

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 Hardware
Option
Entering in 2025
(REVISED 02-24-2025)

Name: _____
ID# _____
Year of Anticipated Graduation: _____

Date: _____
Advisor: _____

TOTAL HOURS REQUIRED FOR THIS DEGREE-----	128 HOURS
General Education + Elective Requirements-----	41-42 HOURS

Minimum CQPA and MQPA required for graduation-----	2.00
MQPA Courses-----	ASTR; COMP; PHYS; ELEE; MATH 222
Major Requirements-----	86-87 HOURS

GENERAL EDUCATION REQUIREMENTS----- 26 HOURS

		Cr.	Sem. Taken	Grade
HUMANITIES CORE----- 18 HOURS				
HUMA 100	The Humanities: Christian Wisdom	1	_____	_____
HUMA 200	Western Civilization	3	_____	_____
HUMA 202	Civilization and Literature	3	_____	_____
HUMA 204	Civilization and the Arts	3	_____	_____
HUMA 261	Scripture & Theology for the Chr. Life I	3	_____	_____
HUMA 271	Scripture & Theology for the Chr. Life II	3	_____	_____
HUMA 300	Gospel & the Good Life: Christian Ethics	2	_____	_____

WRITING REQUIREMENT----- 3 HOURS				
WRIT 101	Found. of Academic Discourse (WI/IL)	3	_____	_____

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 204	Historical & Phil. Found. of Education	SOCW 101	Foundations of Social Work	
POLS 101	Foundations of Political Science	SOCI 101	Foundations of Sociology	
		SOCI 103	Found. of Cultural Anthr.	
		3	_____	_____

NATURAL SCIENCE (with lab)/ QUANTITATIVE/LOGICAL REASONING---- 0 HOURS				
(1)	Natural Science with lab	4	(Met through major)	
(2)	Quantitative/Logical Reasoning	3-4	(Met through major)	
(3)	Third course in Natural Science, Quantitative or Logical Reasoning	3-4	(Met through major)	

STUDIES IN SCIENCE, FAITH, & TECHNOLOGY ----- 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	_____	_____

GENERAL ELECTIVES-----		15-16 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	_____	_____
ELEE 441	Computer Architecture	3	_____	_____
COMP 244	Database Management Systems	3	_____	_____
COMP 342	Data Communication and Networking	3	_____	_____

TECHNICAL ELECTIVES----- 6-7 HOURS				
Choose TWO of the following:				
PHYS 304 Mechanics II, PHYS 305 Electricity and Magnetism; PHYS 340 Thermodynamics and Statistical Mechanics, PHYS 401 or 402 (Medical Physics), PHYS 421 Advanced Topics, PHYS 431 Quantum Mechanics, ASTR 310 Astrophysics, or MATH 213 Discrete Mathematics for Computer Science.				

COMPUTER HARDWARE REQUIREMENTS----- 20 HOURS

COMP 220	Computer Programming II	3	_____	_____
ELEE 201	Linear Circuits I	3	_____	_____
ELEE 202	Linear Circuits II	3	_____	_____
ELEE 204	Digital Logic	3	_____	_____
ELEE 251	Lab Skills and Prototyping (IL)	1	_____	_____
ELEE 252	Digital Circuits Laboratory	1	_____	_____
ELEE 306	Design of Digital Systems.	3	_____	_____
ELEE 310	Microcontrollers	3	_____	_____

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	_____	_____

SAMPLE FOUR-YEAR PLAN for the BACHELOR OF SCIENCE IN PHYSICS/COMPUTER with HARDWARE 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	Writing Requirement or HUMA Course.....	<u>3</u>
HUMA 100 The Humanities: Christian Wisdom.....	1		14
Writing Requirement or HUMA Course.....	<u>3</u>		
	16		

Sophomore Year

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

Junior Year

<u>Fall</u>	<u>Credits</u>	<u>Spring</u>	<u>Credits</u>
PHYS 303 Mechanics I.....	3	PHYS 442 Computational Methods in Physics**.....	3
COMP 244 Database Management Systems.....	3	ELEE 202 Linear Circuits II.....	3
ELEE 201 Linear Circuits I.....	3	ELEE 204 Digital Logic	3
ELEE 251 Lab Skills and Prototyping.....	1	ELEE 252 Digital Circuits Laboratory.....	1
HUMA Course	3	ELEE 441 Computer Architecture.....	3
Electives*.....	<u>3</u>	HUMA Course	<u>3</u>
	16		16

Senior Year

<u>Fall</u>	<u>Credits</u>	<u>Spring</u>	<u>Credits</u>
COMP 342 Data Communication and Networking.....	3	PHYS 321 Radiation Laboratory.....	2
HUMA 300 Gospel and the Good Life: Christian Ethics....	2	ELEE 306 Design of Digital Systems.....	3
Electives*.....	<u>12</u>	ELEE 310 Microcontrollers	3
	17	MATH 262 Differential Equations.....	3
		MATH 263 Numerical Differential Equations.....	1
		Electives*.....	<u>4</u>
			16

* 6-7 of these electives must be fulfilled by a Technical Elective course.

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