams and make contribution as electrical and electronics engineering ready to develop innovative technologies to serve the needs of society. On mastering both technical and soft skills, our graduates will be able to flourish on many different career paths. They will be ready for life-long learning, including for some the pursuits of further studies in graduate school. Our graduates can demonstrate an understanding of contemporary issues associated with electrical and electronics engineering and the impact of engineering solutions in society, including the importance of ethical, safety and environmental considerations.

Knowledge Sufficient theoretical knowledge and background in engineering, mathematics, and natural sciences related to electrical and electronics engineering; Ability to determine, define and formulate electrical and electronics engineering problems; Ability to analyze engineering problems under the constraints and conditions of stability, robustness, applicability, and manufacturability. Selection and application of appropriate analytical methods and modeling techniques for the purpose of determining, defining, formulating and solving skills of engineering problems. Using theoretical knowledge in combination with engineering solutions. Selection and application of appropriate analysis, modeling, and design methods for solving electrical and electronics engineering problems. Designing a system, process, equipment or product, in the area of electrical and electronics engineering for the purpose of satisfying certain needs in a predefined direction. Evaluating engineering solutions, based on design qualifications, under realistic conditions and constraints, such as security, cost, environmental issues, sustainability and manufacturability.

Skills -Skill to analyze and design a system component or process under realistic constraints to satisfy the desired requirements. -Skill to apply modern design methods. -Skills to simulate and design, to experiment and design, interpret the results, analyze the data. -Skills to choose and use modern techniques and tools necessary for engineering applications. -Skills to use information technologies effectively for engineering applications.

Competencies - Skill to study in intra-disciplinary or interdisciplinary team work - Skill to function individually or as a member of a team - Independent study using self-initiative and creative work - Self confidence for taking responsibility - Skill to search electronic databases and other information sources for accessing necessary knowledge. - Oral and written communication skills for establishing successful social relationships; project preparation and presentation skills. - Learning and using contemporary techniques and computation tools by user manuals for engineering applications. - Using information technologies efficiently for learning. - Reaching information; literature search; database search; using information sources - Conscience for necessity of lifelong learning; skills for keeping up with developments in science and technology and continuous self-renewal. - Effective oral and written communication skills to convey ideas in Turkish in a concise and precise manner - An ability to use basic research skills and appropriate documentation of sources to write effectively of issues facing the professional - Proficiency in at least one foreign language This includes awareness of following: - an understanding of professional and ethical responsibility - a general knowledge of the pertinent laws applicable to the industry - business life applications such as project management, risk management and change management - entrepreneurship, innovation, and sustainable development - quality control - workplace applications, workers' health, work safety. - impact of engineering solutions and applications in society. - global and social dimensions of the effects of engineering applications

4.3. Programme details and the individual grades/marks obtained:

Code	Course Name	Category	National Credits	ECTS	Grades
Semester 1					
0204101	MATHEMATICS I	Compulsory	4	6	C
0204102	PHYSICS I	Compulsory	4	5	B2
0204103	CHEMISTRY	Compulsory	4	5	C
0204104	INTRODUCTION TO ENGINEERING	Compulsory	2	3	B2
0204105	INTRODUCTION TO TECHNICAL DRAWING	Compulsory	2	3	B2
0204106	BASIC COMPUTER TECHNOLOGIES AND APPLICATIONS	Compulsory	2	4	B2
0204107	ENGLISH I	Compulsory	4	2	A2
0204108	PRINCIPLES OF ATATURK AND TURKISH REV. HISTORY I	Compulsory	2	2	B2
Semester 2					
0204201	MATHEMATICS II	Compulsory	4	6	C
0204202	PHYSICS II	Compulsory	4	5	C
0204203	LINEAR ALGEBRA	Compulsory	3	5	B1
0204204	SEMICONDUCTORS	Compulsory	3	5	C
0204205	BASIC COMPUTER SCIENCES	Compulsory	3	5	B2
0204206	ENGLISH II	Compulsory	4	2	B1
0204207	PRINCIPLES OF ATATURK AND TURKISH REV. HISTORY II	Compulsory	2	2	B2
Semester 3					
0204301	ELECTROMAGNETIC FIELD THEORY	Compulsory	3	5	B2
0204302	CIRCUIT THEORY I	Compulsory	4	6	B2
0204303	CIRCUIT THEORY AND MEASUREMENT LAB. I	Compulsory	1	3	B2
0204304	COMPUTER PROGRAMMING	Compulsory	3	5	B2
0204305	DIFFERENTIAL EQUATIONS	Compulsory	4	4	B2
0204306	PROBABILITY THEORY	Compulsory	3	5	C
0204307	TURKISH LANGUAGE I	Compulsory	0	2	G
Semester 4					
0204401	ELECTROMAGNETIC WAVE THEORY	Compulsory	4	5	C
0204402	CIRCUIT THEORY II	Compulsory	4	6	B1
0204403	CIRCUIT THEORY AND MEASUREMENT LAB. II	Compulsory	1	3	B1
0204404	ELECTRONICS I	Compulsory	3	5	C
0204405	ELECTRONICS LAB. I	Compulsory	1	1	B1
0204406	NUMERICAL ANALYSIS	Compulsory	3	6	A2
0204407	TURKISH LANGUAGE II	Compulsory	0	2	G
0204450	PRACTICAL TRAINING	Compulsory	0	2	A1
Semester 5					
0204501	DIGITAL LOGIC DESIGN	Compulsory	3	5	A1
0204502	DIGITAL LOGIC DESIGN LAB.	Compulsory	1	3	C
0204503	ELECTRIC MACHINERY I	Compulsory	3	4	B1
0204504	ELECTRONICS II	Compulsory	3	5	C
0204505	ELECTRONICS LAB. II	Compulsory	1	3	C
0204506	SIGNALS AND SYSTEMS	Compulsory	4	4	B2
0204507	PROJECT I	Compulsory	1	2	A2
0204512	ELECTRIC PLANTS	Compulsory	3	4	B2
Semester 6					
0204601	DIGITAL ELECTRONICS	Compulsory	3	4	B2
0204602	DIGITAL ELECTRONICS LAB.	Compulsory	1	3	C
0204603	ELECTRIC MACHINERY II	Compulsory	3	4	B1
0204604	ELECTRIC MACHINERY LAB.	Compulsory	1	3	B2
0204605	SYSTEM MODELLING AND CONTROL I	Compulsory	3	4	B1
0204607	MICROPROCESSORS	Compulsory	3	5	C
0204608	PROJECT II	Compulsory	1	2	A2
0204611	MICROPROCESSORS LAB.	Compulsory	1	3	B2
0204650	SUMMER PRACTICE 2	Compulsory	0	2	A1
Semester 7					
0204703	TELECOMMUNICATIONS 1	Compulsory	3	5	B2
0204701	SYSTEM MODELLING AND CONTROL II	Compulsory	4	5	B1
0204704	MICROWAVE THEORY	Compulsory	3	5	B2
0204705	FINAL YEAR PROJECT I	Compulsory	1	5	A2
0204706	HIGH VOLTAGE ENGINEERING	Elective	3	5	B2
0204707	INTERIOR INSTALLATION AND ILLUMINATION PROJECT	Elective	3	5	B1
Semester 8					
0201953	NATURAL DISASTER MANAGEMENT	Elective	2	5	A1
0204802	POWER ELECTRONICS	Compulsory	3	5	B2
0204803	TELECOMMUNICATIONS II	Compulsory	3	5	C
0204804	ANTENNA THEORY	Compulsory	3	5	B2
0204805	FINAL YEAR PROJECT II	Compulsory	1	5	A2
0204810	INTRODUCTION TO ARTIFICIAL INTELLIGENCE	Elective	3	5	B1

Total Credits : 151 Local / 240 ECTS

CGPA*

:2.79 out of 4

* CGPA is calculated using the national credits.

4.4. Grading Scheme and Grades

Grade: Grades are assigned in letters. The letter grades and the corresponding percentage equivalent are given below:

PERCENTAGE	COURSE GRADE
90-100	A1
85-89	A2
75-84	B1
65-74	B2
60-64	C
50-59 (Factor 1,0)	F1
41-49(Factor 0,5)	F2
0-40(Factor 0,0)	F3
Nonattendance	F4
Absent from exam	F5
Fail(for non-credit courses)	F6
Pass (for non-credit courses)	G

Each exam is graded on a 100-point scale. In order to be considered successful in a course,

a- the final exam grade must be at least 60

b- the sum of the 60% of the final exam grade and the 40% of the mid-term exam grade will make up the decisive grade, which must be at least 60. Having a fraction in computing the decisive grade, the result is rounded off to the nearest whole number. For those who are entitled to an additional exam, no mid-term grade is required, but a minimum 60 out of 100 (C) is. The table set by the Higher Education Council(YOK) is used to convert the grades from the 100 point scale to the 4-point scale

A student's academic success is calculated in the form of Cumulative Grade Point Average (CGPA) by the Registrar's Office, taking into account all the courses taken by the student from the beginning of the university education to the end. In order to obtain CGPA, the final mark for each course is multiplied by the course's national credits. The results are added and the sum is divided by the total number of national credits. The score obtained is the CGPA.

The criteria for degree classification are:

3,50 - 4,00 Onur Öğrencisi (Honor Student)

3,00 - 3,49 Pekiyi (Excellent)

2,60 - 2,99 İyi (Good)

2,20 - 2,59 Başarılı (Satisfactory)

4.5. Overall Classification of the Qualification

Cumulative Grade Point Average (CGPA) : 2.79
Final Grade of the degree : İyi (Good)

5. INFORMATION ON THE FUNCTION OF THE QUALIFICATION

5.1 Access to Further Study

May apply to second cycle programmes

5.2 Professional Status Conferred

This degree enables the holder to exercise the profession

6. ADDITIONAL INFORMATION

6.1 Additional Information

: n/a

6.2 Further Information Sources

Electrical & Electronics Engineering	: http://eem.kku.edu.tr/
Faculty of Engineering Web Site	: http://mf.kku.edu.tr
University web site	: http://www.kku.edu.tr
University International Relations and EU Office web site	: http://abofisi.kku.edu.tr
The Council of Higher Education web site	: http://www.yok.gov.tr
The Turkish ENIC/NARIC web site	: http://www.enic-naric.net/members.asp?country=Turkey
The web site of the NQF (TYYÇ) for Higher Education	: http://www.tyyc.yok.gov.tr

7. CERTIFICATION OF THE SUPPLEMENT

7.1. Date : 06.05.2013
7.2. Name and Signature : Hulusü ŞENGÜL
7.3. Capacity : Head of The Student Affairs
7.4. Official Stamp or Seal :

8 INFORMATION ON THE NATIONAL HIGHER EDUCATION SYSTEM

The basic structure of the Turkish National Education System consists of stages of noncompulsory pre-school education; compulsory primary (elementary and middle school) and secondary (high school) education; and higher education. Primary education begins at the age of 5.5 (66 months), lasts eight years and comprises elementary and middle school education, four years each. Secondary education is also four years and divided into two categories as "General High School Education" and "Vocational and Technical High School Education". The entry into these categories is through composite scores obtained from a centralized exam for secondary schools.

Higher education system in Turkey is managed by the Council of Higher Education (CoHE, Yükseköğretim Kurulu-YÖK) which is an autonomous public body responsible for the planning, coordination, governance and supervision of higher education within the provisions set forth in the Constitution of the Turkish Republic and the Higher Education Law. Both state and non-profit foundation universities are founded by law and subjected to the Higher Education Law and to the regulations enacted in accordance with it.

Higher education in Turkey comprises all post secondary higher education programmes, consisting of short, first, second, and third cycle degrees in terms of the terminology of the Bologna Process. The structure of Turkish higher education degrees is based on a two-tier system, except for dentistry, pharmacy, medicine and veterinary medicine programmes which have a one-tier system. The duration of these one-tier programmes is five years (300 ECTS) except for medicine which lasts six years (360 ECTS). The qualifications in these one-tier programmes are equivalent to the first cycle (bachelor's) plus second cycle (master's) degree. Undergraduate level of study consists of short cycle (associate's)-(önlisans derecesi) and first cycle (bachelor's)-(lisans derecesi) degrees which are awarded after successful completion of full-time two-year (120 ECTS) and four-year (240 ECTS) study programmes, respectively.

Graduate level of study consists of second cycle (master's)-(yüksek lisans derecesi) and third cycle (doctorate)-(doktora derecesi) degree programmes. Second cycle is divided into two sub-types named as master without thesis and master with thesis. Master programmes without thesis require 60 to 90 ECTS credits and consist of courses and a semester project. 60 ECTS non-thesis master programmes are exceptional, and exist in a few disciplines. The master programmes with a thesis require 90 to 120 ECTS credits, which consists of courses, a seminar, and a thesis. Third cycle (doctorate) degree programmes are completed having earned a minimum of 180 ECTS credits, which consists of completion of courses, passing a proficiency examination and a doctoral thesis. Specialization in medicine, accepted as equivalent to first cycle programmes are carried out within the faculties of medicine, university hospitals and the training hospitals operated by the Ministry of Health.

Universities consist of graduate schools (Institutes) offering second cycle (master's) and third cycle (doctorate) degree programmes, faculties offering first cycle (bachelor's degree) programmes, four-year higher schools offering first cycle (bachelor's) degree programmes with a vocational emphasis and two-year vocational schools offering short cycle (associate's) degree programmes of a strictly vocational nature.

Since 2003, first cycle degree holders may apply directly to third cycle (doctorate) programmes if their performance at the first cycle degree level is exceptionally high and their national central Graduate Education Entrance Examination (ALES) score is also high and their application is approved. For these students, theoretical part of the programmes requires additional courses of 60 ECTS credits.

Admission of national students to short and first cycle degree programmes is centralized and based on a nationwide one/two-stage examination(s) conducted by an autonomous public body (Assessment, Selection and Placement Centre-ÖSYM). Candidates gain access to institutions of higher education based on their composite scores consisting of the scores on the selection examination and their high school grade point averages. Admission to graduate programmes is directly conducted by the higher education institutions (HEIs) within the frameworks of the publicly available national and institutional regulations. Admission of foreign students to programmes at all levels of higher education can be done by direct applications of candidates to HEIs based on publicly available national and institutional regulations.

The Turkish National Qualifications Framework for Higher Education (TYYÇ): The National Qualifications Framework for Higher Education in Turkey (TYYÇ) developed with reference to the QF for European Higher Education Area and the EQF for lifelong learning was adopted by the CoHE in 2010. The framework has been developed as a part of a single national qualifications framework, which would eventually consists of 8 level national framework covering all levels of educations on completion of the ongoing work at the national level, in which the higher education levels lie on levels between 5 to 8. The levels of the TYYÇ with reference to the European overarching qualifications frameworks as well as that to ECTS credits and student workload are shown below.

GENERAL STRUCTURE OF THE TURKISH EDUCATION SYSTEM

