

## DOUBLE MAJOR IN BIOENGINEERING GENERAL

### First Semester

	Course Code	Course Name	C	L/P	C	ECTS
1	BIOE101	Intro. to Bioengineering	3	0	3	5
2	ECC107	Biology	3	0	3	5
<b>TOTAL</b>			<b>6</b>	<b>0</b>	<b>6</b>	<b>10</b>

### Second Semester

	Course Code	Course Name	C	L/P	C	ECTS
	CHM211	Organic Chemistry	3	0	3	5
	BME102	Biochemistry	3	2	4	6
<b>TOTAL</b>			<b>6</b>	<b>2</b>	<b>7</b>	<b>11</b>

### Third Semester

	Course Code	Course Name	C	L/P	C	ECTS
1	ECC217	Microbiology	3	0	3	5
2	BIOE205	Principles and applications of Ecology	3	0	3	5
3	BME202	Biomaterials	3	2	4	6
<b>TOTAL</b>			<b>9</b>	<b>2</b>	<b>10</b>	<b>16</b>

### Fourth Semester

	Course Code	Course Name	C	L/P	C	ECTS
1	BIOE202	Polymer Technologies	3	0	3	5
2	ECC432	Intro. to Thermodynamics	3	0	3	5
3	BIOE208	Genetics	3	0	3	5
4	BIOE200	Internship I	0	20	0	12
<b>TOTAL</b>			<b>9</b>	<b>20</b>	<b>9</b>	<b>27</b>

### Fifth Semester

	Course Code	Course Name	C	L/P	C	ECTS
1	BIOE301	Mass & Heat Transfer	3	0	3	5
2	BME301	Biosensors	3	2	3	6
<b>TOTAL</b>			<b>6</b>	<b>2</b>	<b>6</b>	<b>11</b>

### Sixth Semester

	Course Code	Course Name	C	L/P	C	ECTS
1	BIOE302	Bioenergy Resources	3	0	3	5
2	BIOE304	Nanotechnology	3	0	3	5
3	BME321	Artificial Organs	3	2	4	6
4	BIOE306	Systems & Design on Bioeng.	3	0	3	5
5	BIOE300	Internship 2	0	20	0	12
<b>TOTAL</b>			<b>12</b>	<b>22</b>	<b>13</b>	<b>33</b>

### Seventh Semester

	Course Code	Course Name	C	L/P	C	ECTS
1	BME401	Instrumental Analysis	3	0	3	5
2	BIOE400	Graduation Projects I	3	0	3	12
<b>TOTAL</b>			<b>6</b>	<b>0</b>	<b>6</b>	<b>17</b>

### Eighth Semester

	Course Code	Course Name	C	L/P	C	ECTS
1	BME435	Bioinformatics	3	0	3	5
2	BIOE402	Graduation Projects II	3	0	3	12
<b>TOTAL</b>			<b>6</b>	<b>0</b>	<b>6</b>	<b>17</b>

TOTAL	Contact Hs	Lab/Practice Hs	Credit	ECTS
	60	48	63	142