

Graduation requirements for students whose first semester start at or after Fall 2020 are as follows:

1. 177,5 ECTS core courses listed below.
2. At least 6 elective courses. Total credits for these courses must be at least 17,5 ECTS. One of these courses must be an elective course specific to Higher Education Council (HEC) of Turkey. More than one elective courses specific to HEC are not counted for credits but GPA.
3. At least 10 area elective courses. Total credits for these courses must be at least 45 ECTS. Students cannot register to these courses before their fifth semester.
4. Total credits must be at least 240 ECTS.
5. All registered courses must be offered in English. Only if an elective course is not offered in English, you can then register it in Turkish.

(*) Starting from 2021-2022 Fall semester, all students must register to "MAT247 Eng. Mathematics" instead of "BIM313 Adv. Prog. Techniques" regardless of the year of university registration.

(**) Starting from 2021-2022 Fall semester, the minimum required ECTS credits of this course have been updated as 2.0 (instead of 3.0) for the students registered to MAT247 instead of BIM313.

Undergraduate curriculum for the students whose 1st semester will start at or after Fall 2020

I. Semester

Code	Course Name	T	L	E
BIM101	Computer Programming I	3	2	7,0
FIZ105	Physics I	4	0	6,0
FIZ107	Physics Laboratory I	0	2	1,5
KIM113	General Chemistry	4	0	6,0
MAT805	Calculus I	4	2	7,5
TUR125	Turk Dili I	2	0	2,0
Total Credits				30,0

II. Semester

Code	Course Name	T	L	E
BIM102	Computer Programming II	3	0	6,0
BIM122	Discrete Computational Structures	3	0	5,0
FIZ106	Physics II	4	0	6,0
FIZ108	Physics Laboratory II	0	2	1,5
MAT806	Calculus II	4	2	7,5
TUR126	Turk Dili II	2	0	2,0
	Elective Course			2,0
Total Credits				30,0

III. Semester

Code	Course Name	T	L	E
BIM203	Logic Design	4	0	6,0
BIM207	Computer Programming III	2	2	6,0
BIM209	Principles of Software Des. And Dev.	3	0	6,0
BIM213	Data Structures and Algorithms	2	2	5,5
MAT249	Linear Algebra and Differential Equations	3	0	4,5
TAR165	Ataturk İlkeleri ve Inkilap Tarihi I	2	0	2,0
Total Credits				30,0

IV. Semester

Code	Course Name	T	L	E
BIM204	Numeric Analysis for Computer Engineers	3	0	3,5
BIM208	Computer Programming IV	3	0	5,5
BIM222	Internet Programming	3	0	4,5
BIM312	Database Management Systems	3	0	6,0
BIM314	Theory of Computation	3	0	4,5
IST252	Probability and Statistics	3	0	4,0
TAR166	Ataturk İlkeleri ve Inkilap Tarihi II	2	0	2,0
Total Credits				30,0

V. Semester

Code	Course Name	T	L	E
BIM303	Microcomputers	3	2	7,0
BIM305	Computer Organization	3	0	5,0
BIM311	Systems Analysis and Design	3	0	4,5
MAT247	Engineering Mathematics (*)	4	0	7,0
	Elective Course (**)			2,0
	Area Elective Course			4,5
Total Credits				30,0

VII. Semester

Code	Course Name	T	L	E
BIM437	Computer Engineering Design	1	2	4,0
ISG401	Is Sagligi ve Guvenligi I	2	0	2,0
	Elective Courses (2)			6,0
	Area Elective Courses (4)			18,0
Total Credits				30,0

VI. Semester

Code	Course Name	T	L	E
BIM302	Computer Networks	3	0	4,5
BIM304	Computer Algorithm Design	3	0	6,0
BIM306	Operating Systems	3	0	4,5
BIM308	Web Server Programming	3	0	6,0
	Elective Course			4,5
	Area Elective Course			4,5
Total Credits				30,0

VIII. Semester

Code	Course Name	T	L	E
BIM444	Computer Engineering Applications	2	4	7,0
ISG402	Is Sagligi ve Guvenligi II	2	0	2,0
	Elective Course			3,0
	Area Elective Courses (4)			18,0
Total Credits				30,0

Area Elective Courses

Code	Course Name	T	L	E
BIM309	Artificial Intelligence	3	0	4,5
BIM423	Software Engineering	3	2	6,0
BIM439	Applications of DBMS	3	0	4,5
BIM443	Blockchain and Cryptocurrency Techno.	3	0	4,5
BIM451	Web Server Programming with MVC	3	0	4,5
BIM466	Fuzzy Logic	3	0	4,5
BIM470	Neural Networks	3	0	4,5
BIM476	Data Acquisition and Processing	3	0	4,5
BIM485	Research in Computer Science I	3	0	4,5
BIM488	Introduction to Pattern Recognition	3	0	4,5
BIM493	Mobile Programming I	3	0	4,5
BIM446	Analysis of Algorithms	3	0	4,5
BIM450	Network Management	3	0	4,5
BIM452	Multimedia Computing	3	0	4,5
BIM456	Network Security Principles	3	0	4,5
BIM458	Simulation and Modelling	3	0	4,5
BIM460	Software Modelling	3	0	4,5
BIM462	Parallel Systems	3	0	4,5
BIM464	Human-Computer Interaction	3	0	4,5
BIM468	Computer Aided Design	3	0	4,5

BIM405	Project Management	3	0	4,5
BIM445	Enterprise IT Arhitecture	2	0	3,0
BIM448	Computer Graphics	3	0	4,5
BIM454	Programming Language Concepts	3	0	4,5
BIM472	Image Processing	3	0	4,5
BIM478	Management Information Systems	3	0	4,5
BIM486	Research in Computer Science II	3	0	4,5
BIM490	Introduction to Information Retrieval	3	0	4,5
BIM492	Design Patterns	3	0	4,5
BIM494	Mobile Programming II	3	0	4,5
BIM496	Computer Vision	3	0	4,5
BIM474	Introduction to Cryptography	3	0	4,5
BIM480	Compiler Design	3	0	4,5
BIM482	Network Programming	3	0	4,5
BIM484	Distributed Systems	3	0	4,5
EEM305	Signals and Systems	3	0	4,5
EEM334	Digital Systems II	3	0	4,5
MUH302	Interdisciplinary Applications	1	2	4,5
BIM441	Introduction to Rough Sets Theory	3	0	4,5
BIM498	Embedded Software Design	3	0	4,5
BIM453	Introduction to Machine Learning	3	0	4,5

ENM440	Introduction to Data Mining	3	0	4,5
EEM463	Introduction to Image Processing	3	0	5,0

BIM457	Embedded Programming Languages	3	0	5,0
BIM455	Introduction to Hardware Design	3	0	4,5

Elective Courses

Code	Course Name	T	L	E
ALM255	Almanca I	3	0	4,0
ALM256	Almanca II	3	0	4,0
ALM357	Almanca III	3	0	4,0
ALM358	Almanca IV	3	0	4,5
ARK108	Arkeoloji	2	0	2,0
BEO155	Beden Egitimi	2	0	2,0
BIM411	Decision Support Systems	3	0	3,0
FOT202	Fotografcilik	2	0	3,0
FRA255	Fransizca I	3	0	4,0
FRA256	Fransizca II	3	0	4,0
HUK458	Sinai Haklar Sistemi ve Teknolojik Gelisme	3	0	3,0
ILT201	Interpersonal Communication	3	0	4,5
ISN309	Mass Media	3	0	3,0
ISL101	Introduction to Business	3	0	4,5
ISL301	Human Resources Management	3	0	4,0
ISL321	Uygulamali Girismcilik	3	1	5,0
IKT151	Economics	3	0	3,0
IKT356	Engineering Economics	3	0	4,5
ISP151	Ispanyolca I	4	0	4,0
ISP152	Ispanyolca II	4	0	4,0
ESTU115	Fotografik Bakis	2	1	3,0
ESTU116	Bilgisayar Destekli Tasarim I	3	0	3,0
ESTU117	Bilgisayar Destekli Tasarim II	3	0	3,0
ESTU118	Kavramlarla Gorsel Dusunme	3	0	3,0
ESTU119	Flut	3	1	3,0
ESTU120	Solfej	3	1	3,0
ISL475	Tekno-Girismcilik	3	0	4,0
ILT419	Beden Dili ve Diksiyon	2	0	5,0
ESTU106	Proje Yonetimi	2	1	3,0

Code	Course Name	T	L	E
ITA255	Italyanca I	3	0	4,0
ITA256	Italyanca II	3	0	4,0
MUH402	Engineering Ethics	2	0	3,0
MUH404	Innovation Management	3	0	3,0
MUZ151	Muzigin Tarihcesi	2	0	3,0
MUZ157	Turk Sanat Tarihi	2	0	2,0
MUH151	Introduction to Accounting	3	0	4,5
NUM301	Numerical Methods	3	0	3,5
PSI102	Psychology	3	0	3,5
PZL302	Marketing Management	3	0	4,5
RUS255	Rusca I	3	0	4,0
RUS256	Rusca II	3	0	4,0
SNT155	Sanat Tarihi	2	0	2,0
THU203	Topluma Hizmet Uygulamalari	0	2	3,0
TIY121	Tiyatroya Giris	2	0	3,0
TIY152	Tiyatro	2	0	2,5
TIY308	Cumhuriyet Donemi Turk Tiyatrosu	2	0	3,0
TUR120	Turk Isaret Dili	3	0	3,0
ESTU101	Universite Hayatina Giris	0	1	2,0
ESTU102	Negotiation Techniques	2	0	3,0
ESTU103	Seramik Tasarim Surecleri	2	1	3,0
ESTU104	Akademik Basari ve Yasam Becerileri	2	1	3,0
ESTU111	Gonulluluk Calismalari	1	2	4,0
ESTU112	Herkes Icin Siber Guvenlik	2	0	2,0
ESTU113	Tasarim Odakli Dusunme	3	0	2,0
ESTU114	Gorsel Dusunme	3	0	3,0
ESTU121	Piyano	3	1	3,0
ESTU122	Gitar	3	1	3,0
JAP301	Japonca I	4	0	4,0
JAP302	Japonca II	4	0	4,0
ESTU401	Profesyonel Hayata Gecis	1	1	2,0

Abbreviations: T=Theory hours/week | L=Laboratory hours/week | E=ECTS credits