



# SAMPLE FOUR-YEAR PLAN for the BACHELOR OF SCIENCE IN APPLIED SCIENCE & ENGINEERING W/ BIOTECHNOLOGY CONCENTRATION

## Freshman Year

<u>Fall</u>	<u>Credits</u>	<u>Spring</u>	<u>Credits</u>
MATH 161 Calculus I.....	4	MATH 162 Calculus II.....	4
PHYS 101 General Physics Engineering I.....	4	ENGR 156 Introduction to Engineering.....	2
MECE 107 Engineering Graphics.....	2	PHYS 102 General Physics Engineering II.....	4
MECE 109 Introduction to Solid Modeling .....	2	Writing Requirement or HUMA Course.....	3
HUMA 100 The Humanities: Christian Wisdom.....	1	ENGR 120 Numerical Computing.....	<u>3</u>
Writing Requirement or HUMA Course.....	<u>3</u>		16
	16		

## Sophomore Year

<u>Fall</u>	<u>Credits</u>	<u>Spring</u>	<u>Credits</u>
CHEM 105 Chemistry for Engineers.....	4	Foundations Social Science Course .....	3
BIOL 101 General Biology I.....	4	ENGR 216 Mechatronics I.....	3
SSFT Course.....	2	ENGR 274 Mathematical Methods Engineering.....	3
MECE 201 Fundamentals of Material Science.....	3	STAT 131 Statistical Methods I.....	3
MECE 211 Mechanics I.....	3	MECE 252 Mechanical Systems Lab II.....	1
MECE 251 Mechanical Systems Lab I.....	<u>1</u>	HUMA Course .....	<u>3</u>
	17		16

## Junior Year

<u>Fall</u>	<u>Credits</u>	<u>Spring</u>	<u>Credits</u>
BIOL 233 Genetics.....	4	BIOL 234 Cell Biology.....	4
ENGR 304 Design of Experiments.....	1	ENGR 340 Fundamentals Biomedical Engineering.....	3
General Elective.....	3	EXER 258 Anatomy & Physiology II.....	4
EXER 253 Anatomy & Physiology I.....	4	General Elective.....	3
HUMA Course/ENGR 414** Biomedical Engineering Design.....	<u>3</u>	HUMA Course/ENGR 413** Bio Fluid Mechanics.....	<u>3</u>
	15		17

## Senior Year

<u>Fall</u>	<u>Credits</u>	<u>Spring</u>	<u>Credits</u>
ENGR 401 Engineering Design.....	1	ENGR 452 Capstone Design Laboratory II.....	3
ENGR 451 Capstone Design Laboratory I.....	3	ENGR 402 Engineering Senior Seminar.....	1
EXER 309 Biomechanics.....	3	ENGR 413 Bio Fluid Mechanics/HUMA Course**.....	3
ENGR 414 Biomedical Engineering Design/HUMA Course**.....	3	HUMA 300 Gospel and the Good Life: Christian Ethics.....	2
HUMA Course .....	3	General Elective.....	<u>6</u>
General Elective.....	<u>3</u>		15
	16		

\*\*ENGR 413 and 414 are offered every other years so students entering odd years will take first listed course

Students are expected to use this status sheet in conjunction with the College *Bulletin* and to contact their advisors for a detailed schedule of courses recommended to meet requirements for this major.

TOTAL CREDIT HOURS REQUIRED = 128