



 DEPARTMENT OF

COMPUTER SCIENCE

B.S. Computer Science 2017-18

The Computer Science program is accessible to students with or without prior programming experience. This curriculum allows students to tailor senior level electives toward personal and career interests in areas such as algorithmic robotics, applied algorithms and data structures, high performance computing, machine learning, networking, or security and privacy.

Freshman Year							
Fall Semester	Course Title	Credit Hours	Semester(s) Offered	Spring Semester	Course Title	Credit Hours	Semester(s) Offered
PAGN1XX-2XX	Physical Ed	.5	F, Sp	PAGN1XX-2XX	Physical Ed	.5	F, Sp
LAIS100	Nature & Human Values	4	F, Sp, Su	PHGN100	Physics I <i>Pre: MATH111, Co: MATH112</i>	4.5	F, Sp, Su
CSM101	Freshman Seminar	.5	F	CSCI261	Programming Concepts	3	F, Sp, Su
CSCI101	Intro to Computer Science	3	F, Sp	MATH112	Calculus II <i>Pre: MATH111 (≥C)</i>	4	F, Sp, Su
CHGN121	Principles of Chem.	4	F, Sp, Su	EPIC151	Design I	3	F, Sp, Su
MATH111	Calculus I	4	F, Sp, Su				
Total Credits		16				15	
Sophomore Year							
Fall Semester				Spring Semester			
PAGN1XX-2XX	Physical Ed	.5	F, Sp	PAGN1XX-2XX	Physical Ed	.5	F, Sp
CSCI262	Data Structures <i>Pre: CSCI261(≥C-)</i>	3	F, Sp, Su	CSCI358	Discrete Math <i>Pre: MATH213</i>	3	F, Sp
PHGN200	Physics II <i>Pre: PHGN100 (≥C-), Co: MATH213</i>	4.5	F, Sp, Su	EBGN201	Principles of Econ	3	F, Sp, Su
MATH213	Calculus III <i>Pre: MATH112 (≥C)</i>	4	F, Sp, Su	CSCI341	Computer Org <i>Pre: CSCI261, Co:CSCI262</i>	3	F, Sp
DS Elective*	Dist. Science	4	F, Sp, Su	MATH225	Diff. Equations <i>Pre: MATH112 (≥C)</i>	3	F, Sp, Su
				LAIS200	Human Systems <i>Pre: LAIS100</i>	3	F, Sp, Su
				CSCI274	Intro to Linux <i>Pre: CSCI261</i>	1	F, Sp
Total Credits		16				16.5	
Junior Year							
Fall Semester				Spring Semester			
CSCI306	Software Engineering <i>Pre: CSCI262(≥C-)</i>	3	F, Sp	CSCI Elective**		3	F, Sp
MATH332	Linear Algebra <i>Pre: MATH213</i>	3	F, Sp, Su	CSCI406	Algorithms <i>Pre: CSCI262(≥C-), MATH213, CSCI358</i>	3	F, Sp
Free Elective		3	F, Sp, Su	H&SS Mid	LAIS/EBGN I	3	F, Sp, Su
Free Elective		3	F, Sp, Su	MATH201	Prob & Stats <i>Pre: MATH112</i>	3	F, Sp, Su
CSCI403	Database Management <i>Pre: CSCI262(≥C-)</i>	3	F, Sp	Free Elective		3	F, Sp, Su
Total Credits		15				15	

Field Session							
Summer I							
CSCI370	Field Session <i>Pre: CSCI306</i>	6	Su				
Total Credits		6					
Senior Year							
Fall Semester				Spring Semester			
CSCI Elective**		3	F, Sp	CSCI Elective**		3	F, Sp
CSCI Elective**		3	F, Sp	H&SS 400 Level	LAIS/EBGN III	3	F, Sp, Su
CSCI442	Operating Systems <i>Pre: CSCI262(≥C-), CSCI341</i>	3	F, Sp	Free Elective		3	F, Sp, Su
H&SS Mid	LAIS/EBGN II	3	F, Sp, Su	Free Elective		3	F, Sp, Su
Free Elective		3	F, Sp, Su	CSCI400	Principles of Programming Languages <i>Pre: CSCI306</i>	3	F, Sp
Total Credits		15				15	

*CBEN110, GEGN101, or CHGN122 or CHGN125 may be taken for Distributed Science Elective. **Total Credit Hours 129.5**

**Any 4XX or 5XX level Computer Science course.

Computer Science Electives

Course	Course Title	Credit Hours	Semesters(s) Offered
CSCI404	Artificial Intelligence	3	Sp
CSCI422	User Interfaces	3	Check Trailhead
CSCI423	Computer Simulation	3	F
CSCI437	Intro to Computer Vision	3	F
CSCI440	Parallel Computing for Scientists & Engineers	3	Check Trailhead
CSCI441	Computer Graphics	3	F
CSCI443	Advanced Computer Graphics Using Java	3	Check Trailhead
CSCI444	Advanced Computer Graphics	3	Sp
CSCI445	Web Programming	3	F
CSCI446	Web Applications	3	Check Trailhead
CSCI447	Scientific Visualization	3	Check Trailhead
CSCI448	Mobile Application Development	3	Sp
CSCI470	Machine Learning	3	F
CSCI471	Computer Networks	3	F
CSCI473	Human-Centered Robotics	3	Sp
CSCI474	Introduction to Cryptography	3	Sp
CSCI475	Information Security & Privacy	3	F
CSCI498	Special Topics	1-6	F, Sp
EENG383	Microcomputer Architecture & Interfacing	3	F, Sp
MATH307	Introduction to Scientific Computing	3	F, Sp, Su

Semester(s) Offered based on Spring 2017, Summer 2017, and Fall 2017 course schedules. Future semester offerings are subject to change. Consult Trailhead prior to registration.