

**DEPARTMENT OF CHEMICAL ENGINEERING**

**FIRST SEMESTER**

Code		Courses	T	U	L	Y Credit	ECTS
CHEM	111	General Chemistry I	2	2	0	3	6
AFE	131	Academic English I	2	2	0	3	4
ES	115	Fundamentals of Scientific Programming	2	0	2	3	6
MATH	131	Calculus I	3	2	0	4	6
PHYS	101	Physics I	3	0	2	4	6
<b>Toplam</b>			<b>12</b>	<b>6</b>	<b>4</b>	<b>17</b>	<b>28</b>

**Second Semester**

Code		Courses	T	U	L	Y Credit	ECTS
CHBE	102	Intro. to Chem. & Bioprocess Eng.	1	0	2	2	5
CHEM	112	General Chemistry II	2	2	0	3	6
CHEM	113	General Chemistry Lab	1	0	2	2	5
AFE	132	Academic English II	2	2	0	3	4
MATH	132	Calculus II	3	2	0	4	6
PHYS	102	Physics II	3	0	2	4	6
<b>Toplam</b>			<b>12</b>	<b>6</b>	<b>6</b>	<b>18</b>	<b>32</b>

**Third Semester**

Code		Courses	T	U	L	Y Credit	ECTS
CHBE	203	Organic Chemistry	2	0	2	3	5
CHBE	211	Physical Chemistry I	2	2	0	3	5
CHBE	215	Material and Energy Balances	2	2	0	3	5
MATH	221	Linear Algebra	3	1	0	4	6
MATH	241	Differential Equations	3	2	0	4	6
HUM	103	Humanities	2	0	0	2	3
<b>Toplam</b>			<b>14</b>	<b>7</b>	<b>2</b>	<b>19</b>	<b>30</b>

**Fourth Semester**

Code		Courses	T	U	L	Y Credit	ECTS
CHBE	204	Bioorganic Chemistry	2	0	2	3	5
CHBE	213	Physical Chemistry Lab	1	0	2	2	4
CHBE	214	Chemical Engineering Thermodynamics	2	2	0	3	6
CHBE	232	CHBE I: Fluid Mechanics	2	2	0	3	6
ECON	294	Economics for Engineers	3	0	0	3	4
FE	XX1	Free Elective I	3	0	0	3	5
<b>Toplam</b>			<b>13</b>	<b>4</b>	<b>4</b>	<b>17</b>	<b>30</b>

Fifth Semester							
Code		Courses	T	U	L	Y Credit	ECTS
CHBE	301	Experimental CHBE I	1	0	2	2	4
CHBE	331	CHBE II : Heat Transfer	2	2	0	3	6
CHBE	361	Materials in Chemical & Biological Applications	3	0	0	3	5
ES	301	Engineering Management	3	0	0	3	4
FE	XX2	Free Elective II	3	0	0	3	5
TKL	201	Turkish Language I	2	0	0	2	2
CHBE	311	Computer Applications in CHBE	2	2	0	3	5
Toplam			16	4	2	19	31
Sixth Semester							
Code		Courses	T	U	L	Y Credit	ECTS
CHBE	302	Experimental CHBE II	1	0	2	2	4
CHBE	333	CHBE III : Mass Transfer	2	2	0	3	6
CHBE	362	Reactor Design	2	2	0	3	6
CHBE	386	Mathematical Modeling in CHBE	2	2	0	3	6
CHBE	XX1	Restricted Elective I	3	0	0	3	5
TKL	202	Turkish Language II	2	0	0	2	2
Toplam			12	6	2	16	29
Seventh Semester							
Code		Courses	T	U	L	Y Credit	ECTS
CHBE	401	Experimental CHBE III	1	0	2	2	4
CHBE	441	Process Dynamics & Control	2	2	0	3	6
CHBE	463	Chemical & Biochemical Process Design I	3	2	0	4	6
CHBE	XX2	Restricted Elective II	3	0	0	3	5
CHBE	354	Seperation Processes	3	0	0	3	5
HTR	301	History of Turkish Revolution I	2	0	0	2	2
CHBE	400	Summer Practice	0	2	0	0	1
Toplam			14	6	2	17	29
Eighth Semester							
Code		Courses	T	U	L	Y Credit	ECTS
CHBE	464	Chemical & Biochemical Process Design II	2	2	0	3	6
CHBE	492	Engineering Project	1	0	4	3	8
CHBE	XX3	Restricted Elective III	3	0	0	3	5
CHBE	XX4	Restricted Elective IV	3	0	0	3	5
CHBE	XX5	Restricted Elective V	3	0	0	3	5
HTR	302	History of Turkish Revolution II	2	0	0	2	2
Toplam			14	2	4	17	31
Genel Toplam						140	240