BS/MS Biotechnology Internal Candidates (5yr)

It is the responsibility of the student to meet all of their major and liberal arts course requirements of the University.

CORE REQUIREMENTS (40)

*UNIV 100 Living Resp. (1)	Religious Studies 112 (3)	Philosophy 113 (3)
ENGL 160 Writing Skills (3) (C>)	Religious Studies 100 or above (3)	Philosophy (404 suggested) (3)
English 180 (3)	*Social Science(3)	History (global) (3)
English 300 or above (3)	Foreign Language(3)	History(3)
Fine Arts(3)	*Foreign Language(3) or Elective	

*Transfer students are exempt from UNIV 100

* Social Sciences e.g. Psychology 211, Economics, Sociology, Political Science, Anthropology, Criminology or any other social science course.

*If a student has completed 4 years of the same foreign language in high school, that student can choose to take just one, three-credit course to satisfy the foreign language requirement. That course however, must be above the 212 level.

MAJOR REQUIREMENTS

Required for all Biotechnology Majors (44)

BIOL 150 + L	General Biology I (4) (F) (SI) (C>)
BIOL 151 + L	General Biology II (4) (S) (SII)
BIOL 235 + L	General Microbiology (4)
BIOL 281	Intro to Biotechnology (3) (F)
BIOL 410	Science Literacy Capstone (2) (F)
BIOL 455	Senior Research Project (2) (F/S)
CHEM 131 + L	General Chemistry I (4) (F) (SII) (C>)
CHEM 132 + L	General Chemistry II (4) (S)
CHEM 221 + L	Organic Chemistry I (4) (F)
CHEM 222 + L	Organic Chemistry II (4) (S)
PHIL 404	Biomedical Ethics (3) (S)
MATH 155	Statistics for Bhvl & Soc Sci (3) (F/S)
MATH 170	Applications of Math to Biology (3) (S)
OR	
MATH 201	Calculus with Analytic Geometry I (3) (F)

Senior Year Grad Courses (13)

5 th Voor Science Courses (5.6)		
	BIOL 540+L	*Molecular & Cellular BIOL (4) (S)
	BIOL 502	*Bioinformatics (3) (S)
	BIOL 583	*Emerging Medicines & Tech (3) (S)
	BIOL 501	*Cell Culture (3) (F)

5 Year Science Courses (5-6)

BIOL 520	*Literature Review	
BIOL 5XX or CHEM 5XX		*Science Elective

18 -	- 19 Grad Science Credits
CHEW 3AA	Science Elective

ENVS 420+L	*Ecology (4) (F)
BIOL 351	Evolution (3) (S)
CHEM 398+L	CHEM Analysis (3)
BIOL 305	Fundamental Neuroscience (3) (S)
BIOL 498	Biology Internship (3) (F/S)
BIOL 421+L	*Biochemistry I (4) (F)
BIOL 422	*Biochemistry II (3)
BIOL 332+L	*Immunology (4) (S)
BIOL 201+L	Human Gross Anatomy (4) (F)
BIOL 202 + L	Human Physiology (4) (F)
BIOL 446+L	Genetics (4) (F)
CHEM 313	Medicinal Chemistry (3) (F/S)
PHYS 303+L	General Physics I (3) (F)
PHYS 304+L	General Physics II (3) (S)
MATH 202	Calculus with Analytic Geometry II (3)

Required Electives (18)

5th Year Interdisciplinary (18)

		1 /
	COMM 503	Public Presentation (3)
	PSY 501	Research Methods (3)
	PUB 511	Ethics in Mgmt (3)
	BUS Elective	Graduate Business (MBA) (3)
	BUS Elective	Graduate Business (MBA) (3)
	BUS Elective	Graduate Business (MBA) (3)
* MS Biotech Course taught at 500 level		
Students will apply to the MS program in the spring of their Junior		
year		

(F = Fall Semester)

(S = Spring Semester) (F/S = Fall or S

(F/S = Fall or Spring Semester)

(SI = Summer Session I)

(SII = Summer Session II)

 $(C > = Needs \ a \ C \ or \ better)$