

## Computer Science Major Plan (CSMaP)

Name: \_\_\_\_\_ Expected graduation year: \_\_\_\_\_

**Instructions:** Complete this form with the help of a CS professor then submit it to the MSCS Administrative Assistant in RMS 307 who will get the Director's signature.

**Foundations:** normally completed by the end of the sophomore year

Course	Prerequisite	Term, Year
Calculus I	n/a	
Linear Algebra	Calculus I	
Intro to CS (CSCI 121 or 125), or PHYS 130, or permission of program director	None for 121, Calculus I for 125	
Hardware Design	Intro to CS or equiv	
Software Design	Intro to CS or equiv	

**Core:** normally Algorithms and at least 2 others are completed by the end of the junior year

Course	Prerequisite(s)	Term, Year
Mathematical proofs course (232, 244, 252)	usu. Linear Algebra	
Algorithms and Data Structures (recommend at least one core course prior to ADS)	Software Design & proofs course	
Ethics (concurrent registration with BTS-T is acceptable, if approved by instructor)	Software Design, BTS-T course	
Systems course (Operating Systems, Mobile Computing Apps, Parallel and Distributed Computing)	SD, sometimes HD	
Language course (Programming Languages, Logic Programming, Theory of Computation)	SD, sometimes HD	

**Electives:** at least 2 required; normally at least one is completed by the end of the junior year

Course	Prerequisite(s)	Term, Year
CS Core courses	SD, sometimes HD	
Bioinformatics	Varied	
Advanced Team Project		
Topics course	Varied	
MSCS 341: Algorithms for Decision Making	Software Design	
MATH, MSCS, or PHYS courses: by permission/petition	Varied	

**Capstone:** completed in the senior year

Course	Prerequisite(s)	Term, Year
Capstone	Algorithms, Ethics	

Student signature and date: \_\_\_\_\_

Faculty member signature and date: \_\_\_\_\_

CS Director signature and date: \_\_\_\_\_

Sample CSMaP: Start in intro (or physics)

<b>Year</b>	<b>Fall</b>	<b>Interim</b>	<b>Spring</b>
First year	Intro, Calculus I		Software, Linear
Sophomore	Hardware, Elective		Language
Junior	Proofs, Systems		Algorithms
Senior	Ethics	Capstone	Elective

Sample CSMaP: Start in HD

<b>Year</b>	<b>Fall</b>	<b>Interim</b>	<b>Spring</b>
First year	Hardware, Calculus I		Software, Linear
Sophomore	Math Proofs		Algorithms
Junior	Ethics, Systems		Language
Senior	Elective, Capstone		Elective

Blank CSMaP:

<b>Year</b>	<b>Fall</b>	<b>Interim</b>	<b>Spring</b>
First year			
Sophomore			
Junior			
Senior			