

BIOTECHNOLOGY MSc PROGRAM

Remedial Courses								
Code		Courses	Prerequi	T	U	L	Credit	ECTS
CHEM	205	Introduction to Organic Chemistry and Biomacromolecules	-	2	2	0	3	6
GBE	203	Microbiology	-	2	1	3	4	7
GBE	205	Cell Biology	-	2	1	3	4	6
GBE	212	Classical and Molecular Genetics		2	2	0	3	6
GBE	222	Biometrics: Numerical and statistical methods for bioengineering		2	2	0	3	6
GBE	301	Biochemistry I	-	2	1	3	4	7
GBE	326	Experimental GBE I: Principles	-	2	0	2	3	6
GBE	341	Techniques in Genetic Engineering I	-	2	2	0	3	5
GBE	361	Biotransport Phenomena I	-	2	2	0	3	5
GBE	403	Molecular Biology I	-	3	0	0	3	6

FALL&SPRING SEMESTER

Code		Courses	Prerequi	T	U	L	Credit	ECTS
BTEC	501	BASIC BIOTECHNOLOGY	-	3	0	0	3	10
BTEC	555	BIostatISTICS	-	3	0	1	3	10
BTEC	560	SCIENTIFIC RESEARCH METHODS IN GENETIC ENGINEERING	-	3	0	0	3	10
BTEC	590	RESEARCH SEMINAR	-	2	0	0	0	2
BTEC	5XX	Department Elective I	-	3	0	0	3	8
BTEC	5XX	Department Elective II	-	3	0	0	3	8
BTEC	5XX	Department Elective III	-	3	0	0	3	8
BTEC	5-6XX	Department Elective IV	-	3	0	0	3	8
BTEC	600	THESIS IN MS	-	0	0	0	0	60
TOTAL				0	0	0	0	150
GRAND TOTAL							21	124

DEPARTMENT ELECTIVES

Kod Code		Dersler Courses	Onkoşul Prerequi site	T	U	L	Y Credit	AKTS ECTS
BTEC	601	YEAST AND BACTERIAL BIOTECHNOLOGY		3	0	0	3	8
BTEC	602	ADVANCED MOLECULAR BIOLOGY TECHNIQUES		3	0	0	3	8
BTEC	603	ANALYTICAL BIOTECHNOLOGY		3	0	0	3	8
BTEC	605	DRUG METABOLISM		3	0	0	3	8
BTEC	606	TRANSGENICS AND GENE THERAPY		3	0	0	3	8
BTEC	607	DRUG DISCOVERY AND DEVELOPMENT		3	0	0	3	8
BTEC	608	CELL COMMUNICATION AND SIGNAL TRANSDUCTION MECHANISMS		3	0	0	3	8
BTEC	610	TISSUE ENGINEERING APPLICATIONS		3	0	0	3	8
BTEC	611	ADVANCED STEM CELL TECHNOLOGY		3	0	0	3	8
BTEC	612	REPRODUCTIVE GENETICS		3	0	0	3	8
BTEC	613	DEVELOPMENTAL BIOLOGY		3	0	0	3	8
BTEC	615	PROTEIN PURIFICATION AND ANALYSIS		3	0	0	3	8
BTEC	616	ADVANCED TOPICS IN ENZYME KINETICS		3	0	0	3	8
BTEC	618	ADVANCED CANCER GENETICS		3	0	0	3	8
BTEC	620	BIOMATERIALS IN TISSUE ENGINEERING		3	0	0	3	8
BTEC	621	MOLECULAR TOXICOLOGY		3	0	0	3	8
BTEC	623	NEUROSCIENCE		3	0	0	3	8
BTEC	624	CYTOBIOLOGY-I		3	0	0	3	8
BTEC	626	ADVANCED BIOREACTORS		3	0	0	3	8
BTEC	629	EUKARYOTIC GENE REGULATION		3	0	0	3	8
BTEC	630	CONTROLLED DRUG DELIVERY AND TARGETING SYSTEMS		3	0	0	3	8
BTEC	635	EUKARYOTIC CELL BIOLOGY		3	0	0	3	8
BTEC	638	MOLECULAR PHARMACOLOGY		3	0	0	3	8
BTEC	639	FERMENTATION BIOTECHNOLOGY		3	0	0	3	8
BTEC	640	NANOMEDICINE		3	0	0	3	8
BTEC	641	PROTEOMICS AND MASS SPECTROMETRY		3	0	0	3	8
BTEC	642	REGENERATIVE BIOLOGY AND BIOMEDICAL APPLICATIONS		3	0	0	3	8
BTEC	643	GENE EDITING TECHNOLOGIES		3	0	0	3	8
BTEC	644	PLANT BREEDING		3	0	0	3	8
BTEC	666	SYSTEMS BIOLOGY		3	0	0	3	8
BTEC	502	MEDICAL AND CLINICAL GENETICS		3	0	0	3	8
BTEC	503	ADVANCED MOLECULAR BIOLOGY		3	0	0	3	8
BTEC	504	PHARMACEUTICAL AND MEDICAL BIOTECHNOLOGY		3	0	0	3	8
BTEC	505	MICROBIOLOGY		3	0	0	3	8
BTEC	506	PLANT BIOTECHNOLOGY		3	0	0	3	8
BTEC	507	ADVANCED BIOCHEMISTRY		3	0	0	3	8
BTEC	509	PHARMAGENETICS AND PHARMAGENOMICS		3	0	0	3	8
BTEC	510	BIOTECHNOLOGY LABORATORY PROJECTS		3	0	0	3	8
BTEC	511	COMPARATIVE PHYSIOLOGY		3	0	0	3	8
BTEC	512	ECOLOGY		3	0	0	3	8
BTEC	513	INTRODUCTION TO BIOINFORMATICS		3	0	0	3	8
BTEC	514	CANCER GENETICS		3	0	0	3	8

BTEC	515	IMMUNOGENETICS		3	0	0	3	8
BTEC	516	INTRODUCTION TO NANOBIO TECHNOLOGY		3	0	0	3	8
BTEC	517	IMMUNOBIOLOGY		3	0	0	3	8
BTEC	518	FOOD AND BIOETHICS		3	0	0	3	8
BTEC	519	MICROBIOLOGICAL ASPECTS OF FOOD SYSTEMS		3	0	0	3	8
BTEC	521	GENE EXPRESSION		3	0	0	3	8
BTEC	522	SPECIAL TOPICS IN BIOTECHNOLOGY		3	0	0	3	8
BTEC	527	BIOREACTORS		3	0	0	3	8
BTEC	528	PROCESSING OF BIOACTIVE EXTRACTS FROM NATURAL MATERIALS		3	0	0	3	8
BTEC	532	DRUG DELIVERY SYSTEMS AND INSTRUMENTS		3	0	0	3	8
BTEC	533	BIOMATERIALS IN TISSUE ENGINEERING		3	0	0	3	8
BTEC	534	TRANSGENICS AND GENE THERAPY		3	0	0	3	8
BTEC	535	MAMMALIAN TISSUE ENGINEERING		3	0	0	3	8
BTEC	536	STEM CELL BIOLOGY		3	0	0	3	8
BTEC	537	DOSAGE IN PROTEINS AND PEPTIDES		3	0	0	3	8
BTEC	538	NUTRIGENOMICS		3	0	0	3	8
BTEC	539	PROTEIN CHEMISTRY		3	0	0	3	8
BTEC	550	METHODS IN SCIENTIFIC RESEARCH		3	0	0	3	8
BTEC	582	SELECTED TOPICS: SIGNAL TRANSDUCTION PATHWAYS		3	0	0	3	8
BTEC	584	SELECTED TOPICS: ADULT NEUROGENESIS		3	0	0	3	8
BTEC	585	SELECTED TOPICS: MICROBIAL METABOLISM		3	0	0	3	8
BTEC	586	SELECTED TOPICS: APPLICATIONS OF BIostatISTICS IN RESEARCH		3	0	0	3	8
BTEC	587	SELECTED TOPICS: ENCAPSULATION TECHNOLOGY AND APPLICATIONS		3	0	0	3	8