

**Bachelor of Science in Biology
And Master of Science in Biomedical Engineering
College of Engineering
University of Texas at Arlington
General Requirements 2008-2009 ■ Total Credit Hours = 163**

Freshman

First Semester			Hours	Second Semester			Hours
BIOL	1441	Cell & Molecular Biology	4	BIOL	1442	Structure & Function of Organisms	4
BE	1225	Intro to Bioengineering	2	CHEM	1442	General Chemistry II w/ Lab	4
CHEM	1441	Gen Chemistry I w/ Lab	4	ENGL	1301	Critical Thinking, Reading and Writing I	3
MATH	1426	Calculus I	4	MATH	2425	Calculus II	4
POLS	2311	U.S. Government	3	POLS	2312	State & Local Government	3
Total Credit Hours			17	Total Credit Hours			18

Sophomore

First Semester			Hours	Second Semester			Hours
CHEM	2181	Organic Chemistry I Lab	1	CHEM	2182	Organic Chemistry II Lab	1
CHEM	2321	Organic Chemistry I	3	CHEM	2322	Organic Chemistry II	3
ENGL	1302	Critical Thinking, Reading and Writing II	3	HIST	1312	U.S. History Since 1865	3
HIST	1311	U.S. History to 1865	3	MATH	3319	Differential Equation & Linear Algebra	3
MATH	2326	Calculus III	3	PHYS	1444	Technical Physics II (w/ Lab)	4
PHYS	1443	Technical Physics I (w/ Lab)	4			Fine Arts Elective ■	3
Total Credit Hours			17	Total Credit Hours			17

Junior

FIRST SEMESTER			Hrs	SECOND SEMESTER			Hrs	SUMMER SEMESTER			Hrs
BIOL	3301	Cell Physiology	3	BIOL	3315	Genetics	3	BE	5309D	Human Physiology	3
CE	2312	Statics & Dynamics	3	BIOL	3344	General Microbiology	4				
CSE	1310	Intro to Computer & Programming	3	EE	2320	Circuit Analysis	3				
MAE	3310	Thermodynamics*	3	MAE	2314	Fluid Mechanics	3				
		Social/Cultural Elective ■	3	MAE	2381	Experimental Methods & Measures Lab I	3				
						Literature Elective ■	3				
Total Credit Hours			15	Total Credit Hours			19	Total Credit Hours			3

Senior

FIRST SEMESTER			Hrs	SECOND SEMESTER			Hrs	SUMMER SEMESTER			Hrs
BIOL	3305	Technical Writing*	3	BIOL	3310	Tissue Culture & Appl.	3	BE	5365	Tissue Engineering Lab	3
BIOL	3312	Immunobiology	3	BIOL	4346	Techniques in Microbial & Molecular Genetics	3				
BE	4325	Fund. Bioengineering	3	MAE	3319	Dynamic Systems Modeling & Simulation	3				
CHEM	4311	Biochemistry I	3	MAE	4345	Intro to Robotics*	3				
MAE	3183	Measurements Lab 2	1	MAE	5382	Lab Principles	3				
MAE	3317	Linear Systems*	3								
Total Credit Hours			16	Total Credit Hours			15	Total Credit Hours			3

Fifth Year

First Semester			Hours	Second Semester			Hours
BE	5390	Research Project Biomedical Engineering	3	BE	5293	MS Comprehensive Exam	2
BE	5364	Tissue Engineering, Lecture	3	BE	5335	Biological Materials, Mechanics and Processes	3
BE	5300-002	Transport Phenomena in BME	3	BE	5366	Process Control in Biotechnology	3
BE	5361	Biomaterials & Blood Compatibility	3	BIOL	5314	Biometry	3
Total Credit Hours			12	Total Credit Hours			11

Students who do not have two units of a single foreign language in high school will be required to take two courses of a single foreign language in addition to the previously listed curriculum requirements.

■ To be chosen from the approved list of electives available in the BME office, 220 ELB.

* Can substitute: MAE 3310 with CHEM 3321; BIOL 3305 with COMS 3302; MAE 3317 with EE 3317; MAE 4345 with EE 4315.

This document serves as a supplement to the UTA Undergraduate 2007-08 Catalog, the on-line version of which is the official source of university information.