

# 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.

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

## B.S. in Physics/Computer with Software Option Entering in 2019

(REVISED 04-01-19)

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

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

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

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

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

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

General Education + Elective Requirements-----38-40 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

College requirements met through major-related coursework.

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

College requirements met through major-related coursework.

PHYSICAL EDUCATION-----1 HOURS

PHYE 100 Healthful Living	1	_____	_____
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GENERAL ELECTIVES-----14-16 HOURS

_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

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

MQPA Courses-----ASTR; COMP; PHYS; ELEE; MATH 222

Major Requirements-----88-90 HOURS

PHYSICS CORE REQUIREMENTS-----40 HOURS

	Cr.	Sem. Taken	Grade
PHYS 101 General Physics I - Engineering	4	_____	_____
PHYS 102 General Physics II - Engineering	4	_____	_____
PHYS 135 Horizons in Physics	1	_____	_____
PHYS 234 Modern Physics	3	_____	_____
PHYS 242 Introduction to Theoretical Physics	3	_____	_____
PHYS 288 Intermediate Laboratory (WI)	2	_____	_____
PHYS 303 Mechanics I	3	_____	_____
PHYS 321 Radiation Laboratory (SI) (IL)	2	_____	_____
PHYS 442 Computational Methods in Physics	3	_____	_____
ASTR 207 Introduction to Stars, Galaxies, & Cosmology	3	_____	_____
COMP 141 Computer Programming I	3	_____	_____
COMP 233 Parallel Computing	3	_____	_____
COMP 244 Database Management Systems	3	_____	_____
COMP 342 Data Communication and Networking	3	_____	_____

TECHNICAL ELECTIVES-----3 HOURS

Choose ONE of the following:

PHYS 304 Mechanics II, PHYS 305 Electricity and Magnetism; PHYS 340 Thermodynamics and Statistical Mechanics, PHYS 421 Advanced Topics, or PHYS 431 Quantum Mechanics.

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COMPUTER SOFTWARE REQUIREMENTS-----25-27 HOURS

COMP 220 Computer Programming II	3	_____	_____
COMP 222 Introduction to Data Structures/Algorithms	3	_____	_____
COMP 325 Computer Architecture and Organization	3	_____	_____
COMP 340 Operating Systems	3	_____	_____
COMP 350 Software Engineering	3	_____	_____
PHYS 210 Electronics	4	_____	_____

Choose TWO of the following (6-8 hours):

ELEE 204; COMP 480 or PHYS 270/370/470 (Limit 3 hrs); COMP 314 or any 400-level COMP course; MATH 213\*, 222\*.

\*If you complete MATH 213 and 222, you will receive a minor in Mathematics.

TECHNICAL CORE REQUIREMENTS (Science, Math, etc.)-----20 HOURS

CHEM 105 Chemistry for Engineers	4	_____	_____
MATH 161 Calculus I	4	_____	_____
MATH 162 Calculus II	4	_____	_____
MATH 261 Calculus III	4	_____	_____
MATH 262 Differential Equations	3	_____	_____
MATH 263 Numerical Differential Equations	1	_____	_____

**SUGGESTED FOUR-YEAR PLAN for the  
BACHELOR OF SCIENCE IN  
PHYSICS/COMPUTER with SOFTWARE OPTION**

**Freshman Year**

<u>Fall</u>	<u>Credits</u>	<u>Spring</u>	<u>Credits</u>
PHYS 101 General Physics I.....	4	PHYS 102 General Physics II.....	4
PHYS 135 Horizons in Physics.....	1	COMP 220 Computer Programming II.....	3
COMP 141 Computer Programming I.....	3	MATH 162 Calculus II.....	4
MATH 161 Calculus I.....	4	HUMA 102 Civ and the Biblical Revelation.....	3
WRIT 101 Foundations of Academic Discourse.....	<u>3</u>	PHYE 100 Healthful Living.....	<u>1</u>
	15		15

**Sophomore Year**

<u>Fall</u>	<u>Credits</u>	<u>Spring</u>	<u>Credits</u>
CHEM 105 Chemistry for Engineers.....	4	PHYS 234 Modern Physics.....	3
MATH 213 Discrete Mathematics for Comp. Science***...3-4	3-4	PHYS 242 Introduction to Theoretical Physics.....	3
MATH 261 Calculus III.....	4	PHYS 288 Intermediate Laboratory.....	2
HUMA 200 Western Civilization.....	3	ASTR 207 Introduction to Stars, Galaxies, & Cosmology.....	3
Electives*.....	<u>2-3</u>	SSFT Course.....	2
	17	Electives*.....	<u>3</u>
			16

**Junior Year**

<u>Fall</u>	<u>Credits</u>	<u>Spring</u>	<u>Credits</u>
PHYS 210 Electronics.....	4	PHYS 321 Radiation Laboratory.....	2
PHYS 303 Mechanics I.....	3	PHYS 442 Computational Methods in Physics**.....	3
COMP 222 Data Structures and Algorithms.....	3	COMP 233 Parallel Computing.....	3
Technical Elective.....	3	COMP 342 Data Communication and Networking.....	3
HUMA 301 Civilization and the Arts.....	<u>3</u>	HUMA 202 Civilization and Literature.....	3
	16	Electives*.....	<u>3</u>
			17

**Senior Year**

<u>Fall</u>	<u>Credits</u>	<u>Spring</u>	<u>Credits</u>
COMP 244 Database Management Systems.....	3	COMP 340 Operating Systems.....	3
COMP 305 Computer Architecture and Organization.....	3	COMP 350 Software Engineering.....	3
Foundations of Social Science Course.....	3	MATH 262 Differential Equations.....	3
HUMA 303 Christianity and Civilization.....	3	MATH 263 Numerical Differential Equations.....	1
Electives*.....	<u>4</u>	Electives*.....	<u>6</u>
	16		16

\* 3-4 credits will be fulfilled by a Computer Software Requirement choice.

\*\* The sequencing of MATH 262/263 and PHYS 442 may alternate because PHYS 442 is taught every other year.

\*\*\* Recommended Computer Software Requirement selection.