

# Grove City College Status Sheet

Status Sheets are provided as a convenience for the student and may be helpful for recording completed courses. However, the College Bulletin is the controlling authority on all requirements. Questions should be directed to your academic advisor or the Registrar.

## B.S. in Applied Science and Engineering w/ Biomedical Engineering Concentration Entering 2022 (REVISED 05-31-2022)

(WI)=Writing Intensive, (SI)=Speaking Intensive, (IL)=Information Literacy courses.

Name: \_\_\_\_\_

ID# \_\_\_\_\_

Year of Anticipated Graduation: \_\_\_\_\_

Date: \_\_\_\_\_

Advisor: \_\_\_\_\_

**TOTAL HOURS REQUIRED FOR THIS DEGREE----- 128 HOURS**

**General Education + Elective Requirements----- 41 HOURS**

**GENERAL EDUCATION REQUIREMENTS----- 24 HOURS**

**HUMANITIES CORE----- 15 HOURS**

	Cr.	Sem. Taken	Grade
HUMA 102 Civ and the Biblical Revelation (IL)*	3	_____	_____
HUMA 200 Western Civilization	3	_____	_____
HUMA 202 Civilization and Literature	3	_____	_____
HUMA 301 Civilization and the Arts	3	_____	_____
HUMA 303 Christianity and Civilization	3	_____	_____

\*The year-long sequence of RELI 211 and 212 may substitute for this course.

**WRITING REQUIREMENT----- 3 HOURS**

WRIT 101 Found. of Academic Discourse (IL)	3	_____	_____
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**STUDIES IN SCIENCE, FAITH, & TECHNOLOGY (SSFT)----- 2 HOURS**

Choose one course from the following:

COMP 205/SSFT 205 Ethics, Faith, and the Conscious Mind			
PHIL 243 Science and the Human: Inquiry, Design, & the Person			
SSFT 210 Science & Religion			
SSFT 212 Science, Faith, Technology, & Origins			
	2	_____	_____

**FOUNDATIONS OF THE SOCIAL SCIENCES----- 3 HOURS**

Choose one course from the following:

ECON 120 Foundations of Economics	PSYC 101 Foundations of Psychology		
HIST 120 Foundations of History	PSYC 200 Cross-Cultural Psychology		
HIST 141 World Geography	SOCI 101 Foundations of Sociology		
HIST 204 Hist/Phil Foundations of Education	SOCI 103 Found. of Cultural Anthr.		
POLS 101 Foundations of Political Science	SOCW 101 Found. of Social Work		
		3	_____

**QUANTITATIVE/LOGICAL REASONING----- 0 HOURS**

Satisfied by major-related requirements.

**NATURAL SCIENCES (with labs)----- 0 HOURS**

Satisfied by major-related requirements.

**PHYSICAL EDUCATION----- 1 HOURS**

PHYE 100 Healthful Living	1	_____	_____
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**GENERAL ELECTIVES----- 17 HOURS**


**Minimum CQPA and MQPA required for graduation-----2.00**

**MQPA Courses---ENGR; BIOL; CHEM; PHYS; ELEE; MECE; MATH**

**Major Requirements-----87 HOURS**

**ENGINEERING SCIENCE CORE----- 54 HOURS**

	Cr.	Sem. Taken	Grade
BIOL 101 General Biology	4	_____	_____
CHEM 105 Chemistry for Engineers	4	_____	_____
MATH 161 Calculus I	4	_____	_____
MATH 162 Calculus II	4	_____	_____
STAT 131 Statistical Methods I	3	_____	_____
PHYS 101 General Physics Engineering I	4	_____	_____
PHYS 102 General Physics Engineering II	4	_____	_____
ELEE 210 Electrical Engineering	3	_____	_____
MECE 107 Engineering Graphics	2	_____	_____
MECE 109 Introduction to Solid Modeling	2	_____	_____
MECE 201 Fundamentals of Material Science	3	_____	_____
MECE 211 Mechanics I	3	_____	_____
MECE 304 Design of Experiments	1	_____	_____
ENGR 120 Numerical Computing	3	_____	_____
ENGR 156 Introduction to Engineering	2	_____	_____
ENGR 402 Engineering Economics	1	_____	_____
ENGR 401 Capstone Design Sequence	3	_____	_____
ENGR 451 Capstone Design Laboratory I	1	_____	_____
ENGR 452 Capstone Design Laboratory II	3	_____	_____

**PLAN OF STUDY**

**Biomedical Engineering:----- 33 HOURS**

EXER 253 Anatomy & Physiology I	4	_____	_____
EXER 258 Anatomy & Physiology II	4	_____	_____
BIOL 233 Genetics	4	_____	_____
BIOL 234 Cell Biology	4	_____	_____
ENGR 274 Mathematical Methods Engineering	3	_____	_____
MECE 251 Mechanical Systems Lab I	1	_____	_____
MECE 252 Mechanical Systems Lab II	1	_____	_____
EXER 309 Biomechanics	3	_____	_____
ENGR 390 Fundamentals Biomedical Engineering	3	_____	_____
ENGR 413 Bio Fluid Mechanics	3	_____	_____
ENGR 414 Biomedical Engineering Design	3	_____	_____

\* Other plans of study must be approved by Interdisciplinary Study Review Committee

# SAMPLE FOUR-YEAR PLAN for the BACHELOR OF SCIENCE IN APPLIED SCIENCE & ENGINEERING W/ BIOMEDICAL ENGINEERING 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
BIOL 101 General Biology I.....	4	ENGR 156 Introduction to Engineering.....	2
PHYS 101 General Physics Engineering I.....	4	PHYS 102 General Physics Engineering II.....	4
CHEM 105 Chemistry for Engineers.....	4	WRIT 101 Foundations of Academic Discourse.....	3
PHYE 100 Healthful Living .....	<u>1</u>	ENGR 120 Numerical Computing.....	<u>3</u>
	17		16

## Sophomore Year

<u>Fall</u>	<u>Credits</u>	<u>Spring</u>	<u>Credits</u>
BIOL 233 Genetics.....	4	SSFT Course.....	3
MECE 107 Engineering Graphics.....	3	MECE 252 Mechanical Systems Lab II.....	1
MECE 109 Introduction to Solid Modeling .....	1	ENGR 274 Mathematical Methods Engineering.....	3
MECE 201 Fundamentals of Material Science.....	3	BIOL 234 Cell Biology.....	4
MECE 251 Mechanical Systems Lab I.....	1	General Elective.....	3
HUMA 102 Civ and the Biblical Revelation.....	<u>3</u>	General Elective.....	<u>3</u>
	15		17

## Junior Year

<u>Fall</u>	<u>Credits</u>	<u>Spring</u>	<u>Credits</u>
STAT 131 Statistical Methods I.....	3	MECE 304 Design of Experiments.....	1
ELEE 210 Electrical Engineering.....	3	ENGR 390 Fundamentals Biomedical Engineering.....	3
MECE 211 Mechanics I.....	3	EXER 258 Anatomy & Physiology II.....	4
EXER 253 Anatomy & Physiology I.....	4	Foundations Social Science Course .....	3
HUMA 200 Western Civilization.....	<u>3</u>	HUMA 202 Civilization and Literature.....	3
	16	General Elective.....	<u>3</u>
			17

## Senior Year

<u>Fall</u>	<u>Credits</u>	<u>Spring</u>	<u>Credits</u>
ENGR 401 Capstone Design Sequence.....	3	ENGR 452 Capstone Design Laboratory II.....	3
ENGR 451 Capstone Design Laboratory I.....	1	ENGR 402 Engineering Economics.....	1
EXER 309 Biomechanics.....	3	ENGR 414 Biomedical Engineering Design.....	3
ENGR 413 Bio Fluid Mechanics.....	3	HUMA 303 Christianity and Civilization.....	3
HUMA 301 Civilization and the Arts.....	3	General Elective.....	<u>5</u>
General Elective.....	<u>3</u>		15
	16		

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