

**Mühendislik Fakültesi ve Temel Bilimler Fakültesi Öğrencileri için GTÜ Biyomühendislik YANDAL Programı**

1. Yıl Güz Dönemi (1. Dönem)				CED	ENVE	ME	MSE	CSE	ELEC	GEO	IE	CE	MBG	PHYS	CHEM	MATH
BENG 100	Bioengineering Orientation and Career Planning	AKTS:		1	1	1	1	1	1	1	1	1	1	1	1	1
Dönem Toplamı				1	1	1	1	1	1	1	1	1	1	1	1	1
1. Yıl Bahar Dönemi (2. Dönem)				CED	ENVE	ME	MSE	CSE	ELEC	GEO	IE	CE	MBG	PHYS	CHEM	MATH
BENG 101	Fundamentals of Bioengineering	AKTS:		4	4	4	4	4	4	4	4	4	4	4	4	4
Dönem Toplamı				4	4	4	4	4	4	4	4	4	4	4	4	4
2. Yıl Güz Dönemi (3. Dönem)				CED	ENVE	ME	MSE	CSE	ELEC	GEO	IE	CE	MBG	PHYS	CHEM	MATH
BENG 211	Mass and Energy Balances	AKTS:					6	6	6	6	6	6	6	6	6	6
BENG 223	Molecular Biology of the Cell	AKTS:		5	5	5	5	5	5	5	5	5		5		5
BENG 203	Bioengineering Laboratory I	AKTS:		4	4	4	4	4	4	4	4	4		4		4
Dönem Toplamı				9	9	9	15	15	15	15	15	15	6	15	6	15
2. Yıl Bahar Dönemi (4. Dönem)				CED	ENVE	ME	MSE	CSE	ELEC	GEO	IE	CE	MBG	PHYS	CHEM	MATH
BENG 232	Fundamentals of Biomaterials	AKTS:		4	4	4	4	4	4	4	4	4	4	4	4	4
Dönem Toplamı				4	4	4	4	4	4	4	4	4	4	4	4	4
3. Yıl Güz Dönemi (5. Dönem)				CED	ENVE	ME	MSE	CSE	ELEC	GEO	IE	CE	MBG	PHYS	CHEM	MATH
Dönem Toplamı				0	0	0	0	0	0	0	0	0	0	0	0	0
3. Yıl Bahar Dönemi (6. Dönem)				CED	ENVE	ME	MSE	CSE	ELEC	GEO	IE	CE	MBG	PHYS	CHEM	MATH
BENG 302	Bioengineering Laboratory II	AKTS:		4	4	4	4	4	4	4	4	4		4		4
BENG 332	Fundamentals of Biomechanics	AKTS:		5	5	5	5	5	5	5	5	5	5	5	5	5
BENG 312	Bioprocess Engineering Principles	AKTS:		6												
Dönem Toplamı				15	9	9	9	9	9	9	9	9	5	9	5	9
4. Yıl Güz Dönemi (7. Dönem)				CED	ENVE	ME	MSE	CSE	ELEC	GEO	IE	CE	MBG	PHYS	CHEM	MATH
BENG 433	Biomedical Engineering and Physiology	AKTS:		5	5	5	5	5	5	5	5	5	5	5	5	5
BENG 4XX	Department Elective*	AKTS:											5		5	
Dönem Toplamı				5	5	5	5	5	5	5	5	5	10	5	10	5
4. Yıl Bahar Dönemi (8. Dönem)				CED	ENVE	ME	MSE	CSE	ELEC	GEO	IE	CE	MBG	PHYS	CHEM	MATH
Dönem Toplamı				0	0	0	0	0	0	0	0	0	0	0	0	0

CED	Chemical Engineering
ENVE	Environmental Engineering
ME	Mechanical Engineering
MSE	Materials Science and Engineering
CSE	Computer Engineering
ELEC	Electronics Engineering
GEO	Geodetic Engineering
IE	Industrial Engineering
CE	Civil Engineering
MBG	Molecular Biology and Genetics
PHYS	Physics
CHEM	Chemistry
MATH	Mathematics

	CED	ENVE	ME	MSE	CSE	ELEC	GEO	IE	CE	MBG	PHYS	CHEM	MATH
<b>Toplam AKTS</b>	<b>38</b>	<b>32</b>	<b>32</b>	<b>38</b>	<b>38</b>	<b>38</b>	<b>38</b>	<b>38</b>	<b>38</b>	<b>30</b>	<b>38</b>	<b>30</b>	<b>38</b>

**\*Valid Department Elective Courses:**

BENG 400	Advanced Orthopaedic and Dental Biomechanics Lab.
BENG 415	Bioinformatic Data Analysis
BENG 417	Rapid Prototyping for Medical Product Design
BENG 423	Biomedical Electronics
BENG 424	Biosensors
BENG 425	Bioinstrumentation
BENG 426	Theoretical Neuroscience
BENG 434	Data Mining in Bioengineering

BENG 451	Introduction to Bioinformatics
BENG 457	Biopolymers
BENG 462	Fundamental Methods for Biofabrication
BENG 464	Advanced Bioprocess Design
BENG 466	Structural Bioinformatics and Computational Drug Design
BENG 467	Biosorption
BENG 468	Mammalian Cell Cultures for Biopharmaceutical Production