İstanbul Bilgi University

Diploma No : xxxx
Diploma Date : 04 September 2018

Eski Silahtarağa Elektrik Santralı
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The purpose of the Diploma Supplement is to provide sufficient 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 is free from any value judgements, equivalence statements or suggestions about recognition. This Diploma Supplement model was developed by the European Commission, Council of Europe and UNESCO.

1. INFORMATION IDENTIFYING THE HOLDER OF THE QUALIFICATION

1.1. Last Name (s) : **xxxx**
1.2. First Name (s) : **xxx**
1.3. Date of birth *(day/month/year)* : **xxxxxxx**
1.4. Student identification number or code *(if available)* : **xxxxxxx**

2. INFORMATION IDENTIFYING THE QUALIFICATION

2.1. Name of qualification and *(if applicable)* title conferred *(in original language)* : **Endüstri Mühendisliği Lisans Derecesi**
2.2. Main Field(s) of study for the qualification : **Industrial Engineering**
2.3. Name and status of awarding institution *(in original language)* : **Istanbul Bilgi Üniversitesi: Kanunla kurulmuş, Devlet tarafından tanınan, kar amacı gütmeyen vakıf üniversitesidir. Istanbul Bilgi University: Foundation supported, Public Legal Entity, non-profit State-recognized University.**
2.4. Name and status of institution *(if different from 2.3)* administering studies *(in original language)* : **Same as 2.3**
2.5. Language(s) of instruction / examination : **English**

3. INFORMATION ON THE LEVEL AND DURATION OF THE QUALIFICATION

3.1. Level of the qualification : **First Cycle (Bachelor's) Degree; Level 6 in National Qualifications Framework for Higher Education in Turkey (NQF-HETR, TYYÇ)**
3.2. Official duration of the programme in credits and/or years : **4 years (excluding one year of English Preparatory Program), 2 semesters per year, 17 weeks per semester, 240 ECTS**
3.3. Access Requirement(s) : **(1) High School Diploma (2) Placement through a nation-wide Student Selection and Placement Examinations (3) Certificate of Istanbul Bilgi University English Language Exam (BILET) or acceptable score of TOEFL, IELTS or similar internationally recognised exams (4) For graduates of short-cycle degree programmes from the same or related fields of studies of vocational schools (MYOs), placement through a nation-wide Vertical Transfer Examination (Dikey Geçiş Sınavı) (5) For foreign students, placement by direct applications of candidates to the university and assessment by the university within the frameworks of the publicly available national and institutional regulations published on the university's web site**

4. INFORMATION ON THE PROGRAMME COMPLETED AND THE RESULTS OBTAINED

4.1. Mode of study : **Full Time**
4.2. Programme Learning Outcomes :

(1) Has a trustworthy scientific and technical background in mathematics, science and Industrial Engineering. (2) While solving IE problems, utilizes the knowledge and skills gained in mathematics, science and IE. (3) By utilizing the knowledge in IE, defines problems, selects the most approporiate tools, analyzes and creates solutions based on analysis, interprets results and evaluates. (4) Even when solving component or subsystem level problems, considers the systems as a whole. (5) By efficiently allocating scarce resources such as workforce,information, equipment, raw material, energy, time and financial assets; designs, improves and manages integrated processes and systems. (6) Applies mathematical and simulation models to IE problems, for that reason, selects and uses modern techniques and tools in terms of hardware and software. (7) Follows the latest trends in IT and uses at least one programming language efficiently. (8) Designs simulation models to solve IE problems, collects data, analyzes results and interprets. (9) Performs a study individually and independently in IE field, takes effective roles in interdisciplinary teams to improve leadership skills and to work better with teammates. (10) Accesses information through literature survey, follows the improvements in the field of IE by the way of efficiently usage of databases and other sources. (11) Internalizes lifelong learning philosophy and defines learning requirements, becomes motivated in terms of professional skills and improvement by following the latest trends in IE. (12) Communicates efficiently in verbal and written context and speaks at least one foreign language by European Language Portfolio B1 General Level to be able to follow latest improvements in IE.

4.3. Programme details, individual credits gained and grades/marks obtained :

Year 1 (Fall Semester)

C/E	Course	Name	CR	ECTS	GR
C	CHEM 100	General Chemistry	6	6	D+
C	CMPE 130	Algorithms and Programming	6	6	D
C	ENG/E 179	English for Academic Purposes I	3	3	B
C	ENGR 180	Exploring Engineering	6	6	B+
C	MATH 169	Calculus for Scientists and Engineers I	7	7	D
C	TK 103	Turkish Language I	2	2	B-
C	CHEM 110	Chemistry Lab for Scientists and Engineers	1	1	Exempt

Year 1 (Spring Semester)

C/E	Course	Name	CR	ECTS	GR
C	TK 104	Turkish Language II	2	2	B-
C	IE 100	Introduction to Industrial Engineering	6	6	C+
C	EC 200	Principles of Economics for Engineers	6	6	D+
C	MATH 170	Calculus for Scientists and Engineer II	7	7	A
C	PHYS 100	Physics for Scientists and Engineers	6	6	D
C	ENG/E 180	English for Academic Purposes II	3	3	B-

Year 2 (Fall Semester)

C/E	Course	Name	CR	ECTS	GR
C	HTR 111	History of Turkish Revolution I	2	2	B+
E	SOC 110	Basics of Sociology	6	6	D+
C	IE 211	Introduction to Algorithms	6	6	D
C	IE 231	Introduction to Probability	6	6	C+
C	IE 260	Engineering Economics Analysis	5	5	C-
C	MATH 259	Linear Algebra and Differential Equation	6	6	C

Year 2 (Spring Semester)

C/E	Course	Name	CR	ECTS	GR
C	IE 232	Engineering Statistics	6	6	D+
C	IE 234	Optimization Methods I	6	6	B
C	ENGR 205	Materials Science for Engineers	6	6	B-
E	EEEN 100	Electricity and Magnetism	6	6	D
E	HUM 107	Art, History and Culture I	5	5	A
C	HTR 112	History of Turkish Revolution II	2	2	A-

Year 3 (Fall Semester)

C/E	Course	Name	CR	ECTS	GR
C	IE 200	Summer Practice	1	1	P
C	IE 321	Production Planning and Control	5	5	C-
C	IE 343	Quality Control and Management	5	5	C
C	IE 351	Industrial Information System Design	5	5	B-
C	IE 335	Optimization Methods II	5	5	C-
C	IE 336	Stochastic Modeling	5	5	D
E	IE 360	Technology Innovation	5	5	B+

Year 3 (Spring Semester)

C/E	Course	Name	CR	ECTS	GR
E	IE 370	Engineering Project Management	5	5	C+
C	IE 341	Modeling and Simulation	6	6	B
C	IE 352	Systems Thinking	5	5	C-
C	IE 322	Production Sys. Design and Analysis	5	5	D
C	IE 312	Facilities Design and Planning	5	5	D
E	GE 209	History of the World Civilizations	6	6	B

Year 4 (Fall Semester)

C/E	Course	Name	CR	ECTS	GR
E	IE 311	Design of Experiments	6	6	C+
E	IE 313	Work Analysis and Design	5	5	C-
C	IE 491	Senior Design Project I	9	9	C+
E	PSY 202	Social Psychology II	6	6	C-
C	ENGR 400	Ethics in Engineering and Science	4	4	B-
C	IE 300	Summer Practice	1	1	P

Year 4 (Spring Semester)

C/E	Course	Name	CR	ECTS	GR
C	IE 472	Seminar in Industrial Eng. Practice	2	2	B-
C	IE 492	Senior Design Project II	10	10	A-
E	IE 420	Computer Integrated Manufacturing and A	5	5	C+
E	IE 481	Financial Engineering	6	6	C-
E	IE 381	Decision Analysis	5	5	D
E	GE 223	Introduction to Brazilian Studies	6	6	A

Total Credits : 251 **Total ECTS :** 251 **CGPA :** 2,17

4.4. Grading system and, if available, grade distribution table :

The official University grading system uses letter grades with pluses and minuses and CGPA calculated by the credit of Istanbul Bilgi University. For each course taken, the student is given one of the following grades by the course instructor :

Grade	Points	Definition	Grade	Points	Definition
A	4.00	Excellent	C+	2.30	Average
A-	3.70	Excellent	C	2.00	Average
B+	3.30	Good	C-	1.70	Pass on probation
B	3.00	Good	D+	1.30	Pass on probation
B-	2.70	Good	D	1.00	Pass on probation
			F	0.00	Fail

Other letters used to indicate the student's course status are:

P	Pass
T	Transferred course
NC	Non-credit

Honours Requirements : Students in undergraduate programs who have completed their education in a maximum period of no more than 8 semesters (or 4 semesters for students in short cycle programmes) with a GPA of 3.50 or higher are placed on the High Honours list, and with a GPA between 3.00 and 3.49 on the Honours list. The Honours and High Honours status is indicated on a special certificate given along with the diploma. Students who have been subject to disciplinary action lose their rights to any honours.

4.5. Overall classification of the qualification *(in original language)* : **Başarılı (Satisfactory)**

5. INFORMATION ON THE FUNCTION OF THE QUALIFICATION

5.1. Access to further study : **May apply to second cycle (master's) degree programmes.**

5.2. Access to a regulated profession (if applicable) : **This degree entitles the graduate with all legal rights to exercise his/her profession in the field of the study.**

6. ADDITIONAL INFORMATION

6.1. Additional information : **N/A**

6.2. Further information sources :

Istanbul Bilgi University, Faculty of Engineering and Natural Sciences, Industrial Engineering : http://www.bilgi.edu.tr/en/programs-and-schools/undergraduate/faculty-engineering-and-natural-sciences/industrial-engineering/ University website: http://www.bilgi.edu.tr Diploma Supplement (DS) information web-site: http://www.bilgi.edu.tr/en/diploma-supplement/ The Council of Higher Education: http://www.yok.gov.tr The Turkish ENIC-NARIC web-site: http://www.enic-naric.net

7. CERTIFICATION OF THE SUPPLEMENT

7.1. Date : **19 October 2018**

7.2. Signature : **Hüseyin Arpacıoğlu**

7.3. Capacity : **Registrar**

7.4. Official stamp or seal : e-signed

8. INFORMATION ON THE NATIONAL HIGHER EDUCATION SYSTEM

Structure and Degree 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 third 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.

TYYÇ LEVELS, QUALIFICATIONS TYPES AND ECTS CREDITS

Higher Education Levels / Cycles			AWARDS / DEGREES	LENGTH	TOTAL ECTS CREDITS	TOTAL STUDENT WORKLOAD (h)
QF - EHEA	EQF - LLL	TYYÇ LEVELS		(Year)	(Year x 60 ECTS)	(1 ECTS = 25-30h)
3	8	8	Doctorate Specialization in Medicine Doctorate in Art	3 (min.)	180 (min.)	4.500 – 5.400
2	7	7	Master's Degree	1 - 2	60 - 120	1.500 – 3.600
1	6	6	Bachelor's Degree	4	240	6.000 – 7.200
Short Cycle	5	5	Associate's Degree	2	120	3.000 – 3.600

GENERAL STRUCTURE OF THE TURKISH EDUCATION SYSTEM