



Kafkas Üniversitesi
FACULTY OF ENGINEERING AND ARCHITECTURE

Bioengineering
Biyomühendislik

1.Semester Course Plan				
Course Code	Course Name	T+A+L	Compulsory/Elective	ECTS
20100AİT-1012021	ATATÜRK HISTORY OF PRINCIPLES AND REVOLUTIONS-I	2+0+0	Compulsory	1
20100BM-1012021	GENERAL BIOLOGY	3+0+2	Compulsory	6
20100BM-1032021	INTRODUCTION TO BIOENGINEERING	3+0+0	Compulsory	3
20100BM-1042021	BASIC COMPUTER TECHNOLOGIES	0+2+0	Compulsory	1
20100FİZ-1012021	PHYSICAL-I	3+0+2	Compulsory	6
20100KİM-1012021	GENERAL CHEMISTRY	3+0+2	Compulsory	6
20100MAT-1012021	MATHEMATICS-I	4+0+0	Compulsory	6
20100MMF-KP2021	CAREER PLANNING	1+0+0	Compulsory	2
20100TD-1012021	TURKISH LANGUAGE-I	2+0+0	Compulsory	1
Total ECTS				32

2.Semester Course Plan				
Course Code	Course Name	T+A+L	Compulsory/Elective	ECTS
20100AİT-1022021	ATATÜRK'S PRINCIPLE AND HISTORY OF REVOLUTION-II	2+0+0	Compulsory	1
20100BM-1022021	CELL BIOLOGY FOR BIOMENERS	3+0+2	Compulsory	5
20100FİZ-1022021	PHYSICS-II	3+0+2	Compulsory	6
20100KİM-1022021	ORGANIC CHEMISTRY	3+0+0	Compulsory	4
20100KİM-1032021	PHYSICO-CHEMISTRY	3+0+0	Compulsory	5
20100MAT-1022021	MATHEMATICS-II	4+0+0	Compulsory	5
20100MF-TRS2021	TECHNICAL DRAWING	1+2+0	Compulsory	3
20100TD-1022021	TURKISH LANGUAGE-II	2+0+0	Compulsory	1
Total ECTS				30

3.Semester Course Plan				
Course Code	Course Name	T+A+L	Compulsory/Elective	ECTS
20100BM-2012021	BIOCHEMISTRY FOR BIOMENERS	3+0+2	Compulsory	4
20100BM-2032021	MOLECULAR BIOLOGY-I	2+0+2	Compulsory	4
20100BM-2052021	MICROBIOLOGY	3+0+2	Compulsory	4
20100MAT-2012021	DIFFERENTIAL EQUATIONS	3+0+0	Compulsory	5
20100MF-BİL2021	COMPUTER PROGRAMMING	1+2+0	Compulsory	4
20100MF-ELK2021	ELECTRICAL AND ELECTRONIC INFORMATION	2+0+0	Compulsory	3
20100MF-2052021	THERMODYNAMICS FOR BIOMENERS	3+0+0	Compulsory	5
20100YD-2012021	FOREIGN LANGUAGE-I	2+0+0	Compulsory	1
Total ECTS				30

4.Semester Course Plan				
Course Code	Course Name	T+A+L	Compulsory/Elective	ECTS
20100BM-2062021	BIOREACTORS	3+0+0	Compulsory	5
20100MF-IST2021	STATISTICS AND PROBABILITY	2+1+0	Compulsory	4
20100MF-2062021	HEAT TRANSFER	3+0+0	Compulsory	5
Total ECTS				14

5.Semester Course Plan				
Course Code	Course Name	T+A+L	Compulsory/Elective	ECTS
20100BM-3012021	BIOMATERIALS	3+0+0	Compulsory	5
20100BM-3022021	APPLIED GENOMIC AND PROTEOMIC	2+0+3	Compulsory	5
20100BM-3032021	BIOMEDICAL ENGINEERING	3+0+0	Compulsory	5
20100BM-3042021	BIOMENGINEERING LAB-I	0+0+2	Compulsory	3
20100MF-MAT2021	ENGINEERING MATHEMATICS	3+0+0	Compulsory	5
20100BMS-3012021	DEPARTMENT ELECTIVE COURSE I	-	Elective	4
20100BMS-302022	DEPARTMENT ELECTIVE COURSE II	-	Elective	4
Total ECTS				31

20100BMS-301021	BIOSENSORS	3+0+0	Elective	4
20100BMS-302021	SPECIAL TOPICS IN MOLECULAR BIOLOGY	3+0+0	Elective	4

6.Semester Course Plan				
Course Code	Course Name	T+A+L	Compulsory/Elective	ECTS
20100BM-3052021	GENETIC ENGINEERING	3+0+0	Compulsory	4

20100BM-3062021 BIOMEDICAL PHYSIOLOGY FOR BIOMEDUCTORS	3+0+0	Compulsory	5
20100BM-3082021 ACADEMIC ENGLISH	3+0+0	Compulsory	4
20100MF-3022021 FLUID MECHANICS	3+0+0	Compulsory	5
20100MF-3072021 BIOMENGINEERING LABORATORY-II	0+0+2	Compulsory	3
20100BMS-303202 DEPARTMENT ELECTIVE COURSE III	-	Compulsory	4
Total ECTS			25

7.Semester Course Plan

Course Code	Course Name	T+A+L	Compulsory/Elective	ECTS
20100BM-4022021	TISSUE ENGINEERING	3+0+0	Compulsory	5
20100BM-4042021	FINAL THESIS PROJECT-I	0+2+0	Compulsory	6
20100BM-4052021	INTRODUCTION TO BIOTECHNOLOGY	3+0+0	Compulsory	5
20100BM-4062021	BIOMENGINEERING MAIN DESIGN-I	2+0+0	Compulsory	4
20100MF-IGE2021	OCCUPATIONAL SAFETY AND ENGINEERING ETHICS	2+0+0	Compulsory	4
Total ECTS				24

8.Semester Course Plan

Course Code	Course Name	T+A+L	Compulsory/Elective	ECTS
20100BM-4072021	FINAL THESIS PROJECT II	0+2+0	Compulsory	6
20100BM-4092021	BIOMENGINEERING MAIN DESIGN II	2+0+0	Compulsory	4
20100BM-4102021	ACADEMIC WRITING	3+0+0	Compulsory	4
20100BM-4112021	BİYOİNFORMATİK	2+2+0	Compulsory	4
20100BMS-403202	DEPARTMENT ELECTIVE COURSE IV	-	Compulsory	4
20100BMS-404202	DEPARTMENT ELECTIVE COURSE VII	-	Compulsory	4
Total ECTS				26

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