

# 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 Computer Science Entering in 2020

(REVISED 03-01-2020)

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

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

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

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

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

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

**General Education + Elective Requirements-----36-39 HOURS**

**GENERAL EDUCATION REQUIREMENTS-----22 HOURS**

		Cr.	Sem.	Taken	Grade
<b>HUMANITIES CORE-----15 HOURS</b>					
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			
----------	-----------------------------------	---	--	--	--

**STUDIES IN SCIENCE, FAITH, & TECHNOLOGY (SSFT)-----0 HOURS**

College requirements met through major-related coursework.

**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			
----------	------------------	---	--	--	--

**GENERAL ELECTIVES-----14-17 HOURS**


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

**MQPA Courses-----COMP; MATH 213**

**Major Requirements-----89-92 HOURS**

**COMPUTER SCIENCE CORE REQUIREMENTS-----27 HOURS**

COMP 141	Computer Programming I	3		
COMP 155	Introduction to Computer Science	3		
COMP 220	Computer Programming II	3		
COMP 222	Intro. to Data Structures & Algorithms	3		
COMP 233	Parallel Computing	3		
COMP 244	Database Management Systems	3		
COMP 314	Automata Theory	3		
COMP 325	Computer Architecture & Organization	3		
COMP 342	Data Communication & Networking	3		

**ADVANCED COMPUTER CORE REQUIREMENTS-----23 HOURS**

COMP 205	Ethics, Faith, and the Conscious Mind (IL)	3		
COMP 340	Operating Systems	3		
COMP 350	Software Engineering (WI, SI, IL)	3		
COMP 422	Introduction to Algorithms	3		
COMP 443	Programming Languages	3		
COMP 448	Computer Security	3		
COMP 451	Senior Project I (IL)	2		
COMP 452	Senior Project II (WI, SI, IL)	3		

**COMPUTER SCIENCE ELECTIVES-----15 HOURS**

Choose fifteen hours from the following courses:

COMP 390 Topics in Computer Science, COMP 401 Principles of iOS Programming, COMP 402 Principles of Android Programming, COMP 435 Intro to Machine Learning, COMP 441 2D Game Design/Development, COMP 442 Web Programming Technologies, COMP 445 Intro to Artificial Intelligence, COMP 446 3D Game Design/Development, COMP 447 Networked Game Design and Development, COMP 475 Advanced Security, DSCI 344 Intro to Big Data , DSCI 450 Applied Modeling and Visualization, or ROBO 302 Mobile Robotics.

_____	3		
_____	3		
_____	3		
_____	3		
_____	3		

**MATH / SCIENCE CORE REQUIREMENTS-----24-27 HOURS**

MATH 161	Calculus I	4		
MATH 162	Calculus II	4		
MATH 213	Discrete Mathematics for Comp. Science	4		
MATH 214	Applied Probability and Linear Algebra	4		
<b>OR</b>				
MATH 222	Linear Algebra <b>AND</b>	4		
MATH 331	Theory of Statistics I	3		

Choose two of the following (eight credits): PHYS 101, 102, CHEM 105, 111 and 113, 112 and 114, BIOL 101, or 102.

_____	4		
_____	4		

# SAMPLE FOUR-YEAR PLAN for the BACHELOR OF SCIENCE IN COMPUTER SCIENCE

## Freshman Year

<u>Fall</u>	<u>Credits</u>	<u>Spring</u>	<u>Credits</u>
COMP 141 Computer Programming I.....	3	COMP 220 Computer Programming II.....	3
COMP 155 Introduction to Computer Science.....	3	MATH 162 Calculus II.....	4
MATH 161 Calculus I.....	4	Science Elective.....	4
Science Elective.....	4	WRIT 101 Foundations of Academic Discourse.....	3
HUMA 102 Civ and the Biblical Revelation.....	3	PHYE 100 Healthful Living.....	1
	17		15

## Sophomore Year

<u>Fall</u>	<u>Credits</u>	<u>Spring</u>	<u>Credits</u>
COMP 222 Introduction to Data Structures & Algorithms.....	3	COMP 205 Ethics, Faith, and the Conscious Mind.....	3
COMP 244 Database Management.....	3	COMP 233 Parallel Computing.....	3
MATH 213 Discrete Mathematics for Comp. Science.....	4	COMP 342 Data Communication & Networking.....	3
HUMA 200 Western Civilization.....	3	MATH 214 Applied Probability & Linear Algebra.....	4
Foundations of Social Science Course.....	3	HUMA 202 Civilization and Literature.....	3
General Electives.....	1		16
	17		

## Junior Year

<u>Fall</u>	<u>Credits</u>	<u>Spring</u>	<u>Credits</u>
COMP 325 Computer Architecture & Organization.....	3	COMP 314 Automata Theory.....	3
COMP 422 Introduction to Algorithms.....	3	COMP 340 Operating Systems.....	3
Computer Science Elective.....	3	COMP 350 Software Engineering.....	3
Computer Science Elective.....	3	Computer Science Elective.....	3
HUMA 301 Civilization and the Arts.....	3	General Electives.....	3
General Electives.....	2	General Electives.....	1
	17		16

## Senior Year

<u>Fall</u>	<u>Credits</u>	<u>Spring</u>	<u>Credits</u>
COMP 448 Computer Security.....	3	COMP 443 Programming Languages.....	3
COMP 451 Senior Project I.....	2	COMP 452 Senior Project II.....	3
Computer Science Elective.....	3	Computer Science Elective.....	3
HUMA 303 Christianity and Civilization.....	3	General Electives.....	3
General Electives.....	3	General Electives.....	3
General Electives.....	1		15
	15		

\*Note: Students must work with their advisor during their sophomore year to create a plan for their computer science electives, since some electives are only offered in alternate years and require certain prerequisites.