

Mühendislik Fakültesi**Biyomühendislik (İngilizce) - Dönemlik****Lisans - Biyomühendislik (İngilizce) - 2015****Genel Toplam****Ders Adedi :54****T : 126****U : 38****Kredi : 260****ECTS : 260****T+U : 164****YABANCI DİL HAZIRLIK**

No	Ders Kodu	Ders Adı	T	U	Kredi	ECTS
1	YDIO001	Yabancı Dil Yeterlik (İngilizce)	0	0	0	0

1. YARIYIL

No	Ders Kodu	Ders Adı	T	U	Kredi	ECTS
1	ATA121	Atatürk İlkeleri ve İnkılap Tarihi I	2	0	2	2
2	BIOE1000	Introduction to Bioengineering	2	0	3	3
3	CHEM1007	Basic Chemistry	4	0	6	6
4	CSE1121	Scientific Programming	3	2	5	5
5	MATH1001	Calculus I	4	0	6	6
6	PHYS1101	Physics I	3	0	4	4
7	PHYS1103	Physics Lab I	0	2	2	2
8	TRD121	Türk Dili I	2	0	2	2
Toplam			20	4	30,00	30,00

2. YARIYIL

No	Ders Kodu	Ders Adı	T	U	Kredi	ECTS
1	ATA122	Atatürk İlkeleri ve İnkılap Tarihi II	2	0	2	2
2	BIOE1011	General Biology for Engineers	2	2	6	6
3	BIOE1110	Introduction to Biomedical Engineering and Instrumentation	3	0	5	5
4	BIOE-NTE1	Non-Technical Elective - 1 (Ders 1) [Bu ders BIOE-NTE1 ders grubundan alınacaktır, aşağıya bakınız]	2	0	3	3
5	MATH1002	Calculus II	4	0	6	6
6	PHYS1102	Physics II	3	0	4	4
7	PHYS1104	Physics Lab II	0	2	2	2
8	TRD122	Türk Dili II	2	0	2	2
Toplam			18	4	30,00	30,00

3. YARIYIL

No	Ders Kodu	Ders Adı	T	U	Kredi	ECTS
1	BIOE2001	Microbiology for Bioengineers	2	2	6	6
2	BIOE2011	Bioengineering Principles	3	0	6	6
3	BIOE2113	Biochemistry for Bioengineers I	3	2	7	7
4	ECON2003	Introduction to Economics	3	0	4	4
5	MATH2055	Differential Equations	3	0	4	4
6	NTE_2	Non-Technical Elective - 2 (Ders 1) [Bu ders NTE_2 ders grubundan alınacaktır, aşağıya bakınız]	2	0	3	3
Toplam			16	4	30,00	30,00

4. YARIYIL

No	Ders Kodu	Ders Adı	T	U	Kredi	ECTS
1	BIOE2062	Mathematical Applications in Bioengineering Systems	2	2	6	6
2	BIOE2102	Molecular Biology and Genetics	3	2	7	7
3	BIOE2114	Biochemistry for Bioengineers II	3	2	7	7
4	NTE_3	Non-Technical Elective - 3 (Ders 1) [Bu ders NTE_3 ders grubundan alınacaktır, aşağıya bakınız]	2	0	3	3
5	NTE_4	Non-Technical Elective - 4 (Ders 1) [Bu ders NTE_4 ders grubundan alınacaktır, aşağıya bakınız]	2	0	3	3
6	STAT2052	Biostatistics	3	0	4	4
Toplam			15	6	30,00	30,00

5. YARIYIL

No	Ders Kodu	Ders Adı	T	U	Kredi	ECTS
1	BIOE3000	Summer Practice I	0	0	10	10
2	BIOE3011	Bioengineering Lab I	0	4	5	5
3	BIOE3015	Biotransport Phenomena I	3	0	5	5
4	BIOE3041	Bioreaction Engineering	3	0	6	6
5	BIOE3081	Bioengineering Thermodynamics	3	0	6	6
6	ENG-UE	University Elective (Ders 1) [Bu ders ENG-UE ders grubundan alınacaktır, aşağıya bakınız]	2	0	3	3
7	TE_1	Technical Elective - 1 (Ders 1) [Bu ders TE_1 ders grubundan alınacaktır, aşağıya bakınız]	3	0	5	5
Toplam			14	4	40,00	40,00

6. YARIYIL

No	Ders Kodu	Ders Adı	T	U	Kredi	ECTS
1	BIOE3012	Bioengineering Lab II	0	4	5	5
2	BIOE3016	Biotransport Phenomena II	3	0	5	5
3	BIOE3036	Integrated Downstream Processing	3	0	5	5
4	BIOE3056	Bioprocess Dynamics and Control	3	0	5	5
5	TE_2,3	Technical Elective - 2,3 (Ders 1) [Bu ders TE_2,3 ders grubundan alınacaktır, aşağıya bakınız]	3	0	5	5
6	TE_2,3	Technical Elective - 2,3 (Ders 2) [Bu ders TE_2,3 ders grubundan alınacaktır, aşağıya bakınız]	3	0	5	5
Toplam			15	4	30,00	30,00

7. YARIYIL

No	Ders Kodu	Ders Adı	T	U	Kredi	ECTS
1	BIOE4000	Summer Practice II	0	0	10	10
2	BIOE4067	Biochemical Technology	3	0	5	5
3	BIOE4191	Bioprocess Design I	3	2	7	7
4	BIOE4197	Bioengineering Project I	0	4	6	6
5	ISG121	İş Sağlığı ve Güvenliği I	2	0	2	2
6	TE_4,5	Technical Elective - 4,5 (Ders 1) [Bu ders TE_4,5 ders grubundan alınacaktır, aşağıya bakınız]	3	0	5	5
7	TE_4,5	Technical Elective - 4,5 (Ders 2) [Bu ders TE_4,5 ders grubundan alınacaktır, aşağıya bakınız]	3	0	5	5
Toplam			14	6	40,00	40,00

Mühendislik Fakültesi

Biyomühendislik (İngilizce) - Dönemlik

Lisans - Biyomühendislik (İngilizce) - 2015

Genel Toplam

Ders Adedi :54

T : 126

U : 38

Kredi : 260

ECTS : 260

T+U : 164

8. YARIYIL

No	Ders Kodu	Ders Adı	T	U	Kredi	ECTS
1	BIOE4192	Bioprocess Design II	3	2	7	7
2	BIOE4198	Bioengineering Project II	0	4	6	6
3	ENG-FTE	Faculty Technical Electives (Ders 1) <small>[Bu ders ENG-FTE ders grubundan alınacaktır, aşağıya bakınız]</small>	3	0	5	5
4	ISG122	İş Sağlığı ve Güvenliği II	2	0	2	2
5	TE_6,7	Technical Elective - 6-7 (Ders 1) <small>[Bu ders TE_6,7 ders grubundan alınacaktır, aşağıya bakınız]</small>	3	0	5	5
6	TE_6,7	Technical Elective - 6-7 (Ders 2) <small>[Bu ders TE_6,7 ders grubundan alınacaktır, aşağıya bakınız]</small>	3	0	5	5
Toplam			14	6	30,00	30,00

BIOE-NTE1

No	Ders Kodu	Ders Adı	T	U	Kredi	ECTS
1	BUS1003	Entrepreneurship and Innovation	2	0	3	3
2	BUS1004	Strategic Entrepreneurship	2	0	3	3
3	BUS2005	International Business	2	0	3	3
4	CAS1001	Self Management	2	0	3	3
5	CAS1010	Our Biosphere	2	0	3	3
6	CAS1061	Geometric Origami	2	0	3	3
7	CAS2001	Energy for Physical Activity	2	0	3	3
8	CAS2002	Human Performance and Nutrition	2	0	3	3
9	CAS2003	Cardiopulmonary Resuscitation and First Aid Basics	2	0	3	3
10	CAS2004	Interpersonal Relations and Communication	2	0	3	3
11	CAS2005	Trekking and Orienteering	2	0	3	3
12	CAS3001	Earthquake and Rescue Principles	2	0	3	3
13	CAS3044	Positive Thinking	2	0	3	3
14	COMM2060	Communication Models and Techniques	2	0	3	3
15	FNCE3003	Investment Planning	2	0	3	3
16	HR1013	Career Development	2	0	3	3
17	HR4001	Career Orientation	2	0	3	3
18	HSS3002	Ethics in Engineering and Science	2	0	3	3
19	IKT1054	Industrial and Economic Sociology	2	0	3	3
20	INF1001	Information Literacy in Engineering	2	0	3	3
21	LAW2004	Labor Law	2	0	3	3
22	MAN1001	Principles of Managerial Economics & Financial Management	2	0	3	3
23	MGT1021	Design, Innovation and Entrepreneurship	2	0	3	3
24	MGT3082	Creativity And Innovation Management	2	0	3	3
25	MRK3082	Integrated Marketing Communication	2	0	3	3
26	MRK3084	Brand Creation/Branding	2	0	3	3
27	NTE1002	Effects Of Human Behaviour On Environment	2	0	3	3
28	NTE1003	The Culture of Radiation Safety	2	0	3	3
29	NTE1004	World Cultures	2	0	3	3
30	NTE1006	Basic Principles of Accessibility in Informatics and Technology	2	0	3	3
31	NTE1008	Cinema	2	0	3	3
32	NTE1010	Introduction to Finance for Engineers	2	0	3	3
33	OB2040	Industrial Psychology	2	0	3	3
34	OB2041	Behavioral Sciences for Engineers	2	0	3	3
35	OB3043	Organizational Behaviour	2	0	3	3
36	SOC3082	Environmental Sociology	2	0	3	3
37	YDA1001	German for Beginners	2	0	3	3
38	YDA1002	German	2	0	3	3
39	YDA1003	German Communication	2	0	3	3

NTE_2

No	Ders Kodu	Ders Adı	T	U	Kredi	ECTS
1	BUS1003	Entrepreneurship and Innovation	2	0	3	3
2	BUS1004	Strategic Entrepreneurship	2	0	3	3
3	BUS2005	International Business	2	0	3	3
4	CAS1001	Self Management	2	0	3	3
5	CAS1010	Our Biosphere	2	0	3	3
6	CAS1061	Geometric Origami	2	0	3	3
7	CAS2001	Energy for Physical Activity	2	0	3	3
8	CAS2002	Human Performance and Nutrition	2	0	3	3
9	CAS2003	Cardiopulmonary Resuscitation and First Aid Basics	2	0	3	3
10	CAS2004	Interpersonal Relations and Communication	2	0	3	3
11	CAS2005	Trekking and Orienteering	2	0	3	3
12	CAS3001	Earthquake and Rescue Principles	2	0	3	3
13	CAS3044	Positive Thinking	2	0	3	3
14	COMM2060	Communication Models and Techniques	2	0	3	3
15	FNCE3003	Investment Planning	2	0	3	3
16	HR1013	Career Development	2	0	3	3
17	HR4001	Career Orientation	2	0	3	3
18	HSS3002	Ethics in Engineering and Science	2	0	3	3
19	IKT1054	Industrial and Economic Sociology	2	0	3	3
20	INF1001	Information Literacy in Engineering	2	0	3	3
21	LAW2004	Labor Law	2	0	3	3
22	MAN1001	Principles of Managerial Economics & Financial Management	2	0	3	3
23	MGT1021	Design, Innovation and Entrepreneurship	2	0	3	3
24	MGT3082	Creativity And Innovation Management	2	0	3	3
25	MRK3082	Integrated Marketing Communication	2	0	3	3
26	MRK3084	Brand Creation/Branding	2	0	3	3
27	NTE1002	Effects Of Human Behaviour On Environment	2	0	3	3
28	NTE1003	The Culture of Radiation Safety	2	0	3	3
29	NTE1004	World Cultures	2	0	3	3
30	NTE1006	Basic Principles of Accessibility in Informatics and Technology	2	0	3	3
31	NTE1008	Cinema	2	0	3	3
32	NTE1010	Introduction to Finance for Engineers	2	0	3	3
33	OB2040	Industrial Psychology	2	0	3	3
34	OB2041	Behavioral Sciences for Engineers	2	0	3	3
35	OB3043	Organizational Behaviour	2	0	3	3
36	SOC3082	Environmental Sociology	2	0	3	3
37	YDA1001	German for Beginners	2	0	3	3
38	YDA1002	German	2	0	3	3
39	YDA1003	German Communication	2	0	3	3

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Biyomühendislik (İngilizce) - Dönemlik

Lisans - Biyomühendislik (İngilizce) - 2015

Genel Toplam Ders Adedi :54 T : 126 U : 38 Kredi : 260 ECTS : 260 T+U : 164

40	YDA2001	Seminars in German	2	0	3	3
41	YDI1004	Report Writing in English	2	0	3	3
42	YDIS1001	Spanish For Beginners	2	0	3	3
43	YDIS1002	Spanish	2	0	3	3

40	YDA2001	Seminars in German	2	0	3	3
41	YDI1004	Report Writing in English	2	0	3	3
42	YDIS1001	Spanish For Beginners	2	0	3	3
43	YDIS1002	Spanish	2	0	3	3

NTE_3						
No	Ders Kodu	Ders Adı	T	U	Kredi	ECTS
1	BUS1003	Entrepreneurship and Innovation	2	0	3	3
2	BUS1004	Strategic Entrepreneurship	2	0	3	3
3	BUS2005	International Business	2	0	3	3
4	CAS1001	Self Management	2	0	3	3
5	CAS1010	Our Biosphere	2	0	3	3
6	CAS1061	Geometric Origami	2	0	3	3
7	CAS2001	Energy for Physical Activity	2	0	3	3
8	CAS2002	Human Performance and Nutrition	2	0	3	3
9	CAS2003	Cardiopulmonary Resuscitation and First Aid Basics	2	0	3	3
10	CAS2004	Interpersonal Relations and Communication	2	0	3	3
11	CAS2005	Trekking and Orienteering	2	0	3	3
12	CAS3001	Earthquake and Rescue Principles	2	0	3	3
13	CAS3044	Positive Thinking	2	0	3	3
14	COMM2060	Communication Models and Techniques	2	0	3	3
15	FNCE3003	Investment Planning	2	0	3	3
16	HR1013	Career Development	2	0	3	3
17	HR4001	Career Orientation	2	0	3	3
18	HSS3002	Ethics in Engineering and Science	2	0	3	3
19	IKT1054	Industrial and Economic Sociology	2	0	3	3
20	INF1001	Information Literacy in Engineering	2	0	3	3
21	LAW2004	Labor Law	2	0	3	3
22	MAN1001	Principles of Managerial Economics & Financial Management	2	0	3	3
23	MGT1021	Design, Innovation and Entrepreneurship	2	0	3	3
24	MGT3082	Creativity And Innovation Management	2	0	3	3
25	MRK3082	Integrated Marketing Communication	2	0	3	3
26	MRK3084	Brand Creation/Branding	2	0	3	3
27	NTE1002	Effects Of Human Behaviour On Environment	2	0	3	3
28	NTE1003	The Culture of Radiation Safety	2	0	3	3
29	NTE1004	World Cultures	2	0	3	3
30	NTE1006	Basic Principles of Accessibility in Informatics and Technology	2	0	3	3
31	NTE1008	Cinema	2	0	3	3
32	NTE1010	Introduction to Finance for Engineers	2	0	3	3
33	OB2040	Industrial Psychology	2	0	3	3
34	OB2041	Behavioral Sciences for Engineers	2	0	3	3
35	OB3043	Organizational Behaviour	2	0	3	3
36	SOC3082	Environmental Sociology	2	0	3	3
37	YDA1001	German for Beginners	2	0	3	3
38	YDA1002	German	2	0	3	3
39	YDA1003	German Communication	2	0	3	3
40	YDA2001	Seminars in German	2	0	3	3
41	YDI1004	Report Writing in English	2	0	3	3
42	YDIS1001	Spanish For Beginners	2	0	3	3
43	YDIS1002	Spanish	2	0	3	3

NTE_4						
No	Ders Kodu	Ders Adı	T	U	Kredi	ECTS
1	BUS1003	Entrepreneurship and Innovation	2	0	3	3
2	BUS1004	Strategic Entrepreneurship	2	0	3	3
3	BUS2005	International Business	2	0	3	3
4	CAS1001	Self Management	2	0	3	3
5	CAS1010	Our Biosphere	2	0	3	3
6	CAS1061	Geometric Origami	2	0	3	3
7	CAS2001	Energy for Physical Activity	2	0	3	3
8	CAS2002	Human Performance and Nutrition	2	0	3	3
9	CAS2003	Cardiopulmonary Resuscitation and First Aid Basics	2	0	3	3
10	CAS2004	Interpersonal Relations and Communication	2	0	3	3
11	CAS2005	Trekking and Orienteering	2	0	3	3
12	CAS3001	Earthquake and Rescue Principles	2	0	3	3
13	CAS3044	Positive Thinking	2	0	3	3
14	COMM2060	Communication Models and Techniques	2	0	3	3
15	FNCE3003	Investment Planning	2	0	3	3
16	HR1013	Career Development	2	0	3	3
17	HR4001	Career Orientation	2	0	3	3
18	HSS3002	Ethics in Engineering and Science	2	0	3	3
19	IKT1054	Industrial and Economic Sociology	2	0	3	3
20	INF1001	Information Literacy in Engineering	2	0	3	3
21	LAW2004	Labor Law	2	0	3	3
22	MAN1001	Principles of Managerial Economics & Financial Management	2	0	3	3
23	MGT1021	Design, Innovation and Entrepreneurship	2	0	3	3
24	MGT3082	Creativity And Innovation Management	2	0	3	3
25	MRK3082	Integrated Marketing Communication	2	0	3	3
26	MRK3084	Brand Creation/Branding	2	0	3	3
27	NTE1002	Effects Of Human Behaviour On Environment	2	0	3	3
28	NTE1003	The Culture of Radiation Safety	2	0	3	3
29	NTE1004	World Cultures	2	0	3	3
30	NTE1006	Basic Principles of Accessibility in Informatics and Technology	2	0	3	3
31	NTE1008	Cinema	2	0	3	3
32	NTE1010	Introduction to Finance for Engineers	2	0	3	3
33	OB2040	Industrial Psychology	2	0	3	3
34	OB2041	Behavioral Sciences for Engineers	2	0	3	3
35	OB3043	Organizational Behaviour	2	0	3	3
36	SOC3082	Environmental Sociology	2	0	3	3
37	YDA1001	German for Beginners	2	0	3	3
38	YDA1002	German	2	0	3	3
39	YDA1003	German Communication	2	0	3	3
40	YDA2001	Seminars in German	2	0	3	3
41	YDI1004	Report Writing in English	2	0	3	3
42	YDIS1001	Spanish For Beginners	2	0	3	3
43	YDIS1002	Spanish	2	0	3	3

ENG-UE						
No	Ders Kodu	Ders Adı	T	U	Kredi	ECTS

TE_1						
No	Ders Kodu	Ders Adı	T	U	Kredi	ECTS

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Genel Toplam Ders Adedi :54 T : 126 U : 38 Kredi : 260 ECTS : 260 T+U : 164

1	BUS1003	Entrepreneurship and Innovation	2	0	3	3
2	BUS1004	Strategic Entrepreneurship	2	0	3	3
3	BUS2005	International Business	2	0	3	3
4	CAS1001	Self Management	2	0	3	3
5	CAS1010	Our Biosphere	2	0	3	3
6	CAS1061	Geometric Origami	2	0	3	3
7	CAS2001	Energy for Physical Activity	2	0	3	3
8	CAS2002	Human Performance and Nutrition	2	0	3	3
9	CAS2003	Cardiopulmonary Resuscitation and First Aid Basics	2	0	3	3
10	CAS2004	Interpersonal Relations and Communication	2	0	3	3
11	CAS2005	Trekking and Orienteering	2	0	3	3
12	CAS3001	Earthquake and Rescue Principles	2	0	3	3
13	CAS3044	Positive Thinking	2	0	3	3
14	COMM2060	Communication Models and Techniques	2	0	3	3
15	FNCE3003	Investment Planning	2	0	3	3
16	HR1013	Career Development	2	0	3	3
17	HR4001	Career Orientation	2	0	3	3
18	HSS3002	Ethics in Engineering and Science	2	0	3	3
19	IKT1054	Industrial and Economic Sociology	2	0	3	3
20	INF1001	Information Literacy in Engineering	2	0	3	3
21	LAW2004	Labor Law	2	0	3	3
22	MAN1001	Principles of Managerial Economics & Financial Management	2	0	3	3
23	MGT1021	Design, Innovation and Entrepreneurship	2	0	3	3
24	MGT3082	Creativity And Innovation Management	2	0	3	3
25	MRK3082	Integrated Marketing Communication	2	0	3	3
26	MRK3084	Brand Creation/Branding	2	0	3	3
27	NTE1002	Effects Of Human Behaviour On Environment	2	0	3	3
28	NTE1003	The Culture of Radiation Safety	2	0	3	3
29	NTE1004	World Cultures	2	0	3	3
30	NTE1006	Basic Principles of Accessibility in Informatics and Technology	2	0	3	3
31	NTE1008	Cinema	2	0	3	3
32	NTE1010	Introduction to Finance for Engineers	2	0	3	3
33	OB2040	Industrial Psychology	2	0	3	3
34	OB2041	Behavioral Sciences for Engineers	2	0	3	3
35	OB3043	Organizational Behaviour	2	0	3	3
36	SOC3082	Environmental Sociology	2	0	3	3
37	YDA1001	German for Beginners	2	0	3	3
38	YDA1002	German	2	0	3	3
39	YDA1003	German Communication	2	0	3	3
40	YDA2001	Seminars in German	2	0	3	3
41	YDI1004	Report Writing in English	2	0	3	3
42	YDIS1001	Spanish For Beginners	2	0	3	3
43	YDIS1002	Spanish	2	0	3	3

1	BIOE3001	Biomaterials in Bioengineering Applications	3	0	5	5
2	BIOE3002	Industrial Microbiology	3	0	5	5
3	BIOE3003	Modern Techniques in Biochemical Engineering	3	0	5	5
4	BIOE3004	Protein Interactions	3	0	5	5
5	BIOE3014	Molecular Biophysics	3	0	5	5
6	BIOE3022	Protein/Peptide Transport	3	0	5	5
7	BIOE3023	Biosystems Unit Operations	3	0	5	5
8	BIOE3026	Biomaterials and Drug Delivery	3	0	5	5
9	BIOE3031	Biochemical Regulation and Signal Transduction	3	0	5	5
10	BIOE3032	Introduction to Systems Biology	3	0	5	5
11	BIOE3033	Protein Folding	3	0	5	5
12	BIOE3034	Structural Biology	3	0	5	5
13	BIOE3050	Bioprocess Optimization	3	0	5	5
14	BIOE3051	Computer Aided Bioengineering	3	0	5	5
15	BIOE3052	Introduction to Bioinformatics	3	0	5	5
16	BIOE3053	Cellular and Metabolic Engineering	3	0	5	5
17	BIOE3054	Metabolic Control Analysis	3	0	5	5
18	BIOE3055	Biological Control Systems	3	0	5	5
19	BIOE3060	Bioprocess Validation and Quality Control	3	0	5	5
20	BIOE3061	Industrial and Environmental Biotechnology	3	0	5	5
21	BIOE3062	Proteomics and Mass Spectrometry	3	0	5	5
22	BIOE3065	Computational Bioengineering	3	0	5	5
23	BIOE4001	Recombinant DNA Technology	3	0	5	5
24	BIOE4012	Introduction to Protein Structure and Function	3	0	5	5
25	BIOE4013	Biomolecular Interactions	3	0	5	5
26	BIOE4014	Microbial Proteomics	3	0	5	5
27	BIOE4021	Tissue Engineering	3	0	5	5
28	BIOE4022	Downstream Processing	3	0	5	5
29	BIOE4023	Protein Engineering	3	0	5	5
30	BIOE4030	Bioconversion of Lignocellulosics	3	0	5	5
31	BIOE4031	Biosensors and Bioprocess Instrumentation	3	0	5	5
32	BIOE4032	Introduction to Biodegradable Polymers	3	0	5	5
33	BIOE4035	Reconstruction of Biological Networks	3	0	5	5
34	BIOE4040	Dynamics of Biomolecules	3	0	5	5
35	BIOE4041	Mass Spectrometry Data Analysis in Proteomics	3	0	5	5
36	BIOE4042	Enzymes in Industrial Applications	3	0	5	5
37	BIOE4052	Introduction to Computational Structural Biology	3	0	5	5
38	BIOE4053	Statistics for Bioinformatics Data Mining	3	0	5	5
39	BIOE4054	Design and Simulation of Proteins as Macromolecules	3	0	5	5
40	BIOE4055	Introduction to Machine Learning	3	0	5	5
41	BIOE4056	Plant-wide Process Control	3	0	5	5
42	BIOE4058	Nanotechnology	3	0	5	5
43	BIOE4060	Molecular Modeling	3	0	5	5
44	BIOE4061	Computational Methods in Biology	3	0	5	5
45	BIOE4062	Environmental Bioengineering	3	0	5	5
46	BIOE4063	Biomass and Biorefineries	3	0	5	5
47	BIOE4065	Biomedical Imaging and Diagnostics	3	0	5	5
48	BIOE4070	Protein Biotechnology	3	0	5	5
49	BIOE4071	Management of Bioprocess Development	3	0	5	5
50	BIOE4072	Planning and Management of Research	3	0	5	5
51	BIOE4073	Business in a Competitive Environment in Bioengineering	3	0	5	5
52	BIOE4074	Bioremediation: Principles and Practices	3	0	5	5
53	BIOE4080	Stoichiometric Modeling of Metabolic Networks	3	0	5	5

TE_2,3

No	Ders Kodu	Ders Adı	T	U	Kredi	ECTS
1	BIOE3001	Biomaterials in Bioengineering Applications	3	0	5	5
2	BIOE3002	Industrial Microbiology	3	0	5	5
3	BIOE3003	Modern Techniques in Biochemical Engineering	3	0	5	5
4	BIOE3004	Protein Interactions	3	0	5	5
5	BIOE3014	Molecular Biophysics	3	0	5	5
6	BIOE3022	Protein/Peptide Transport	3	0	5	5
7	BIOE3023	Biosystems Unit Operations	3	0	5	5
8	BIOE3026	Biomaterials and Drug Delivery	3	0	5	5

Mühendislik Fakültesi

Biyomühendislik (İngilizce) - Dönemlik

Lisans - Biyomühendislik (İngilizce) - 2015

Genel Toplam Ders Adedi :54 T : 126 U : 38 Kredi : 260 ECTS : 260 T+U : 164

9	BIOE3031	Biochemical Regulation and Signal Transduction	3	0	5	5
10	BIOE3032	Introduction to Systems Biology	3	0	5	5
11	BIOE3033	Protein Folding	3	0	5	5
12	BIOE3034	Structural Biology	3	0	5	5
13	BIOE3050	Bioprocess Optimization	3	0	5	5
14	BIOE3051	Computer Aided Bioengineering	3	0	5	5
15	BIOE3052	Introduction to Bioinformatics	3	0	5	5
16	BIOE3053	Cellular and Metabolic Engineering	3	0	5	5
17	BIOE3054	Metabolic Control Analysis	3	0	5	5
18	BIOE3055	Biological Control Systems	3	0	5	5
19	BIOE3060	Bioprocess Validation and Quality Control	3	0	5	5
20	BIOE3061	Industrial and Environmental Biotechnology	3	0	5	5
21	BIOE3062	Proteomics and Mass Spectrometry	3	0	5	5
22	BIOE3065	Computational Bioengineering	3	0	5	5
23	BIOE4001	Recombinant DNA Technology	3	0	5	5
24	BIOE4012	Introduction to Protein Structure and Function	3	0	5	5
25	BIOE4013	Biomolecular Interactions	3	0	5	5
26	BIOE4014	Microbial Proteomics	3	0	5	5
27	BIOE4021	Tissue Engineering	3	0	5	5
28	BIOE4022	Downstream Processing	3	0	5	5
29	BIOE4023	Protein Engineering	3	0	5	5
30	BIOE4030	Bioconversion of Lignocellulosics	3	0	5	5
31	BIOE4031	Biosensors and Bioprocess Instrumentation	3	0	5	5
32	BIOE4032	Introduction to Biodegradable Polymers	3	0	5	5
33	BIOE4035	Reconstruction of Biological Networks	3	0	5	5
34	BIOE4040	Dynamics of Biomolecules	3	0	5	5
35	BIOE4041	Mass Spectrometry Data Analysis in Proteomics	3	0	5	5
36	BIOE4042	Enzymes in Industrial Applications	3	0	5	5
37	BIOE4052	Introduction to Computational Structural Biology	3	0	5	5
38	BIOE4053	Statistics for Bioinformatics Data Mining	3	0	5	5
39	BIOE4054	Design and Simulation of Proteins as Macromolecules	3	0	5	5
40	BIOE4055	Introduction to Machine Learning	3	0	5	5
41	BIOE4056	Plant-wide Process Control	3	0	5	5
42	BIOE4058	Nanotechnology	3	0	5	5
43	BIOE4060	Molecular Modeling	3	0	5	5
44	BIOE4061	Computational Methods in Biology	3	0	5	5
45	BIOE4062	Environmental Bioengineering	3	0	5	5
46	BIOE4063	Biomass and Biorefineries	3	0	5	5
47	BIOE4065	Biomedical Imaging and Diagnostics	3	0	5	5
48	BIOE4070	Protein Biotechnology	3	0	5	5
49	BIOE4071	Management of Bioprocess Development	3	0	5	5
50	BIOE4072	Planning and Management of Research	3	0	5	5
51	BIOE4073	Business in a Competitive Environment in Bioengineering	3	0	5	5
52	BIOE4074	Bioremediation: Principles and Practices	3	0	5	5
53	BIOE4080	Stoichiometric Modeling of Metabolic Networks	3	0	5	5
54	BIOE4081	Thermodynamics and Statistical Mechanics	3	0	5	5
55	BIOE4083	Medical Imaging	3	0	5	5
56	BIOE4093	Special Topics in Bioengineering I	3	0	5	5
57	BIOE4094	Special Topics in Bioengineering II	3	0	5	5
58	BIOE4095	Special Topics in Bioengineering III	3	0	5	5
59	BIOE4096	Special Topics in Bioengineering IV	3	0	5	5
60	DP.TE1	Exchange Program Technical Elective-1	3	0	5	5

54	BIOE4081	Thermodynamics and Statistical Mechanics	3	0	5	5
55	BIOE4083	Medical Imaging	3	0	5	5
56	BIOE4093	Special Topics in Bioengineering I	3	0	5	5
57	BIOE4094	Special Topics in Bioengineering II	3	0	5	5
58	BIOE4095	Special Topics in Bioengineering III	3	0	5	5
59	BIOE4096	Special Topics in Bioengineering IV	3	0	5	5
60	DP.TE1	Exchange Program Technical Elective-1	3	0	5	5
61	DP.TE2	Exchange Program Technical Elective-2	3	0	5	5
62	DP.TE3	Exchange Program Technical Elective-3	3	0	5	5
63	DP.TE4	Exchange Program Technical Elective-4	3	0	5	5
64	DP.TE5	Exchange Program Technical Elective-5	3	0	5	5
65	DP.TE6	Exchange Program Technical Elective-6	3	0	5	5
66	DP.TE7	Exchange Program Technical Elective-7	3	0	5	5

TE_4,5						
No	Ders Kodu	Ders Adı	T	U	Kredi	ECTS
1	BIOE3001	Biomaterials in Bioengineering Applications	3	0	5	5
2	BIOE3002	Industrial Microbiology	3	0	5	5
3	BIOE3003	Modern Techniques in Biochemical Engineering	3	0	5	5
4	BIOE3004	Protein Interactions	3	0	5	5
5	BIOE3014	Molecular Biophysics	3	0	5	5
6	BIOE3022	Protein/Peptide Transport	3	0	5	5
7	BIOE3023	Biosystems Unit Operations	3	0	5	5
8	BIOE3026	Biomaterials and Drug Delivery	3	0	5	5
9	BIOE3031	Biochemical Regulation and Signal Transduction	3	0	5	5
10	BIOE3032	Introduction to Systems Biology	3	0	5	5
11	BIOE3033	Protein Folding	3	0	5	5
12	BIOE3034	Structural Biology	3	0	5	5
13	BIOE3050	Bioprocess Optimization	3	0	5	5
14	BIOE3051	Computer Aided Bioengineering	3	0	5	5
15	BIOE3052	Introduction to Bioinformatics	3	0	5	5
16	BIOE3053	Cellular and Metabolic Engineering	3	0	5	5
17	BIOE3054	Metabolic Control Analysis	3	0	5	5
18	BIOE3055	Biological Control Systems	3	0	5	5
19	BIOE3060	Bioprocess Validation and Quality Control	3	0	5	5
20	BIOE3061	Industrial and Environmental Biotechnology	3	0	5	5
21	BIOE3062	Proteomics and Mass Spectrometry	3	0	5	5
22	BIOE3065	Computational Bioengineering	3	0	5	5
23	BIOE4001	Recombinant DNA Technology	3	0	5	5
24	BIOE4012	Introduction to Protein Structure and Function	3	0	5	5
25	BIOE4013	Biomolecular Interactions	3	0	5	5
26	BIOE4014	Microbial Proteomics	3	0	5	5
27	BIOE4021	Tissue Engineering	3	0	5	5
28	BIOE4022	Downstream Processing	3	0	5	5
29	BIOE4023	Protein Engineering	3	0	5	5
30	BIOE4030	Bioconversion of Lignocellulosics	3	0	5	5
31	BIOE4031	Biosensors and Bioprocess Instrumentation	3	0	5	5
32	BIOE4032	Introduction to Biodegradable Polymers	3	0	5	5
33	BIOE4035	Reconstruction of Biological Networks	3	0	5	5
34	BIOE4040	Dynamics of Biomolecules	3	0	5	5
35	BIOE4041	Mass Spectrometry Data Analysis in Proteomics	3	0	5	5

Mühendislik Fakültesi

Biyomühendislik (İngilizce) - Dönemlik

Lisans - Biyomühendislik (İngilizce) - 2015

Genel Toplam **Ders Adedi :54** **T : 126** **U : 38** **Kredi : 260** **ECTS : 260** **T+U : 164**

61	DP.TE2	Exchange Program Technical Elective-2	3	0	5	5
62	DP.TE3	Exchange Program Technical Elective-3	3	0	5	5
63	DP.TE4	Exchange Program Technical Elective-4	3	0	5	5
64	DP.TE5	Exchange Program Technical Elective-5	3	0	5	5
65	DP.TE6	Exchange Program Technical Elective-6	3	0	5	5
66	DP.TE7	Exchange Program Technical Elective-7	3	0	5	5

36	BIOE4042	Enzymes in Industrial Applications	3	0	5	5
37	BIOE4052	Introduction to Computational Structural Biology	3	0	5	5
38	BIOE4053	Statistics for Bioinformatics Data Mining	3	0	5	5
39	BIOE4054	Design and Simulation of Proteins as Macromolecules	3	0	5	5
40	BIOE4055	Introduction to Machine Learning	3	0	5	5
41	BIOE4056	Plant-wide Process Control	3	0	5	5
42	BIOE4058	Nanotechnology	3	0	5	5
43	BIOE4060	Molecular Modeling	3	0	5	5
44	BIOE4061	Computational Methods in Biology	3	0	5	5
45	BIOE4062	Environmental Bioengineering	3	0	5	5
46	BIOE4063	Biomass and Biorefineries	3	0	5	5
47	BIOE4065	Biomedical Imaging and Diagnostics	3	0	5	5
48	BIOE4070	Protein Biotechnology	3	0	5	5
49	BIOE4071	Management of Bioprocess Development	3	0	5	5
50	BIOE4072	Planning and Management of Research	3	0	5	5
51	BIOE4073	Business in a Competitive Environment in Bioengineering	3	0	5	5
52	BIOE4074	Bioremediation: Principles and Practices	3	0	5	5
53	BIOE4080	Stoichiometric Modeling of Metabolic Networks	3	0	5	5
54	BIOE4081	Thermodynamics and Statistical Mechanics	3	0	5	5
55	BIOE4083	Medical Imaging	3	0	5	5
56	BIOE4093	Special Topics in Bioengineering I	3	0	5	5
57	BIOE4094	Special Topics in Bioengineering II	3	0	5	5
58	BIOE4095	Special Topics in Bioengineering III	3	0	5	5
59	BIOE4096	Special Topics in Bioengineering IV	3	0	5	5
60	DP.TE1	Exchange Program Technical Elective-1	3	0	5	5
61	DP.TE2	Exchange Program Technical Elective-2	3	0	5	5
62	DP.TE3	Exchange Program Technical Elective-3	3	0	5	5
63	DP.TE4	Exchange Program Technical Elective-4	3	0	5	5
64	DP.TE5	Exchange Program Technical Elective-5	3	0	5	5
65	DP.TE6	Exchange Program Technical Elective-6	3	0	5	5
66	DP.TE7	Exchange Program Technical Elective-7	3	0	5	5

ENG-FTE

No	Ders Kodu	Ders Adı	T	U	Kredi	ECTS
1	BIOE4072	Planning and Management of Research	3	0	5	5
2	CHE4060	Cost Management in Chemical Industries	3	0	5	5
3	CHE4068	Financial Engineering	3	0	5	5
4	CHE4080	Chemical Engineering for Sustainable Biosphere	3	0	5	5
5	CSE4044	Software Project Management	3	0	5	5
6	CSE4056	Management of Information Systems	3	0	5	5
7	CSE4057	Information Systems Security	3	0	5	5
8	CSE4062	Introduction to Data Science and Analytics	3	0	5	5
9	CSE4084	Multimedia Systems	3	0	5	5
10	CSE4088	Introduction to Machine Learning	3	0	5	5
11	EE4056	Introduction to Information Systems Management	3	0	5	5
12	EE4057	Introduction to Systems Security	3	0	5	5
13	EE4062	Introduction to Image Processing	3	0	5	5
14	ENVE4062	Energy and the Environment	3	0	5	5
15	ENVE4063	Construction Materials for Environmental Engineering	3	0	5	5
16	IE4055	Design of Experiments	3	0	5	5
17	IE4087	Introduction to Total Quality Management	3	0	5	5
18	ME3004	Mathematical Modeling in Mechanical Engineering	3	0	5	5
19	ME3022	Mechatronics	3	0	5	5
20	ME4018	Introduction to Robotics	3	0	5	5
21	ME4022	Control Systems	3	0	5	5
22	ME4033	Designing Quality Products	3	0	5	5
23	ME4051	Automotive Engineering	3	0	5	5
24	MGT4082	Advanced innovative Design Management for Entrepreneurship	3	0	5	5
25	MGT4084	Innovation and New Product Development Management	3	0	5	5
26	MSE4073	Materials Engineering Economics and Plant Design	3	0	5	5
27	MSE4074	Total Quality Management in Materials Engineering	3	0	5	5

TE_6,7

No	Ders Kodu	Ders Adı	T	U	Kredi	ECTS
1	BIOE3001	Biomaterials in Bioengineering Applications	3	0	5	5
2	BIOE3002	Industrial Microbiology	3	0	5	5
3	BIOE3003	Modern Techniques in Biochemical Engineering	3	0	5	5
4	BIOE3004	Protein Interactions	3	0	5	5
5	BIOE3014	Molecular Biophysics	3	0	5	5
6	BIOE3022	Protein/Peptide Transport	3	0	5	5
7	BIOE3023	Biosystems Unit Operations	3	0	5	5
8	BIOE3026	Biomaterials and Drug Delivery	3	0	5	5
9	BIOE3031	Biochemical Regulation and Signal Transduction	3	0	5	5
10	BIOE3032	Introduction to Systems Biology	3	0	5	5
11	BIOE3033	Protein Folding	3	0	5	5
12	BIOE3034	Structural Biology	3	0	5	5
13	BIOE3050	Bioprocess Optimization	3	0	5	5
14	BIOE3051	Computer Aided Bioengineering	3	0	5	5
15	BIOE3052	Introduction to Bioinformatics	3	0	5	5
16	BIOE3053	Cellular and Metabolic Engineering	3	0	5	5
17	BIOE3054	Metabolic Control Analysis	3	0	5	5

Mühendislik Fakültesi**Biyomühendislik (İngilizce) - Dönemlik****Lisans - Biyomühendislik (İngilizce) - 2015****Genel Toplam****Ders Adedi :54****T : 126****U : 38****Kredi : 260****ECTS : 260****T+U : 164**

18	BIOE3055	Biological Control Systems	3	0	5	5
19	BIOE3060	Bioprocess Validation and Quality Control	3	0	5	5
20	BIOE3061	Industrial and Environmental Biotechnology	3	0	5	5
21	BIOE3062	Proteomics and Mass Spectrometry	3	0	5	5
22	BIOE3065	Computational Bioengineering	3	0	5	5
23	BIOE4001	Recombinant DNA Technology	3	0	5	5
24	BIOE4012	Introduction to Protein Structure and Function	3	0	5	5
25	BIOE4013	Biomolecular Interactions	3	0	5	5
26	BIOE4014	Microbial Proteomics	3	0	5	5
27	BIOE4021	Tissue Engineering	3	0	5	5
28	BIOE4022	Downstream Processing	3	0	5	5
29	BIOE4023	Protein Engineering	3	0	5	5
30	BIOE4030	Bioconversion of Lignocellulosics	3	0	5	5
31	BIOE4031	Biosensors and Bioprocess Instrumentation	3	0	5	5
32	BIOE4032	Introduction to Biodegradable Polymers	3	0	5	5
33	BIOE4035	Reconstruction of Biological Networks	3	0	5	5
34	BIOE4040	Dynamics of Biomolecules	3	0	5	5
35	BIOE4041	Mass Spectrometry Data Analysis in Proteomics	3	0	5	5
36	BIOE4042	Enzymes in Industrial Applications	3	0	5	5
37	BIOE4052	Introduction to Computational Structural Biology	3	0	5	5
38	BIOE4053	Statistics for Bioinformatics Data Mining	3	0	5	5
39	BIOE4054	Design and Simulation of Proteins as Macromolecules	3	0	5	5
40	BIOE4055	Introduction to Machine Learning	3	0	5	5
41	BIOE4056	Plant-wide Process Control	3	0	5	5
42	BIOE4058	Nanotechnology	3	0	5	5
43	BIOE4060	Molecular Modeling	3	0	5	5
44	BIOE4061	Computational Methods in Biology	3	0	5	5
45	BIOE4062	Environmental Bioengineering	3	0	5	5
46	BIOE4063	Biomass and Biorefineries	3	0	5	5
47	BIOE4065	Biomedical Imaging and Diagnostics	3	0	5	5
48	BIOE4070	Protein Biotechnology	3	0	5	5
49	BIOE4071	Management of Bioprocess Development	3	0	5	5
50	BIOE4072	Planning and Management of Research	3	0	5	5
51	BIOE4073	Business in a Competitive Environment in Bioengineering	3	0	5	5
52	BIOE4074	Bioremediation: Principles and Practices	3	0	5	5
53	BIOE4080	Stoichiometric Modeling of Metabolic Networks	3	0	5	5
54	BIOE4081	Thermodynamics and Statistical Mechanics	3	0	5	5
55	BIOE4083	Medical Imaging	3	0	5	5
56	BIOE4093	Special Topics in Bioengineering I	3	0	5	5
57	BIOE4094	Special Topics in Bioengineering II	3	0	5	5
58	BIOE4095	Special Topics in Bioengineering III	3	0	5	5
59	BIOE4096	Special Topics in Bioengineering IV	3	0	5	5
60	DP.TE1	Exchange Program Technical Elective-1	3	0	5	5
61	DP.TE2	Exchange Program Technical Elective-2	3	0	5	5
62	DP.TE3	Exchange Program Technical Elective-3	3	0	5	5
63	DP.TE4	Exchange Program Technical Elective-4	3	0	5	5
64	DP.TE5	Exchange Program Technical Elective-5	3	0	5	5
65	DP.TE6	Exchange Program Technical Elective-6	3	0	5	5
66	DP.TE7	Exchange Program Technical Elective-7	3	0	5	5