

**BIOTECHNOLOGY PhD. Program**

REMEDIAL COURSES				
Dept.	Code	Course Name	CR.	ECTS
CHEM	205	Introduction to Organic Chemistry and Biomacromolecules	NC	NC
GBE	203	Microbiology	NC	NC
GBE	205	Cell Biology	NC	NC
GBE	212	Classical and Molecular Genetics	NC	NC
GBE	222	Biometrics: Numerical and statistical methods for bioengineering applications	NC	NC
GBE	301	Biochemistry I	NC	NC
GBE	326	Experimental GBE I: Principles	NC	NC
GBE	341	Techniques in Genetic Engineering I	NC	NC
GBE	361	Biotransport Phenomena I	NC	NC
GBE	403	Molecular Biology I	NC	NC
PROGRAM COURSES				
Dept.	Code	Course Name	CR.	ECTS
BTEC	604	Current Topics in Biotechnology	3	10
BTEC	667	Applied Biostatistics and Experimental Design	3	10
BTEC	6XX	Department Elective I*	3	8
BTEC	6XX	Department Elective II	3	8
BTEC	6XX	Department Elective III	3	8
BTEC	6XX	Department Elective IV	3	8
BTEC	5-6XX	Department Elective V	3	8
BTEC	690	PhD Seminar	NC	2
BTEC	691	Independent Study for Qualifying Exam	NC	30
BTEC	700	PhD Dissertation	NC	150
TOTAL			21	242
EXTRA/NON-DEGREE COURSES				
Dept.	Code	Course Name	CR.	ECTS
		Extra/Non-degree	NC	

*If student did not take a research methods/methodologies course during MS work, he/she shall take BTEC 560 Scientific Research Methods in Genetic Engineering instead Department Elective I

Course Group	Description
Remedial Courses	Undergraduate level courses offered by department
Research Methodologies	BTEC 560 Scientific Research Methods in Genetic Engineering
Department Elective I-IV	Restricted BTEC departmental courses in 6XX pool, by approval of advisor and BTEC department.
Department Elective V	Restricted BTEC departmental courses in 5XX and 6XX pool, by approval of advisor and BTEC department.
Extra/Non-degree	Optional non-credit (NC) courses that are not part of the program.