



Alanya Alaaddin Keykubat Üniversitesi

RAFET KAYIS FACULTY OF ENGINEERING

DEPARTMENT OF BIOSYSTEMS ENGINEERING

BİYOSİSTEM MÜHENDİSLİĞİ

1.Semester Course Plan				
Course Code	Course Name	T+A+L	Compulsory/Elective	ECTS
ATA 101	PRINCIPLES OF ATATURK AND HISTORY OF TURKISH REVOLUTION I	2+0+0	Compulsory	2
BSM 105	BOTANICAL	2+2+0	Compulsory	4
BSM 101	PHYSICS I	3+0+0	Compulsory	4
BSM 103	MATHEMATICS I	4+0+0	Compulsory	5
BSM 107	CHEMICAL	3+0+0	Compulsory	4
BSM 109	INTRODUCTION TO BIOSYSTEM ENGINEERING	2+0+0	Compulsory	3
BSM 111	USE OF BASIC INFORMATION TECHNOLOGIES	1+1+0	Compulsory	2
ING 101	ENGLISH I	2+0+0	Compulsory	2
TDB 101	TURKISH LANGUAGE I	2+0+0	Compulsory	2
SEC 101	ELECTIVE GENERAL CULTURE COURSES	2+0+0	Elective	2
			Total ECTS	30
Course Groups				
KRP 102.1	CAREER PLANNING	2+0+0	Elective	2
SEC 101.1	HISTORY OF ART	2+0+0	Elective	2
SEC 101.10	BASKETBALL	2+0+0	Elective	2
SEC 101.11	TENNIS	2+0+0	Elective	2
SEC 101.12	TABLE TENNIS	2+0+0	Elective	2
SEC 101.13	FOLK DANCES	2+0+0	Elective	2
SEC 101.14	MUSIC CULTURE	2+0+0	Elective	2
SEC 101.15	ARTS&PAINTING	2+0+0	Elective	2
SEC 101.16	DİĞİTAL DESİGN	2+0+0	Compulsory	2
SEC 101.17	THEATER AND CINEMA	2+0+0	Elective	2
SEC 101.18	HEALTHY LIFESTYLE	2+0+0	Elective	2
SEC 101.19	NUTRITION	2+0+0	Elective	2
SEC 101.2	SCIENCE HISTORY AND PHILOSOPHY	2+0+0	Elective	2
SEC 101.20	MEDIA LITERACY	2+0+0	Elective	2
SEC 101.21	MATHEMATICAL AESTHETICS	2+0+0	Elective	2
SEC 101.22	INDUSTRIAL DESIGN	2+0+0	Elective	2
SEC 101.23	BASIC PHOTOGRAPHY	2+0+0	Elective	2
SEC 101.24	SURFING	2+0+0	Elective	2
SEC 101.25	MYTHOLOGY	2+0+0	Elective	2
SEC 101.26	ANCIENT CITIES	2+0+0	Elective	2
SEC 101.27	SOCIOLOGY	2+0+0	Elective	2
SEC 101.28	PHILOSOPHY	2+0+0	Elective	2
SEC 101.29	TREKKING	2+0+0	Elective	2
SEC 101.3	DISASTER CONSCIOUSNESS	2+0+0	Elective	2
SEC 101.30	ANCIENT DNA: THE TRAIL OF THE PAST	2+0+0	Elective	2
SEC 101.31	GENETIC HERITAGE	2+0+0	Elective	2
SEC 101.32	MODERN GENETIC APPLICATIONS: GENE CLONING	2+0+0	Elective	2
SEC 101.33	KUANTUM DÜŞÜNCE VE BİLİNÇALTI DÖNÜŞÜM: ZİHNİ YENİDEN PROGRAML	2+0+0	Elective	2
SEC 101.4	EFFECTIVE AND GOOD SPEECH	2+0+0	Elective	2
SEC 101.5	BASIC FIRST AID AND EMERGENCY EDUCATION	2+0+0	Elective	2
SEC 101.6	ARCHERY	2+0+0	Elective	2
SEC 101.7	BOXING, KARATE AND TAEKWONDO	2+0+0	Elective	2
SEC 101.8	FOOTBALL	2+0+0	Elective	2
SEC 101.9	VOLLEYBALL	2+0+0	Elective	2
2.Semester Course Plan				
Course Code	Course Name	T+A+L	Compulsory/Elective	ECTS
ATA 102	ATATURK'S PRINCIPLES AND REVOLUTION HISTORY II	2+0+0	Compulsory	2
BSM 102	PHYS II	3+0+0	Compulsory	4
BSM 104	MATHEMATICS II	4+0+0	Compulsory	5
BSM 106	METEOROLOGY	2+0+0	Compulsory	3
BSM 108	CAREER PLANNING	2+0+0	Compulsory	2
BSM 110	ECOLOGY	2+0+0	Compulsory	3
BSM 112	GENERAL ECONOMY	3+0+0	Compulsory	5
ING 102	ENGLISH II	2+0+0	Compulsory	2
TDB 102	TURKISH LANGUAGE II	2+0+0	Compulsory	2
SEC 102	ELECTIVE GENERAL CULTURE COURSES	2+0+0	Elective	2

				Total ECTS	30
Course Groups					
KRP 102.2	CAREER PLANNING	2+0+0	Elective	2	
SEC 102.1	HISTORY OF ART	2+0+0	Elective	2	
SEC 102.10	BASKETBALL	2+0+0	Elective	2	
SEC 102.11	TENNIS	2+0+0	Elective	2	
SEC 102.12	TABLE TENNIS	2+0+0	Elective	2	
SEC 102.13	FOLK DANCES	2+0+0	Elective	2	
SEC 102.14	MUSIC CULTURE	2+0+0	Elective	2	
SEC 102.15	ARTS&PAINTING	2+0+0	Elective	2	
SEC 102.16	DIGITAL DESIGN	2+0+0	Elective	2	
SEC 102.17	THEATER AND CINEMA	2+0+0	Elective	2	
SEC 102.18	HEALTHY LIFESTYLE	2+0+0	Elective	2	
SEC 102.19	NUTRITION	2+0+0	Elective	2	
SEC 102.2	HISTORY AND PHILOSOPHY OF SCIENCE	2+0+0	Elective	2	
SEC 102.20	MEDIA LITERACY	2+0+0	Elective	2	
SEC 102.21	MATHEMATICAL AESTHETICS	2+0+0	Elective	2	
SEC 102.22	INDUSTRIAL DESIGN	2+0+0	Elective	2	
SEC 102.23	BASIC PHOTOGRAPHY	2+0+0	Elective	2	
SEC 102.24	SURFING	2+0+0	Elective	2	
SEC 102.25	MYTHOLOGY	2+0+0	Elective	2	
SEC 102.26	ANCIENT CITIES	2+0+0	Elective	2	
SEC 102.27	SOCIOLOGY	2+0+0	Elective	2	
SEC 102.28	PHILOSOPHY	2+0+0	Elective	2	
SEC 102.29	TREKKING	2+0+0	Elective	2	
SEC 102.3	DISASTER CONSCIOUSNESS	2+0+0	Elective	2	
SEC 102.30	ANCIENT DNA: HISTORY OF THE PAST	2+0+0	Elective	2	
SEC 102.31	GENETIC HERITAGE	2+0+0	Elective	2	
SEC 102.32	MODERN GENETIC APPLICATIONS: GENE CLONING	2+0+0	Elective	2	
SEC 102.4	ELOQUENT SPEECH	2+0+0	Elective	2	
SEC 102.5	BASIC FIRST AID AND EMERGENCY	2+0+0	Elective	2	
SEC 102.6	ARCHERY	2+0+0	Elective	2	
SEC 102.7	BOXING, KARATE AND TAEKWONDO	2+0+0	Elective	2	
SEC 102.8	FOOTBALL	2+0+0	Elective	2	
SEC 102.9	VOLLEYBALL	2+0+0	Elective	2	

3.Semester Course Plan				
Course Code	Course Name	T+A+L	Compulsory/Elective	ECTS
BSM 201	DIFFERENTIAL EQUATIONS	4+0+0	Compulsory	5
BSM 203	STATIC	3+0+0	Compulsory	4
BSM 205	MATERIAL SCIENCE	3+0+0	Compulsory	4
BSM 207	STATISTICS	3+0+0	Compulsory	3
BSM 209	HYDROLOGY	1+2+0	Compulsory	3
BSM 211	VOCATIONAL ENGLISH I	2+0+0	Compulsory	3
SEC 201	FIELD ELECTIVE COURSES I	4+4+0	Elective	8

Total ECTS 30

Course Groups				
BSM 201.1	GOOD AGRICULTURAL PRACTICES	2+2+0	Elective	4
BSM 201.2	AGRICULTURE 4.0	2+2+0	Elective	4
BSM 201.3	DROUGHT AND CLIMATE CHANGE	2+2+0	Elective	4

4.Semester Course Plan				
Course Code	Course Name	T+A+L	Compulsory/Elective	ECTS
BSM 202	SOIL INFORMATION	3+0+0	Compulsory	4
BSM 204	RESISTANCE	3+0+0	Compulsory	4
BSM 206	COMPUTER AIDED DRAWING	2+2+0	Compulsory	4
BSM 208	DYNAMIC	3+0+0	Compulsory	4
BSM 210	MEASUREMENT INFORMATION I	2+2+0	Compulsory	4
BSM 212	HYDRAULIC	2+1+0	Compulsory	3
BSM 214	VOCATIONAL ENGLISH II	2+0+0	Compulsory	3
SEC 202	FIELD ELECTIVE COURSES II	4+0+0	Elective	8

Total ECTS 34

Course Groups				
BSM 202.1	RESEARCH TRIAL METHODS	2+0+0	Elective	2
BSM 202.2	METHODS OF CONTROL WITH PLANT PESTS	2+0+0	Elective	2
BSM 202.3	INFORMATION SYSTEMS	2+0+0	Elective	2

5.Semester Course Plan				
Course Code	Course Name	T+A+L	Compulsory/Elective	ECTS

BSM 301	DRAINAGE AND LAND IMPROVEMENT	3+0+0	Compulsory	4
BSM 303	BASIC PRINCIPLES OF IRRIGATION ENGINEERING	3+0+0	Compulsory	4
BSM 305	PROFESSIONAL PRACTICES I	0+4+0	Compulsory	2
BSM 307	IRRIGATION SYSTEMS I	2+2+0	Compulsory	5
BSM 309	GREENHOUSE DESIGN	1+2+0	Compulsory	3
BSM 311	PLANT NUTRITION	2+0+0	Compulsory	3
BSM 313	WATER QUALITY AND SALT	2+1+0	Compulsory	3
SEC 301	ELECTIVE FIELD COURSES III	6+0+0	Elective	18

Total ECTS 42

Course Groups

BSM 301.1	SOIL PHYSICS	2+0+0	Elective	2
BSM 301.2	SOILLESS AGRICULTURE	2+0+0	Elective	2
BSM 301.3	GEOGRAPHICAL INFORMATION SYSTEMS	2+0+0	Elective	2
BSM 301.4	REUSE OF WASTE WATER IN AGRICULTURE	2+0+0	Elective	2
BSM 301.5	OPERATION AND MANAGEMENT IN IRRIGATION NETWORKS	2+0+0	Elective	2
BSM 301.6	ENERGY RECOVERY SYSTEMS	2+0+0	Elective	2

6.Semester Course Plan

Course Code	Course Name	T+A+L	Compulsory/Elective	ECTS
BSM 302	RENEWABLE ENERGY SOURCES	2+1+0	Compulsory	5
BSM 304	DESIGN OF BUILDING ELEMENTS	2+0+0	Compulsory	3
BSM 306	SOIL MECHANICS	3+0+0	Compulsory	4
BSM 308	PROFESSIONAL PRACTICES II	0+4+0	Compulsory	2
BSM 310	IRRIGATION SYSTEMS II	2+2+0	Compulsory	5
BSM 312	ENVIRONMENTAL CONTROL IN AGRICULTURAL BUILDINGS	3+0+0	Compulsory	5
SEC 302	ELECTIVE FIELD COURSES IV	6+0+0	Elective	18

Total ECTS 42

Course Groups

BSM 302.1	BIOFUEL PRODUCTION TECHNOLOGY	2+0+0	Elective	2
BSM 302.10	SOILLESS AGRICULTURE	2+0+0	Elective	2
BSM 302.2	SOIL AND WATER RESOURCES PLANNING	2+0+0	Elective	2
BSM 302.3	SOLAR ENERGY SYSTEMS AND DESIGN	2+0+0	Elective	2
BSM 302.4	IRRIGATION IN RECREATIONAL AREAS	2+0+0	Elective	2
BSM 302.5	MEASUREMENT TECHNIQUES IN ENERGY SYSTEMS	1+0+0	Elective	2
BSM 302.6	WATER STRATEGIES AND LAWS	2+0+0	Elective	2
BSM 302.7	WIND ENERGY AND CONVERSION TECHNOLOGIES	2+0+0	Elective	2
BSM 302.8	MODERN IRRIGATION METHODS	2+0+0	Elective	2
BSM 302.9	AGRICULTURAL TRACTORS	5+0+0	Elective	2

7.Semester Course Plan

Course Code	Course Name	T+A+L	Compulsory/Elective	ECTS
BSM 401	OCCUPATIONAL HEALTH AND SAFETY I	2+0+0	Compulsory	2
BSM 403	GRADUATION STUDY I	0+4+0	Compulsory	6
BSM 405	AGRICULTURAL STRUCTURES	2+2+0	Compulsory	6
SEC 401	FIELD ELECTIVE COURSES V	8+4+0	Elective	64

Total ECTS 78

Course Groups

BSM 401.1	VOCATIONAL ENGLISH III	2+0+0	Elective	4
BSM 401.10	PROJECT PREPARATION TECHNIQUES	2+2+0	Elective	4
BSM 401.2	STATISTICAL ANALYSIS METHODS	2+0+0	Elective	4
BSM 401.3	ENVIRONMENTAL IMPACT ASSESSMENT	2+0+0	Elective	4
BSM 401.4	AGRICULTURAL ENVIRONMENTAL POLLUTION AND WATER QUALITY	2+2+0	Elective	4
BSM 401.5	SOIL WORKING SYSTEMS AND MACHINES	2+2+0	Elective	4
BSM 401.6	SOIL AND WATER STRUCTURES	2+2+0	Elective	4
BSM 401.7	IRRIGATION OPERATION AND MANAGEMENT	2+2+0	Elective	4
BSM 401.8	AUTOMATION IN BIOSYSTEMS	2+2+0	Elective	4
BSM 401.9	BASIN MANAGEMENT	2+2+0	Elective	4

8.Semester Course Plan

Course Code	Course Name	T+A+L	Compulsory/Elective	ECTS
BSM 402	LAND CONSOLIDATION	2+2+0	Compulsory	6
BSM 404	GRADUATION STUDY II	0+4+0	Compulsory	6
BSM 406	OCCUPATIONAL HEALTH AND SAFETY II	1+0+0	Compulsory	2
SEC 402	FIELD ELECTIVE COURSES VI	8+4+0	Elective	64

Total ECTS 78

Course Groups

BSM 402.1	VOCATIONAL ENGLISH IV	2+0+0	Elective	4
BSM 402.10	BUILDING PROJECTING IN BIOSYSTEMS	2+2+0	Elective	4
BSM 402.2	PRECISION AGRICULTURE	2+0+0	Elective	4

BSM 402.3	PLANNING OF WATER RESOURCES	2+0+0	Elective	4
BSM 402.4	RURAL SETTLEMENT PLANNING	2+0+0	Elective	4
BSM 402.5	WATER POLICIES	2+2+0	Elective	4
BSM 402.6	PROJECTING IN ANIMAL SHELTERS	2+2+0	Elective	4
BSM 402.7	PRODUCT PROCESSING MACHINES	2+2+0	Elective	4
BSM 402.8	WATER STRATEGIES AND LAWS	2+2+0	Elective	4
BSM 402.9	MECHANIZATION SELECTION AND MODEL PLANNING FOR BIOSYSTEMS	2+2+0	Elective	4