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 2016

(REVISED 05-03-16)

Name: _____

ID# _____ **Date:** _____

Year of Anticipated Graduation: _____ **Advisor:** _____

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

General Education + Elective Requirements---------- 42 HOURS

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

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

Major Requirements----------86 HOURS

GENERAL EDUCATION REQUIREMENTS---------- 25 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	Civ and the Speculative Mind	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		

STUDIES IN SCIENCE, FAITH, & TECHNOLOGY (SSFT)---------- 2 HOURS

Choose one course from the following:

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 social science course from the following:

ECON 120	Foundations of Economics			
HIST 120	Foundations of History			
HIST 204	Hist/Phil Foundations of Education			
POLS 101	Foundations of Political Science			
PSYC 101	Foundations of Psychology			
PSYC 200	Cross-Cultural Psychology			
SOCI 101	Foundations of Sociology			
SOCI 103	Foundations of Cultural Anthropology			
SOCW 101	Foundations 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---------- 2 HOURS

PHYE 101 (men) / 111 (women)		1		
PHYE 102 (men) / 112 (women)		1		

GENERAL ELECTIVES---------- 17 HOURS

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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 232	Intermediate General Physics	3		
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		
COMP 141	Computer Programming I	3		
COMP 244	Database Management Systems	3		
COMP 252	Computer Architecture and Organization	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 421 Advanced Topics, or PHYS 431 Quantum Mechanics.

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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 Design	3		
ELEE 251	Linear Circuits Laboratory	1		
ELEE 252	Digital Circuits Laboratory	1		
ELEE 306	Design of Digital Systems.	3		
ELEE 310	Microcontrollers with Robotic Applications	3		

TECHNICAL CORE REQUIREMENTS (Science, Math, etc.)---------- 23 HOURS

CHEM 105	Chemistry for Engineers	4		
MATH 161	Calculus I	4		
MATH 162	Calculus II	4		
MATH 213	Discrete Mathematics for Comp. Science	3		
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 HARDWARE OPTION

Freshman Year

Fall	Credits	Spring	Credits
PHYS 101 General Physics I	4	PHYS 102 General Physics II	4
PHYS 135 Horizons in Physics	1	CHEM 105 Chemistry for Engineers	4
COMP 141 Computer Programming I	3	MATH 162 Calculus II	4
MATH 161 Calculus I	4	WRIT 101 Foundations of Academic Discourse	3
HUMA 102 Civ and the Biblical Revelation	3	Physical Education 102 (men)/112 (women)	1
Physical Education 101 (men)/111 (women)	1		16
	16		

Sophomore Year

Fall	Credits	Spring	Credits
PHYS 232 Intermediate General Physics	3	PHYS 288 Intermediate Laboratory	2
COMP 220 Computer Programming II	3	PHYS 234 Modern Physics	3
MATH 261 Calculus III	4	PHYS 242 Introduction to Theoretical Physics	3
HUMA 200 Western Civilization	3	Foundations of Social Science Course	3
SSFT Course	2	HUMA 202 Civilization and Literature	3
Elective	1	Electives*	3
	16		17

Junior Year

Fall	Credits	Spring	Credits
PHYS 303 Mechanics I	3	PHYS 442 Computational Methods in Physics**	3
COMP 244 Database Management Systems	3	COMP 252 Computer Architecture and Organization	3
ELEE 201 Linear Circuits I	3	ELEE 202 Linear Circuits II	3
ELEE 251 Linear Circuits Laboratory	1	ELEE 204 Digital Logic Design	3
HUMA 301 Civilization and the Arts	3	ELEE 252 Digital Circuits Laboratory	1
Electives*	3	HUMA 303 Civilization and the Speculative Mind	3
	16		16

Senior Year

Fall	Credits	Spring	Credits
COMP 342 Data Communication and Networking	3	PHYS 321 Radiation Laboratory	2
MATH 213 Discrete Mathematics for Comp. Science	3	ELEE 306 Design of Digital Systems	3
Electives*	9	ELEE 310 Microcontrollers with Robotic Applications	4
	15	MATH 262 Differential Equations	3
		MATH 263 Numerical Differential Equations	1
		Electives*	3
			16

* 3 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.