

FACULTY OF ENGINEERING AND NATURAL SCIENCES
2016 / 2017 TEACHING PLAN
DEPARTMENT OF BIOMEDICAL ENGINEERING

1. Semester (autumn)							
Code	Course Title	C/E	T	P	L	C	ECTS
ENG 111	Academic English I	C	2	0	0	2	2
BIO 111	General Biology I	C	2	0	0	2	3
BME 111	Introduction to Biomedical Engineering	C	2	0	0	2	3
CHM 111	General Chemistry	C	3	0	0	3	4
CHM113	General Chemistry Lab.	C	0	0	2	1	2
MAT111	Calculus I	C	4	0	0	4	5
PHY111	Physics I	C	3	0	0	3	4
COM111	Introduction to Computer for Engineering	C	2	2	0	3	4
GEN113	Scientific Orientation	C	1	0	0	1	1
TDI161	Turkish Language and Literature I	C	2	0	0	2	2
TOTAL						23	30

1 st Semester Elective Course List							
Code	Course Title		T	P	L	C	ECTS

2. Semester (spring)							
Code	Course Title	C/E	T	P	L	C	ECTS
ENG112	Academic Writing	C	2	0	0	2	2
BIO112	General Biology II	C	2	0	0	2	3
BIO114	General Biology Lab.	C	0	0	2	1	2
CHM112	Organic Chemistry	C	3	0	0	3	4
MAT112	Calculus II	C	4	0	0	4	5
PHY112	Physics II	C	3	0	0	3	4
PHY114	Physics Lab.	C	0	0	2	1	2
COM112	Computer Programming for Engineering	C	2	2	0	3	4
TDI162	Turkish Language and Literature II	C	2	0	0	2	2
BMEXXX	Technical Elective Course II	E	2	0	0	2	2
TOTAL						23	30

2 nd Semester Elective Course List							
Code	Course Title		T	P	L	C	ECTS
GEN112	Introduction to Cell Biology		2	0	0	2	2
BME152	MATLAB		2	0	0	2	2

3. Semester (autumn)							
Code	Course Title	C/E	T	P	L	C	ECTS
BME211	Circuit Theory I	C	3	0	0	3	5
BME213	Circuit Theory I Lab.	C	0	0	2	1	2
BME215	Mathematics for Engineers	C	3	0	0	3	5
BME217	Electronics	C	3	0	0	3	5
BME219	Electronics Lab.	C	0	0	2	1	2
ATA151	Atatürk's Prin. and His. of Turkish Revolution I	C	2	0	0	2	2
BMEXXX	Technical Elective Course III	E	6	0	0	6	9
TOTAL						19	30

3 rd Semester Elective Course List							
Code	Course Title		T	P	L	C	ECTS
BME251	Introduction to Human Physiology		2	0		2	3
BME253	Biophysics		2	0		2	3
BME255	Biostatistic		2	0		2	3
BME257	Recent Topics in BME		2	0		2	3
BME259	Radiation Physics		2	0		2	3

4. Semester (spring)							
Code	Course Title	C/E	T	P	L	C	ECTS
BME212	Circuit Theory II	C	3	0	0	3	5
BME214	Logic Design	C	3	0	0	3	5
BME216	Logic Design Lab.	C	0	0	2	1	2
BME218	Signals and Systems	C	3	0	0	3	5
BME220	Introduction to Bioinformatics	C	2	2	0	3	5
ATA152	Atatürk's Prin. and His. of Turkish Revolution I	C	2	0	0	2	2
BMEXXX	Technical Elective Course IV	E	4	0	0	4	6
						TOTAL	19 30

4 th Semester Elective Course List							
Kodu	Dersin Adı		T	P	L	C	ECTS
BME252	Human Anatomy		2	0	0	2	3
BME254	Introduction to Material Science		2	0	0	2	3
BME256	Object Oriented Programming		2	0	0	2	3

5. Semester (autumn)							
Code	Course Title	C/E	T	P	L	C	ECTS
BME311	Microprocessor and Microcontrollers	C	3	0	0	3	4
BME313	Microprocessor and Microcontrollers Lab.	C	0	0	2	1	2
BME315	Electromagnetism	C	3	0	0	3	5
BME317	Fluid Mechanics and Mass Transfer	C	3	0	0	3	5
BMEXXX	Technical Elective Course V	E	9	0	0	9	12
BMEXXX	Non-Technical Elective Course V	E	2	0	0	2	2
						TOTAL	21 30

5 th Semester Elective Course List							
Code	Course Title		T	P	L	C	ECTS
BME351	Biomechanics		3	0	0	3	4
BME353	Biomaterials		3	0	0	3	4
BME355	Biotechnology		3	0	0	3	4
BME357	Quality Control and Manangmend		3	0	0	3	4
BME359	History of Science		2	0	0	2	2
BME361	Phylosophy of Science		2	0	0	2	2

6. Semester (spring)							
Code	Course Title	C/E	T	P	L	C	ECTS
BME312	Biomedical Sensors	C	3	0	0	3	5
BME314	Biomedical Instruments	C	3	0	0	3	4
BME316	Biomedical Instruments Lab.	C	0	0	2	1	2
BME318	Physiological Control Systems	C	3	0	0	3	5
BMEXXX	Technical Elective Course VI	E	9	0	0	9	12
BMEXXX	Non-Technical Elective Course VI	E	2	0	0	2	2
						TOTAL	21 30

6 th Semester Elective Course List							
Code	Course Title		T	P	L	C	ECTS
BME352	Biopolymers		3	0	0	3	4
BME354	Machine informatics		3	0	0	3	4
BME356	Numerical Methods		3	0	0	3	4
BME358	Cell Culture Techniques		3	0	0	3	4
BME360	Engineering Economy		2	0	0	2	2
BME362	Entreprenaturship and Leadership		2	0	0	2	2

7. Semester (autumn)							
Code	Course Title	C/E	T	P	L	C	ECTS
BME411	Internship	C	0	0	0	0	8
BME413	Biomedical Design and Application I	C	2	2	0	3	5
BME415	Medical Imaging and Image Processing and Application	C	3	2	0	4	5
BMEXXX	Technical Elective Course VII	E	9	0	0	9	12
						TOTAL	16 30

7 th Semester Elective Course List							
Code	Course Title		T	P	L	C	ECTS
BME451	Medical Implants		3	0	0	3	4
BME453	Nanotechnology-Nanomaterials		3	0	0	3	4
BME455	Artificial Organs and Life Support System		3	0	0	3	4
BME457	Biomedical Optics		3	0	0	3	4
BME459	Medical Device Calibration						


8. Semester (spring)							
Code	Course Title	C/E	T	P	L	C	ECTS
BME412	Graduation Project	C	0	0	0	0	9
BME414	Biomedical Design and Application II	C	2	2	0	3	5
BMEXXX	Technical Elective Course VIII	E	12	0	0	12	16
						TOTAL	15 30

8 th Semester Elective Course List							
Code	Course Title		T	P	L	C	ECTS
BME452	Nanoengineering		3	0	0	3	4
BME454	Artificial Intelligent Systems		3	0	0	3	4
BME456	Robotics for Healthcare		3	0	0	3	4
BME458	Drug Target and Controlled Released Systems		3	0	0	3	4
BME460	Doppler Technique and Applications		3	0	0	3	4
BME462	Data Mining		3	0	0	3	4

UNIVERCITY ELECTIVE COURSE LIST

Code	Course Title		T	P	L	C	ECTS
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 University Elective Courses

 Department Elective Courses

 Department compulsory courses

ATA101 PRINC.OF ATATÜRK AND HISTORY OF TURKISH REVOLUTION I 2 AKTS
ATA102 PRINC.OF ATATÜRK AND HISTORY OF TURKISH REVOLUTION II 2 AKTS
TRD101 TURKISH LANGUAGE I 2 AKTS
TRD102 TURKISH LANGUAGE II 2 AKTS

2014-2015

ENG101 ENGLISH I 19 AKTS (GÜZ)
ENG102 ENGLISH II 19 AKTS (BAHAR)

2015-2016

ENG001 ENGLISH I 16 AKTS (GÜZ)
ENG003 ENGLISH I 12 AKTS (GÜZ)
ENG005 ENGLISH I 10 AKTS (GÜZ)
ENG007 ENGLISH I 3 AKTS (GÜZ)
ING152 ENGLISH II 3 AKTS (BAHAR)
ENG004 ENGLISH II 12 AKTS (BAHAR)
ENG006 ENGLISH II 10 AKTS (BAHAR)
ENG008 ENGLISH II 16 AKTS (BAHAR)

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