COMPUTER SCIENCE MAJOR (BS)

Plan of Study

A typical four-year full-time plan of study appears below. Some variation may be possible. Students should always discuss their individual plan of study with their advisor prior to registering for courses.

Course	Title	Credits
First Year		
Fall		
CPSC 1101 or ENGR 1031	Introduction to Computing (placement based) or Fundamentals of Engineering	3
MATH 1141	Calculus I for Chemistry, Engineering, and Physics Majors	4
Modern/Classical Language Orientation Tier [5]		3
Natural Sciences Exploration Tier [9]		4
History Orientation Tier [1]		3
	Credits	**17**
Spring		
CPSC 1131	Fundamentals of Programming	3
ENGL 1001	Introduction to Rhetoric and Composition	3
MATH 1142	Calculus II for Chemistry, Engineering, and Physics Majors	4
PHIL 1101	Introduction to Philosophy	3
Natural Sciences Exploration Tier [9]		4
	Credits	**17**
Second Year		
Fall		
CPSC 2231	Programming Workshop	3
CPSC 2231L	Programming Workshop Lab	1
CPSC 2250L	Computer Science Sophomore Clinic	1
CPSC 2304	Web Development	3
MATH 2231	Discrete Mathematics	3
Math Elective		3-4
Religious Studies Orientation Tier [1]		3
	Credits	**17-18**
Spring		
CPEG 2245	Digital Design I	3
CPEG 2245L	Digital Design I Lab	1
CPSC 2232	Data Structures	3
CPSC 2232L	Data Structures Lab	1
Literature Exploration Tier [7]		3
Math Elective		3-4
	Credits	**14-15**
Third Year		
Fall		
CPEG 3346	Computer Systems Architecture	3
CPSC 3343	Design and Analysis of Algorithms	3
CPSC 3351L	Computer Science Junior Clinic I	1
SWEG 3301	Software Engineering Methods	3
History or Philosophy or Religious Studies Exploration Tier [2]		3
History or Philosophy or Religious Studies Exploration Tier [2]		3
	Credits	**16**
Spring		
CPSC 4331	Operating Systems	3
CPSC 3352L	Computer Science Junior Clinic II	1
CPSC 3354	Theory of Programming Languages	3
SWEG 3302	Software Design Methods	3
Behavioral and Social Sciences Exploration Tier [3]		3
Visual and Performing Arts Exploration Tier [6]		3
	Credits	**16**
Fourth Year		
Fall		
CPSC 3333	Introduction to Cybersecurity	3
ENGR 4961	Senior Design Project I	3
Behavioral and Social Sciences Exploration Tier [3]		3
Major Elective [4]		3
General Elective [8]		3
	Credits	**15**
Spring		
ENGR 4962	Senior Design Project II	3
Major Elective [4]		3
Major Elective [4]		3
Major Elective [4]		3
General Elective [8]		3
	Credits	**15**
	Total Credits	**127**

[1] Choose an appropriate History or Religious Studies course at the 1000 level.

[2] Choose any appropriate Religious Studies, History, or Philosophy core course.

[3] Core Social Science course may be filled by appropriate courses in Communication, Economics, Psychology, Politics, or Sociology and Anthropology.

[4] Students may choose one elective from any of the following courses in this group:
CPSC 4322 Visual Analytics
CPSC 4355 Artificial Intelligence
CPSC 4357 Database Management Systems
CPSC 4360 Machine Learning
CPSC 4521 Information Visualization
Students may choose a second elective from any of the following courses in this group:
CPSC 3349 Cloud Computing
CPSC 4314 Network Security
The remaining two major electives are chosen from the department under advisement of the faculty advisor and department chair.

[5] Choose any language offered by the Department of Modern Languages and Literatures, based on a placement exam.

[6] Visual and Performing Art History courses may be chosen from Art History, Music, Film, Television, and Media Arts, Studio Art, or Theatre.

[7] Approved English, Modern Languages and Literatures, or Classics courses.

[8] General Electives may be chosen from any courses offered at the university, and are frequently chosen to help fulfill requirements toward a chosen minor

[9] Lab science elective is typically met by any lab course in Biology, Chemistry, or Physics.