

NAME		MAJOR:		Biomedical Engineering							
STUDENT ID#		FOCUS		Biomaterials and Tissue Engineering							
TRANSFER FROM		MINOR:									
TERM/YEAR ADMITTED:		CATEGORY:									
TERM/YEAR COMPLETED:		(BS;BS/MS,etc)									
Category and Course	Equivalent Alternative	Type and Purpose of Course	Year/Quarter Suggested	Year/Quarter Taken	Sci/Math Credits	Engineer Credits	Design Y/N	General Credits	Liberal Y/N	Free Elective	Total Credits
Term 1											
MATH 121 Calculus I		Required - Engineering Curriculum	Frosh-1		3	1	Y				4
CS 121 Computational Laboratory I		Required - Engineering Curriculum	Frosh-1			1	Y				1
CHEM 101 General Chemistry I		Required - Engineering Curriculum	Frosh-1		3.5						3.5
ENGR 101 Engineering Design Laboratory I		Required - Engineering Curriculum	Frosh-1		0.5	1.5	Y				2
ENGL 101 Expository Writing and Reading		Required - Engineering Curriculum	Frosh-1					3	Y		3
University Seminar		Required - University Curriculum	Frosh-1					1			1
BMES 125 - Found. of Biomedical Engineering		Required - BME Curriculum	Frosh - 1		1	1					2
											16.5
Term 2											
MATH 122 Calculus II		Required - Engineering Curriculum	Frosh -2		3	1	Y				4
PHYS 101 Fundamentals of Physics I		Required - Engineering Curriculum	Frosh -2		3	1	Y				4
CHEM 102 Chemistry II		Required - Engineering Curriculum	Frosh -2		3.5	1					4.5
ENGR 102 Engineering Design Laboratory II		Required - Engineering Curriculum	Frosh -2		0.5	1.5	Y				2
ENGL 102 Persuasive Writing and Reading		Required - Engineering Curriculum	Frosh -2					3	Y		3
CS 122 Computational Laboratory II		Required - Engineering Curriculum	Frosh -2			1	Y				1
University Seminar		Required - University Curriculum	Frosh -2					0.5			0.5
CO-OP 101		Required - University Curriculum	Frosh -2								
											19
Term 3											
MATH 200 Multivariate Calculus		Required - Engineering Curriculum	Frosh - 3		3	1	Y				4
PHYS 102 Fundamentals of Physics II		Required - Engineering Curriculum	Frosh - 3		3	1	Y				4
BIO 122: Cells and Genetics or similar		Required - Engineering Curriculum	Frosh - 3		4.5						4.5
ENGR 103 Engineering Design Laboratory III		Required - Engineering Curriculum	Frosh - 3		0.5	1.5	Y				2
ENGL 103 Analytical Writing and Reading		Required - Engineering Curriculum	Frosh - 3					3	Y		3
CS 123 Computational Laboratory III		Required - Engineering Curriculum	Frosh - 3			1	Y				1
University Seminar		Required - University Curriculum	Frosh - 3					0.5			0.5
CO-OP 101		Required - University Curriculum	Frosh - 3								
											19
Term 4											
ENGR 221: Linear Systems Engineering		Required - Engineering Curriculum	Soph - 1		3						3
PHYS 201 Physics III		Required - Engineering Curriculum	Soph - 1		3	1					4
MEM 202 Statics		Required - BME Curriculum	Soph - 1			3					3
BMES 212 The Body Synthetic		Required - BME Curriculum	Soph - 1		1	2					3
Sophomore Design/Professional Techniques I (?)		Required - Engineering Curriculum	Soph - 1			2					2
BIO 201 Human Physiology I		Required - BME Curriculum	Soph - 1		3.5	0.5					4
											19
Term 5											
ENGR 222 : Dynamic Systems Engineering		Required - Engineering Curriculum	Soph - 2		3						3
BMES 480 Biosimulation		Required - BME Curriculum	Soph - 2		2	2			Y		4
Sophomore Design/Professional Techniques I (?)		Required - Engineering Curriculum	Soph - 2			2					2
BIO 203 Human Physiology II		Required - BME Curriculum	Soph - 2		3.5	0.5					4
ECE 201 Fund Electric Circuits		Required - BME Curriculum	Soph - 2			3					3
											16
Term 6											
BMES 321 - Eng. Principles of Living Systems I		Required - BME Curriculum	PreJun - 1		1	2					3
MATE 101		Required - Engineering Curriculum	PreJun - 1			4					4
BMES 301 Biomed. Eng Lab I: Biomechanics		Required - BME Curriculum	PreJun - 1		1	1					2
BMES 310 - Biomedical Statistics		Required - BME Curriculum	PreJun - 1		4						4
HIST 285 History of Technology		Required - Engineering Curriculum	PreJun - 1					3	Y		3
											16
Term 7											
BMES 322 Eng. Principles of Living Systems II		Required - BME Curriculum	PreJun - 2		2	1					3
BMES 338 Biomedical Ethics and Law		Required - BME Curriculum	PreJun - 2					3			3

BIO 214: Principles of Cell Biology		Required Biomat/Tissue Eng	PreJun - 2								3
MEM 230 - Mechanics of Materials I		Pre-Requisite for Biomaterials I	PreJun - 2			4					4
											13
Term 8											
BIO 218/219 Principles/Techniques in Molecular Biology		Pre-Requisite for BMES 471	Junior - 1		5.5						5.5
CHEM 241 - Organic Chemistry I		Required Biomat/Tissue Eng	Junior - 1		4						4
Liberal Studies		Required - BME Curriculum	Junior - 1					3	Y		3
BMES 381 - Junior Seminar I		Required - BME Curriculum	Junior - 1					2			2
											14.5
Term 9											
CHEM 242 - Organic Chemistry II		Required Biomat/Tissue Eng	Junior - 2		4						4
CHEM 244 - Organic Chemistry Laboratory I		Required Biomat/Tissue Eng	Junior - 2		2	1					3
BMES 375 - Computational Bioengineering		Required Biomat/Tissue Eng	Junior - 2		1	3					4
BMES 451 - Transport Phenomena in Living Systems I		Required Biomat/Tissue Eng	Junior - 2		1	3	Y				4
BMES 382 - Junior Seminar II		Required - BME Curriculum	Junior - 2			2			Y		2
											17
Term 10											
CHEM 245 - Organic Chemistry Laboratory II		Required Biomat/Tissue Eng	Senior - 1		2	1					3
BMES 471 - Foundations of Tissue Engineering I		Required Biomat/Tissue Eng	Senior - 1		3	1					4
BMES 460 Biomaterials I		Required Biomat/Tissue Eng	Senior - 1		2	2					4
Liberal Studies		Required - BME Curriculum	Senior - 1					3	Y		3
Senior Design I		Required - BME Curriculum	Senior - 1			2	Y				2
											16
Term 11											
BMES 461 - Biomaterials II		Required Biomat/Tissue Eng	Senior - 2		1	3					4
General Studies		Required - BME Curriculum	Senior - 2					3			3
BMES 472 - Foundational of Tissue Engineering II		Required Biomat/Tissue Eng	Senior - 2		2	2					4
Liberal Studies		Required - BME Curriculum	Senior - 2					3	Y		3
Senior Design II		Required - BME Curriculum	Senior - 2			2	Y				2
											16
Term 12											
BMES 462 - Biomaterials III		Required Biomat/Tissue Eng	Senior - 3		1	3					4
BMES 473 - Foundations of Tissue Engineering III		Required Biomat/Tissue Eng	Senior - 3		1	3					4
General Studies		Required - BME Curriculum	Senior - 3					3			3
Senior Design III		Required - BME Curriculum	Senior - 3			4	Y				4
											15
TOTALS - Biomaterials & Tissue Engineering	197.00				88.50	74.50		34.00			197
TOTALS - ABET BASIC REQUIREMENTS	192 Total Credits				48	72					