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 non- compulsory 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 European Higher Education Area (EHEA). 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. The structure of first and second cycles is separate except for dentistry, pharmacy, medicine and veterinary programmes which are one-tier systems (lisans ve yüksek lisans bütünleşik programları). The duration of these one-tier programmes is five years (300 ECTS) except for medicine which lasts six years (360 ECTS). The level of qualifications in these one-tier programmes is equivalent to that of second cycle including first cycle.

Graduate level of study consists of second cycle (master's-yüksek lisans derecesi) and third cycle (doctorate-doktora derecesi) degree programmes.

Second cycle degrees are divided into two sub-types named as master with thesis and master without thesis. The master programmes with thesis require 120 ECTS credits, which consist of courses, a seminar, and a thesis. Master programmes without thesis require 60 to 90 ECTS credits and consist of courses and a semester project. These programmes do not give direct access to third-cycle doctoral studies; for access to third-cycle programmes candidates should fulfil the thesis and other requirements of master programmes with thesis. 60 ECTS non-thesis master programmes are exceptional and exist in a few disciplines. Third cycle (doctorate with master degree) degree programmes are completed having earned 240 ECTS credits, which consist of completion of courses, a seminar, passing a scientific proficiency examination and a doctoral thesis. Third cycle (doctorate with bachelor degree) degree programmes are completed having earned 300 ECTS credits, which consist of completion of courses, a seminar, passing a scientific proficiency examination and a doctoral thesis. Proficiency in art, specialisation in medicine and in dentistry are accepted as equivalent to third cycle programmes, the last two being carried out within the faculties of medicine and dentistry, university hospitals and the training hospitals operated by the Ministry of Health.

Universities consist of graduate schools (Institutes) offering second cycle and third cycle degree programmes, faculties offering first cycle programmes, four-year professional higher education schools offering first cycle degree programmes and two-year vocational schools offering short cycle degree programmes.

Admission requirements: Admission of national students to short and first cycle degree programmes is centralised 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 international 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.

Turkish National Qualifications Frameworks: The National Qualifications Framework for Higher Education in Turkey (TQF-HE, TYYÇ in Turkish) developed with reference to the QF for European Higher Education Area and the EQF for lifelong learning was adopted by the CoHE in 2010. Later in 2015, the framework became a part of Turkish Qualifications Framework (TQF, TYÇ in Turkish) which was designed as a single framework in harmony with the European Qualifications Framework and displays all qualifications gained through vocational, general and academic programs including primary, secondary and higher education or other learning environments. The framework was referenced with the EQF in 2017.
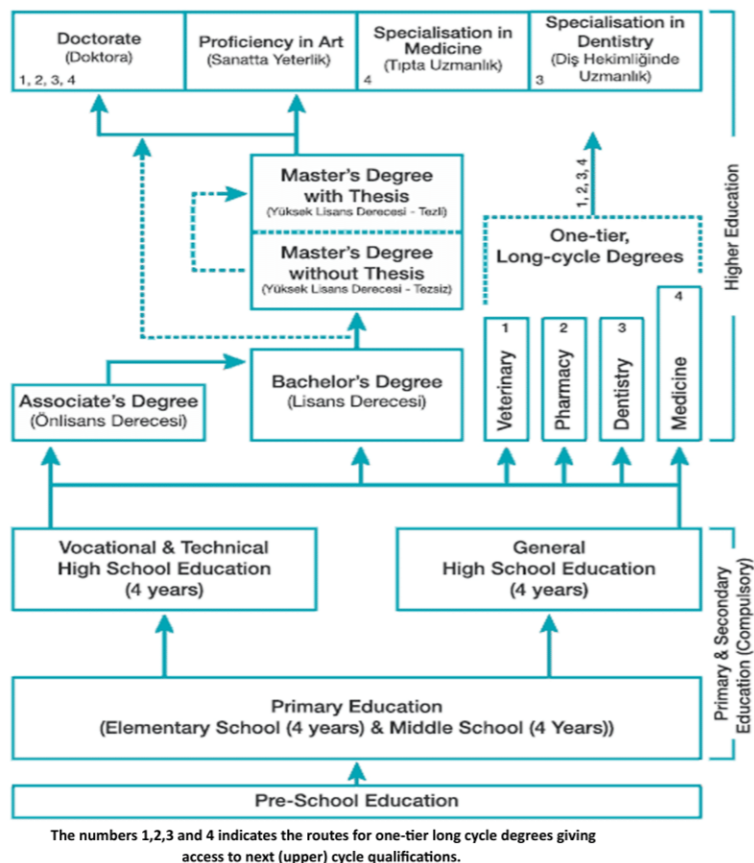
TQF consists of 8 levels in which the higher education lies from 5 to 8. The levels of TQF and TQF- HE with reference to the European Overarching Qualifications Frameworks as well as that to ECTS credits and student workload are shown below.

Turkish Quality Assurance System: The Higher Education Quality Council of Turkey (THEQC) was founded as an autonomous public legal entity in 2015, and since then it has been operating at the national level for evaluating the quality levels of higher education institutions' education and research activities and administrative services at institutional level in accordance with the national and international quality standards, and coordinating the processes of institutional accreditation, internal and external quality assurance as well as authorization of independent external evaluation and accreditation organizations. THEQC is a full member of ENQA (The European Association for Quality Assurance in Higher Education) since April of 28, 2020.

TQF, TQF-HE LEVELS, QUALIFICATIONS TYPES AND ECTS CREDITS

Higher Education Levels / Cycles			QUALIFICATIONS TYPES	LENGTH (Year)	TOTAL ECTS CREDITS (Year × 60 ECTS)
QF-EHEA	EQF-LLL	TQF & TQF-HE			
3	8	8	Doctorate	4	240
			Specialisation in Medicine		
			Specialisation in Dentistry		
			Proficiency in Art		
2	7	7	Master's Degree with Thesis	2	120
			Master's Degree without Thesis	1 - 1,5	60 - 90
1	6	6	Bachelor's Degree	4	240
Short Cycle	5	5	Associate's Degree	2	120

GENERAL STRUCTURE OF THE TURKISH EDUCATION SYSTEM

The numbers 1,2,3 and 4 indicates the routes for one-tier long cycle degrees giving access to next (upper) cycle qualifications.

İZMİR BAKIRÇAY UNIVERSITY DIPLOMA SUPPLEMENT

İzmir Bakırçay Üniversitesi
Gazi Mustafa Kemal Mahallesi,
Kaynaklar Caddesi 35665 Seyrek, Menemen,
İzmir/TURKEY
Phone:+90 23249 300 00
Fax: +90 232 844 71 22
www.bakircay.edu.tr

Diploma Number:
Diploma Date   :

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 European Commission, Council of Europe and UNESCO.

1. INFORMATION IDENTIFYING THE HOLDER OF THE QUALIFICATION

1.1 Last name(s)   :
1.2 First name(s)   :
1.3 Date of birth (day/month/year)   :
1.4 Student identification number or code (if available)   :

2. INFORMATION IDENTIFYING THE QUALIFICATION

2.1 Name of the qualification and (if applicable) title conferred:
Bilgisayar Mühendisliği Programı, Lisans Derecesi

2.2 Main field(s) of study for the qualification:
Computer Engineering Program, Bachelor's degree

2.3 Name and status of awarding institution:
İzmir Bakırçay Üniversitesi, Devlet Üniversitesi
İzmir Bakırçay University, State University

2.4 Name and status of institution (if different from 2.3) administering studies:
Same as 2.3

2.5 Language(s) of instruction/examination:
Turkish

3. INFORMATION ON THE LEVEL AND DURATION OF THE QUALIFICATION

3.1 Level of qualification:
First Cycle (Bachelor's) Degree

3.2 Official duration of programme in credits and/or years:
4 years (240 ECTS), 8 Semesters, 14-16 weeks per semester

3.3 Access requirement(s):
(1) High School Diploma, (2) Placement through a centralised, nation-wide student selection and placement examination organized by Assessment, Selection and Placement Centre (ÖSYM). Candidates gain access to the programmes based on their composite scores consisting of the scores on the centralized exam and high school grade point averages.

4. INFORMATION ON THE PROGRAMME COMPLETED AND THE RESULTS OBTAINED

4.1 Mode of study:
Full-time

4.2 Programme learning outcomes:
Aims: The aim of this programme is to educate computer engineer candidates with knowledge in computer engineering field to solve complex engineering problems with scientific knowledge at international standards, to prepare computer engineer candidates to deal with daily and global issues, work within interdisciplinary teams in national and multi-national efforts and to be aware of their responsibilities in social, ethical and moral values in their profession. Objectives: 1) To reflect the scientific knowledge gained in high school to computer engineering problems. 2) to stimulate independent study, critical and creative thinking. 3) to ensure an understanding of the fundamental aspects of computer engineering area. 4) to provide opportunities for specialization and creative research activities in computer engineering. 5) to contribute to the education of computer engineering society. Key Learning Programme Outcomes: 1) Ability to design a complex system, process, device or product under realistic conditions and constraints with meeting the prescribed requirements. 2) Ability to analyze, experiment, design the process data, and interpret their corresponding outcomes. 3) Gaining knowledge on the standards used in the engineering applications, professional and ethical sense of responsibility, and behaving accordingly to the ethical principles.

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

SEMESTER 1

Courses taken Course Code	Course Name	Course Category	National Credit	Grade	ECTS Credit
ATA101	ATATURK'S PRINCIPLES AND HISTORY OF REVOLUTION I	Required	2,00	BB	2,00
BİL101	COMPUTER ENGINEERING ETHICS	Required	2,00	CB	4,00
BİL103	COMPUTER PROGRAMMING I	Required	3,00	BA	5,00
BİL105	FUNDAMENTALS OF COMPUTER SYSTEMS	Required	2,50	AA	5,00
TBB111	PHYSICS I	Required	4,00	BB	5,00
TBB121	CALCULUS I	Required	4,00	BA	5,00
TDL101	TURKISH LANGUAGE I	Required	2,00	BA	2,00
YDL101	ENGLISH I	Required	2,00	AA	2,00

SEMESTER 2

Courses taken Course Code	Course Name	Course Category	National Credit	Grade	ECTS Credit
ATA102	ATATURK'S PRINCIPLES AND HISTORY OF REVOLUTION II	Required	2,00	CC	2,00
BİL102	FUNDAMENTALS OF SOFTWARE ENGINEERING	Required	2,50	AA	5,00
BİL104	COMPUTER PROGRAMMING II	Required	3,00	BA	5,00
TBB112	PHYSICS II	Required	4,00	CC	5,00
TBB122	CALCULUS II	Required	4,00	BB	5,00
TBB124	LINEAR ALGEBRA	Required	2,00	BA	4,00
TDL102	TURKISH LANGUAGE II	Required	2,00	BB	2,00
YDL102	ENGLISH II	Required	2,00	AA	2,00

SEMESTER 3

Courses taken Course Code	Course Name	Course Category	National Credit	Grade	ECTS Credit
BİL201	OBJECT ORIENTED PROGRAMMING	Required	3,00	AA	5,00
BİL203	DATABASE MANAGEMENT SYSTEMS	Required	3,00	AA	5,00
BİL205	CIRCUIT THEORY	Required	3,00	CB	4,00
BİL209	INTRODUCTION TO WEB PROGRAMMING	Required	3,00	AA	4,00
TBB221	DIFFERENTIAL EQUATIONS	Required	3,00	BB	4,00
TBB223	PROBABILITY AND STATISTICS	Required	3,00	CB	4,00
PSİ/AD203	COMMUNICATION PSYCHOLOGY	Elective	3,00	BA	4,00

SEMESTER 4

Courses taken Course Code	Course Name	Course Category	National Credit	Grade	ECTS Credit
BİL202	PROGRAMMING LANGUAGES	Required	3,00	AA	5,00
BİL204	DATA STRUCTURES	Required	3,00	AA	5,00
BİL206	DISCRETE STRUCTURES	Required	3,00	AA	4,00
BİL208	DIGITAL LOGIC DESIGN	Required	3,00	BA	4,00
BİL210	COMPUTER GRAPHİCS	Required	3,00	AA	4,00
BİL212	NUMERICAL METHODS	Required	3,00	AA	4,00
ISL/AD204	FINANCIAL LITERACY	Elective	3,00	AA	4,00

SEMESTER 5

Courses taken Course Code	Course Name	Course Category	National Credit	Grade	ECTS Credit
BİL301	THEORY OF COMPUTATION AND AUTOMATA	Required	3,00	AA	5,00
BİL303	COMPUTER ARCHITECTURE AND ORGANIZATION	Required	3,00	AA	5,00
BİL307	COMPUTER NETWORKS	Required	3,00	AA	5,00
BİL311	ALGORITHM ANALYSIS AND DESIGN	Required	3,00	AA	5,00
ISG301	OCCUPATIONAL HEALTH AND SAFETY I	Required	2,00	AA	2,00
BİL357	PARALLEL AND DISTRIBUTED PROGRAMMING	Elective	3,00	AA	4,00
BİL359	ADVANCED WEB PROGRAMMING	Elective	3,00	AA	4,00

SEMESTER 6

Courses taken Course Code	Course Name	Course Category	National Credit	Grade	ECTS Credit
BİL304	SOFTWARE ARCHITECTURE AND DESIGN	Required	3,00	AA	6,00
BİL306	SOFTWARE PROJECT MANAGEMENT	Required	3,00	AA	6,00
BİL308	OPERATING SYSTEMS	Required	3,00	BA	4,00
BİL310	EMBEDDED SYSTEMS	Required	3,00	BB	4,00
ISG302	OCCUPATIONAL HEALTH AND SAFETY II	Required	2,00	BA	2,00
BİL372	DIGITAL TRANSFORMATION AND INNOVATION	Elective	2,00	AA	4,00
BİL358	SIGNALS AND SYSTEMS FOR COMPUTER ENGINEERING	Elective	3,00	AA	4,00

SEMESTER 7

Courses taken Course Code	Course Name	Course Category	National Credit	Grade	ECTS Credit
BİL401	INTERNSHIP	Required	0,00	BL	5,00
BİL403	GRADUATION PROJECT	Required	1,00	AA	5,00
BİL407	TECHNICAL ENGLISH	Required	3,00	AA	5,00
BİL451	INTODUCTION TO NATURAL LANGUAGE PROCESSING	Elective	3,00	BB	5,00
BİL453	DEEP LEARNING	Elective	3,00	AA	5,00
BİL473	SYSTEM ADMINISTRATION	Elective	3,00	AA	5,00

SEMESTER 8

Courses taken Course Code	Course Name	Course Category	National Credit	Grade	ECTS Credit
STJ402	VOCATIONAL BUSINESS TRAINING	Elective	15,00	AA	30,00
		National Total Credits	152,00	Total ECTS Credits	240,00

Cumulative Grade Point Average(CPGA): 3,62 out of 4,00

4.4.Grading system and (if available) grade distribution table:

Our Bachelor's degree program gives eight semesters of instruction. One midterm and one final exam are scheduled at each semester. The students who are successful as a result of this evaluation are entitled to graduate from the program. Written, practical and oral evaluations are made for each course. Along with midterm exams, quizzes, projects and other activities that the instructor deems appropriate can be done. The number of these activities and their contribution to the achievement grade are indicated by the instructor in the course plan. These evaluations are converted into a grade for achievement using the weights determined and announced for the course, and added to the cumulative academic average considering the proportion of the ECTS value of the course. Success grade is converted to letter grade with relative evaluation system. in order to be considered successful in a course, the student must obtain at least a letter grade CC. Students whose GPA is at least 2.00 are also considered successful in the courses in which they receive (DC) and (DD) grades. Students who do not have failing courses but whose GPA is below 2.00 must re-take the courses with (DC) and (DD) and increase their GPA above 2.00 in order to graduate. The letter grades and their equivalents on the 4.00 scale are shown below:

Success Score Over 100 Points	Success Grade	Coefficient	Definition
90-100	AA	4,00	Excellent
85-89	BA	3,50	Very Good
80-84	BB	3,00	Good
75-79	CB	2,50	Fair
60-74	CC	2,00	Satisfactory
55-59	DC	1,50	Pass
50-54	DD	1,00	Conditional Pass
0-49	FF	0,00	Unsuccessful
0.00	GR	0,00	Not Attended
0.00	DZ	0,00	Incomplete
-	MU	-	Exempt
-	BL	-	Successful
-	BZ	-	Unsuccessful

At the end of the semester, students with a CGPA of 3.00-3.49 receive a Certificate of Honour, and students with a CGPA of 3.50-4.00 receive a Certificate of High Honour. Students who have FF and/or DZ and/or BZ in their grades in any period can not obtain a certificate of honour or high honour even if they have the required grade point average. Honour or high honour students should not have received any disciplinary penalties during their education, and must have taken all courses and succeeded.

4.5. Overall cl assification of the qualification:

Cumulative Grade Point Average: 3,62, 'Excellent'

5. INFORMATION ON THE FUNCTION OF THE QUALIFICATION

5.1 Access to further study:

Upon successful completion of this programme, students may apply to second cycle degree or directly to integrated third cycle (doctorate) programmes.

5.2 Professional status (if applicable):

This degree enables the holder to perform the tasks related to computer engineering topics in public and private companies and government institutions.

6. ADD ITIONAL INFORMATION

6.1 Additional Information:
N.A.

6.2 Further information sources:

University web site	: https://www.bakircay.edu.tr/
Department web site	:
Web site for the information package of the university	: https://ubys.bakircay.edu.tr/AIS/OutcomeBasedLearning/Home/Index?culture=tr-TR
The Council of Higher Education web site	: https://www.yok.gov.tr/
YÖKAK/THEQC website	: https:/ /yokak.gov.tr
The Turkish ENIC-NARIC website	: https://denklik.yok.gov.tr/enic-naric-tr-tanima-ofisi
TYÇ/TQF website	: https://www.myk.gov.tr/index.php/turkiye-yeterlilikler-cercevesi
TYYÇ/TQF-HE website	: http://tyyc.yok.gov.tr/

7.CERTIFICATION OF THE SUPPLEMENT

7.1 Date :

7.2. Name and Signature :

7.3. Capacity : Head of Student Affairs Department

7.4. Official stamps or seal :