

**7. CERTIFICATION OF THE SUPPLEMENT**

- 7.1. Date :
- 7.2. Name and Signature :
- 7.3. Capacity :
- 7.4. Official stamp or seal :

**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 bütünlüklü 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.

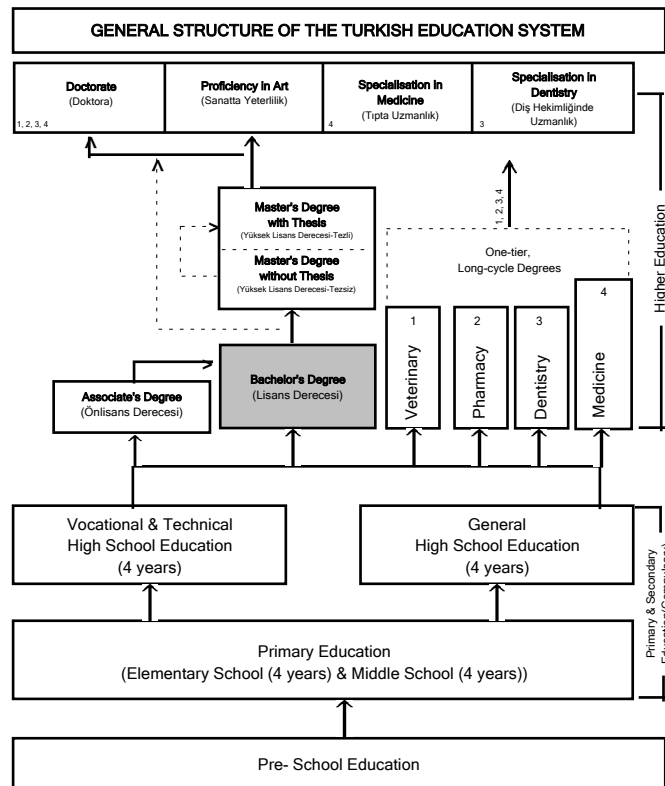
**Turkish National Qualifications Frameworks:** The National Qualifications Framework for Higher Education in Turkey (TQF-HE, TYÇ in Turkish) developed with reference to the QF for European Higher Education Area and the EQF for lifelong learning was adopted by the CoHE in 2010. Later in 2015, the framework 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			QUALIFICATION TYPES	LENGTH (Year)	TOTAL ECTS CREDITS (Year x 60 ECTS)
QF-EHEA	EQF-LLL	TQF&TQF-HE			
3	8	8	Doctorate Specialization in Medicine Specialization in Dentistry Proficiency in Art	4	240
2	7	7	Master's Degree with Thesis 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



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



ÇANKAYA  
UNIVERSITY

Çankaya University  
Yukarıyurtçu Mahallesi  
Mimar Sinan Caddesi  
No:4 06790  
Etimesgut - Ankara  
TÜRKİYE  
[www.cankaya.edu.tr](http://www.cankaya.edu.tr)

FACULTY OF  
ENGINEERING



DIPLOMA NO :  
DIPLOMA DATE :

**1. INFORMATION IDENTIFYING THE HOLDER OF THE QUALIFICATION**

- 1.1. Last name (s) \_\_\_\_\_
- 1.2. First name (s) \_\_\_\_\_
- 1.3. Date of birth \_\_\_\_\_
- 1.4. Student identification number \_\_\_\_\_

**2. INFORMATION IDENTIFYING THE QUALIFICATION**

- 2.1. Name of the qualification:  
**Bachelor of Science, Computer Engineering  
Lisans, Bilgisayar Mühendisliği**
- 2.2. Main field(s) of study for the qualification:  
**Computer Engineering  
Bilgisayar Mühendisliği**
- 2.3. Name and status of awarding institution:  
**Çankaya University; Foundation; Public Legal Entity, Non-profit, State-recognised  
Çankaya Üniversitesi; Vakıf, kanunla kurulmuş, devlet tarafından tanınan üniversite**
- 2.4. Name and status of institution administering studies:  
**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:  
**Bachelor's Degree**
- 3.2. Official duration of programme in credits and/or years:  
**4 years (excluding English Preparatory School); 2 semesters per year; 14 weeks (plus 2 weeks for final exams) per semester**
- 3.3. Access requirement(s):  
**High School Diploma,  
Placement through nation-wide Student Selection and Placement Examination  
Acceptable score from a recognised language proficiency exam as determined by the university administration.**

**4. INFORMATION ON THE PROGRAMME COMPLETED AND THE RESULTS OBTAINED**

- 4.1. Mode of study:  
**Full-Time**
- 4.2. Programme learning outcomes:
  - 4.2.1 Requirements:  
**The Bachelor's Degree is awarded to the students who have successfully completed all courses in the curriculum, and have obtained a cumulative grade point average of at least 2.00 on a scale of 4.00.**
  - 4.2.2. Objectives:
    - To provide an understanding of the fundamental knowledge in mathematics, science and engineering subjects pertaining to the computer engineering discipline so that our graduates are able to use theoretical and applied information in these areas to model and solve computer engineering problems.
    - To train computer engineers who are able to analyze and design a complex system, process, device or product under realistic constraints and conditions, in such a way as to meet the desired result; who are also aware of social, professional and ethical responsibilities.
    - To enable our graduates who can devise, select, and use modern techniques and tools needed for computer engineering practice with the ability to employ information technologies effectively as an individual or as part of an intra-disciplinary or multi-disciplinary team.
    - To develop recognition of the need for lifelong learning, ability to access information, to follow developments in science and technology, and to continue to educate him/herself.
    - To provide information about business life practices such as project management, risk management, and change management; awareness of entrepreneurship, innovation, and sustainable development.
    - To establish knowledge about contemporary issues and the global and societal effects of engineering practices on health, environment, and safety; awareness of legal consequences of engineering solutions.

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.

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

Code	Duration	Course Name	Course Category	Grade	ÇU Credit	ECTS Credit
<b>Semester 1</b>						
BIO 101	Semesterly	Introduction to Biology	Required	DD	3	5
CENG 105	Semesterly	Computer Engineering Orientation	Required	BB	2	2
CENG 111	Semesterly	Fundamentals of Computer Engineering	Required	BB	4	4
ENG 121	Semesterly	Academic English I	Required	BB	3	4
ESR 101	Semesterly	Ethics and Social Responsibility	Required	BA	1	1
MATH 155	Semesterly	Calculus for Engineering I	Required	BB	4	5
PHYS 131	Semesterly	Physics I	Required	CC	4	6
TURK 101	Semesterly	Turkish I	Required	AA	2	3
<b>Semester 2</b>						
CENG 114	Semesterly	Computer Programming	Required	CC	4	7
CENG 124	Semesterly	Discrete Structures	Required	DD	3	5
ENG 122	Semesterly	Academic English II	Required	AA	3	4
MATH 156	Semesterly	Calculus for Engineering II	Required	BA	4	5
PHYS 132	Semesterly	Physics II	Required	CC	4	6
TURK 102	Semesterly	Turkish II	Required	BA	2	3
<b>Semester 3</b>						
CENG 235	Semesterly	Introduction to Probability and Statistics	Required	BB	3	6
CENG 241	Semesterly	Object Oriented Programming	Required	BA	4	7
ECE 223	Semesterly	Digital Design I + Lab.	Required	BB	4	4
ECE 281	Semesterly	Electrical Circuits and Instrumentation + Lab.	Required	BA	3	6
HIST 201	Semesterly	Principles of Atatürk and History of Turkish Revolution I	Required	CB	2	3
MATH 205	Semesterly	Basic Linear Algebra	Required	CB	3	4
<b>Semester 4</b>						
CEC 210	Semesterly	Fictional Text Analyses	Elective	BA	3	5
CEC 212	Semesterly	Academic Success and Life Skills	Elective	BB	3	5
CEC 226	Semesterly	History of Science	Elective	AA	3	5
CENG 200	Semesterly	Summer Training I	Required	S	-	5
CENG 218	Semesterly	Data Structures	Required	CB	4	7
CENG 222	Semesterly	Computer Organization	Required	BA	3	7
CENG 236	Semesterly	Numerical Analysis	Required	BB	3	6
HIST 202	Semesterly	Principles of Atatürk and History of Turkish Revolution II	Required	CB	2	3
MATH 254	Semesterly	Introduction to Differential Equations	Required	BB	4	4
<b>Semester 5</b>						
CENG 329	Semesterly	Microprocessors	Required	CB	3	6
CENG 361	Semesterly	Innovative Game Design	Elective	CB	3	5
CENG 383	Semesterly	Algorithms	Required	DD	3	6
CENG 393	Semesterly	Computer Networks	Required	CC	3	6
<b>Semester 6</b>						
CENG 300	Semesterly	Summer Training II	Required	S	-	5
CENG 328	Semesterly	Operating Systems	Required	BA	3	7
CENG 344	Semesterly	Introduction to Java Programming	Elective	AA	3	5
CENG 356	Semesterly	Database Management Systems	Required	BB	3	6
CENG 382	Semesterly	Web Development	Required	AA	3	6
CENG 396	Semesterly	Software Engineering	Required	SC	-	6
<b>Semester 7</b>						
CENG 407	Semesterly	Innovative System Design and Development I	Required	AA	2	5
CENG 471	Semesterly	Parallel Computing	Elective	CB	3	5
CENG 491	Semesterly	Formal Languages and Automata	Required	AA	3	6
CENG 497	Semesterly	Computer Graphics	Required	AA	3	5
<b>Semester 8</b>						
CENG 408	Semesterly	Innovative System Design and Development II	Required	AA	2	6
CENG 442	Semesterly	Programming Languages	Required	CB	3	5
CENG 464	Semesterly	Introduction to Data Mining	Elective	AA	3	5
CENG 466	Semesterly	Artificial Intelligence	Required	AA	3	5
CENG 474	Semesterly	Int. to Data Science	Elective	BB	3	5
MAN 432	Semesterly	Management for Engineers	Required	AA	3	4
<b>Total Credits :</b>					<b>136</b>	<b>246</b>

#### 4.4. Grading system and grade distribution table:

The official university grading system uses letter grades. Passing grades range from AA to DD; FF is failing. The descriptions and weights of the grades are:

COURSE GRADE	DESCRIPTION	GRADE POINT	SCORE RANGE	ECTS GRADE
AA	Pass	4.00	90-100	A
BA	Pass	3.50	85-89	B
BB	Pass	3.00	80-84	B
CB	Pass	2.50	70-79	C
CC	Pass	2.00	60-69	C
DC	Conditional Pass	1.50	50-59	D
DD	Conditional Pass	1.00	45-49	E
FD	Fail	0.50	35-44	F
FF	Fail	0.00	00-34	F
NA	Fail	0.00	0	F

Other grades are EX (Exempted), I (Incomplete), P (Progress), S (Satisfactory), U (Unsatisfactory) and W (Withdrawal). Descriptions of these grades are as follows.

(EX) Grade is given to the students who are successful in the English Language Proficiency Examination.

(I) Grade is given to the student who provides evidence through genuine and valid documentation of illness or other reasons which have prevented her/him from completing the necessary course work within 15 days from the day of the last final examination, the student must complete the missing work and obtain a grade. Otherwise the (I) grade will automatically become an (FF). In the case of prolonged illness and similar situations, this period can be extended until the beginning of registration for the next semester on the recommendation of the Head of the Department and approval of the Faculty Executive Council.

(P) Grade is given to the students who are making progress in the courses which carry over for more than one semester.

(S) Grade is given to the students who are successful in the non-credit courses. The grade (S) is also given to the students who have transferred from other Universities or re-registered to the University through the entrance examination conducted by Student Selection and Placement Center, and when these courses are approved as equivalents by the Faculty or School of Higher Education or Vocational Training School Executive Council on the recommendation of the Head of the Department. The (S) grade cannot be given to the student who has transferred, and who is required to repeat a course under the regulations. The (S) grade is not included in computing the grade averages.

(U) Grade is given to the students who are not successful in non-credit courses.

(W) Grade is issued if a student withdraws from a course after the add/drop period within the first 7 weeks of the semester on the recommendation of her/his advisor and with the permission of the Head of the Department, and also with the decision of the School Executive Council concerned.

(GPA) Grade Point Average and (CGPA) Cumulative Grade Point Average :

A student's academic performance is determined at the end of each semester by computing an average of the grades that he/she has received during that semester (GPA) and during all the semesters (CGPA).

#### 4.5. Overall classification of the qualification:

**Cumulative Grade Point Average (CGPA) : 3,07 / 4,00**

**Genel Not Ortalaması : 3,07 / 4,00**

Classification	High Honour	Honour	Satisfactory	Satisfactory
Point	4.00 - 3.50	3.49 - 3.00	2.99 - 2.50	2.49 - 2.00

#### 5. INFORMATION ON THE FUNCTION OF THE QUALIFICATION

5.1. Access to further study:

**May apply to second cycle programmes.**

5.2. Access to a regulated profession:

**This degree enables the holder to exercise the profession.**

#### 6. ADDITIONAL INFORMATION

6.1. Additional information:

**Çankaya University, Faculty of Engineering**

6.2. Further information sources:

- University web site: [www.cankaya.edu.tr](http://www.cankaya.edu.tr)
- Çankaya University General Catalog for Undergraduate and Graduate Programmes (published bi-annually)
- The Council of Higher Education web site: [www.yok.gov.tr](http://www.yok.gov.tr)
- The Turkish ENIC-NARIC web site: <https://www.enic-naric.net/turkey.aspx>
- The Turkish Qualifications Framework web site: <https://www.tyc.gov.tr>