

**COMPUTER SCIENCE DEPARTMENT 2017-2019
PROPOSED SOPHOMORE PLAN OF STUDY**

Student name: _____

E-mail address: _____

CPSC Honors Major Requirements - nine courses in computer science:

Required courses in computer science. **Must be taken** before any upper-level CS course:

CPSC21*	_____	CPSC31	_____
	Semester and Year		Semester and Year
CPSC35	_____		
	Semester and Year		

One course from each group listed, see link: <http://www.cs.swarthmore.edu/courses/future.html>:

Group 1:	_____	_____
	Course	Semester and Year

Group 2:	_____	_____
	Course	Semester and Year

Group 3:	_____	_____
	Course	Semester and Year

CPSC180	_____
	(Thesis) Semester and Year

Required	<u>Senior Comprehensive+(G1,G2 or G3)</u>
----------	---

Any two CPSC courses numbered above CPSC35 (must differ from those chosen above)

Elective:	_____	_____
	Course	Semester and Year

Elective:	_____	_____
	Course	Semester and Year

Two mathematics courses at or above MATH27 (Discrete Math and Linear Algebra are recommended):

Math	_____	_____
	Course	Semester and Year

Math	_____	_____
	Course	Semester and Year

*If exempted from CPSC21, substitute any upper-level course.

Each honors preparations consists of two courses. Pick your two 2-credit honors preparations from the following sets. For each preparation, specify the focus course and the breadth course from the same set. For example, CPSC 41 and CPSC 46 are a valid course preparation pairing, but CPSC 41 and CPSC 68 are not. Honors majors must have at least three distinct courses in their set of two 2-credit preparations (e.g. CPSC 63 and CPSC 65 can be used a one preparation and CPSC 65 and CPSC 68 as the other, but CPSC 63 and CPSC 65 as one preparation and CPSC 65 and CPSC 63 is not allowed). Honors majors may choose both of the 2-credit preparations from the same set of courses, or may choose one 2-credit preparation from one set and the other from a different set.

Preparation Sets

- Set 0 CPSC 41 Algorithms
CPSC 46 Theory of Computation
CPSC 49 Probabilistic Method

- Set 1 CPSC 63 Artificial Intelligence
CPSC65 Natural Language Processing
CPSC 68 Bioinformatics
CPSC 66 Machine Learning
CPSC 81 Adaptive Robotics

- Set 2 CPSC 43 Computer Networks
CPSC 44 Database Systems
CPSC 45 Operating Systems
CPSC 87 Parallel and Distributed Computing
CPSC 89 Cloud Computing

- Set 3 CPSC 37 Structure and Interpretation of Computer Programs
CPSC 73 Programming Languages
CPSC 75 Compilers

- Set 4 CPSC 40 Computer Graphics
CPSC 87 Parallel and Distributed Computing

Honors Major Preparation 1

Focus course:_____ Semester:_____

Breadth course:_____ Semester:_____

Honors Major Preparation 2

Focus course:_____ Semester:_____

Breadth course:_____ Semester:_____