

Standard graduation plan

Fall – Year 1	CR		Winter	CR		Spring	CR
UNIV 101	1		ENG 102	5		World Cultures	5
Literature	5		Philosophies	5		Human Behavior	5
Aesthetic	5		US Cultures	5		Physical Sciences	5
ENG 101	5						
Total	16		Total	15		Total	15

Fall – Year 2	CR		Winter	CR		Spring	CR
Natural World	5		Gen Ed *	5		Reasoning	4
Gen Ed *	5		Natural Sciences	5		MATH 172	5
Computer Fund.	5		CS 110	4		CS 111	4
Total	14		Total	14		Total	13

Fall – Year 3	CR		Winter	CR		Spring	CR
CS 112	4		CS 312	4		CS 380	4
CS 301	4		CS 302	4		CS 446	4
CS 311	4		CS 325	4		MATH 330	5
Elective 1	4		MATH 260	5		Elective 2	4
Total	16		Total	17		Total	17

Fall – Year 4	CR		Winter	CR		Spring	CR
CS 480	4		CS 481	4		CS 489	1
CS 427	4		CS 470	4		CS 492	1
Elective 3	4		CS 362	4		CS 420	4
CS 361	4		CS 392	1		Elective 4	4
						Elective 5	4
Total	16		Total	13		Total	14

Total Credits: 180

* Denotes classes that are not used for specific degree requirements, other than meeting the minimum credits required to graduate. Can be used for foreign language requirement or for math prerequisites if needed.

Graduation Requirements:

Gen Ed Requirements	CR	CS Pre-Major	CR	CS Major	CR	CS Elective	CR
UNIV 101	1	ENG 101	5	CS 112	4	Elective 1	4
Literature	5	ENG 102	5	CS 302	4	Elective 2	4
Aesthetic	5	CS 110	4	CS 311	4	Elective 3	4
Philosophies	5	CS 111	4	CS 312	4	Elective 4	4
United States Cultures	5	CS 301	4	CS 325	4	Elective 5	4
World Cultures	5	MATH 172	5	CS 361	4		
Human Behavior	5			CS 362	4		
Natural World	5			CS 380	4		
Natural Sciences	5			CS 392	1		
Physical Sciences	5			CS 420	4		
Computer Fundamentals	4			CS 427	4		
Reasoning	4			CS 446	4		
Gen Ed 1	5			CS 470	4		
Gen Ed 2	5			CS 480	4		
				CS 481	4		
				CS 489	1		
				CS 492	1		
				MATH 260	5		
				MATH 330	5		
Total	64	Total	27	Total	69	Total	20

Assumptions:

- High School foreign language requirement completed.
- Gen-Ed classes are offered every quarter
- Gen-Ed classes meet writing and lab graduation requirements.
- Gen-Ed and elective categories represent the minimum number of credits that can be used to fulfill that requirement.
- CS Pre-admission requirements are taken with at least a B- Minimum
- CS Electives consist of at least 12 credits from the CS department and at least 20 credits total.
- Prerequisites for MATH 172 are met before last quarter of second year.

Quarterly Course Offerings - Based off of tentative course offerings for 2017-2018 academic year

Course	Fall	Winter	Spring
CS 110	X	X	X
CS 111		X	X
CS 112	X	X	X
CS 301	X		X
CS 302	X	X	
CS 311	X		X
CS 312	X	X	
CS 325	X	X	X
CS 351*		X	
CS 361	X		
CS 362		X	
CS 367*			X
CS 370*			X
CS 380			X
CS 392	X	X	X
CS 420		X	X
CS 427	X	X	
CS 440*	X		
CS 445*		X	
CS 446			X
CS 450*			X
CS 455*		X	
CS 460*	X		
CS 470		X	
CS 471			X
CS 473*		X	
CS 480	X		
CS 481		X	
CS 489		X	X
CS 492	X	X	X
MATH 260	X	X	X
MATH 330	X		X

* denotes elective classes

Computer Science Core Course Prerequisites

CS 110 - Programming Fundamentals I	
CS 111 - Programming Fundamentals II	CS 110 and MATH 153
CS 112 - Foundations of Computer Science	
CS 301 - Data Structures	CS 111 and MATH 154
CS 302 - Advanced Data Structures and File Processing	CS 301 and MATH 172
CS 311 - Computer Architecture I	CS 110
CS 312 - Computer Architecture II	CS 301 and CS 311
CS 325 - Technical Writing in Computer Science	ENG 102 and CS 301
CS 361 - Principles of Language Design I	CS 302 <i>and admission to CS Major</i>
CS 362 - Principles of Language Design II	CS 361 and MATH 260 <i>and admission to CS Major</i>
CS 380 - Introduction to Software Engineering	CS 302 <i>and admission to CS Major</i>
CS 392 - Lab Experience in Teaching Computer Science	
CS 420 - Database Management Systems	CS 302, CS 325, and MATH 330 <i>and admission to CS Major</i>
CS 427 - Algorithm Analysis	CS 302, CS 325, and MATH 330 <i>and admission to CS Major</i>
CS 446 - User Interface Design and Development	CS 302 <i>and admission to CS Major</i>
CS 470 - Operating Systems	CS 302 and CS 312 and CS 325 <i>and admission to CS Major</i>
CS 480 - Advanced Software Engineering	CS 325 and CS 380 <i>and admission to CS Major</i>
CS 481 - Software Engineering Project	CS 325 and CS 480 <i>and admission to CS Major</i>
CS 489 - Senior Colloquium	CS 325 <i>and admission to CS Major</i>
CS 492 - Lab Experience in Teaching Computer Science	
MATH 172 - Calculus I	MATH 154 with a grade of C or higher, a score of 19 on the Advanced Math Placement Test
MATH 260 - Sets and Logic	MATH 173 with a grade of C or higher or MATH 172 and CS 301 with grades of C or higher
MATH 330 - Discrete Mathematics	MATH 260 with a grade of C or higher

Computer Science Elective Prerequisites

CS 351 - Web Development Technologies II	CS 250
CS 367 - Advanced Visual Basic Programming	CS 105 and CS 110
CS 370 - Introduction to the UNIX Operating System	CS 301 and CS 311
CS 430 - Introduction to Computer Security	CS 312
CS 440 - Computer Graphics	CS 302 and CS 325
CS 441 - Computer Graphics II	CS 440
CS 442 - Computer Vision	CS 302
CS 445 - Data and Information Visualization	CS 302
CS 450 - Computer Network and Data Communications	CS 301, CS 311, and CS 325
CS 455 - Artificial Intelligence	CS 302, CS 325, CS 362, and MATH 330
CS 456 - Data Mining	CS 420 and either MATH 311 or BUS 221
CS 460 - Software Engineering for Mobile Devices	CS 301
CS 471 - Optimization	CS 302 and CS 325 and MATH 330
CS 473 - Parallel Computing	CS 325 and CS 470
CS 475 - Distributed Systems	CS 302
CS 476 - Social Informatics	CS 301
CS 530 - High-performance Computing	CS 528