

COMPUTER SCIENCE CORE REQUIREMENTS				
COURSE #	COURSE TITLE	PREREQUISITE	CR	
CS 1400◆	Fundamentals of Programming	MAT 1000 or 1010 with a B or higher, or math test score. CS 1030 recommended	3	F, Sp, Su
CS 1410◆	Object-Oriented Programming	CS 1400 and Math 1050 with C+	3	F, Sp, Su
CS 2300◆	Discrete Mathematical Structures I	CS 1410 and MATH 1050	3	F, Sp, Su
CS 2370	C plus plus programming	CS 1410	3	F, Sp, Su
CS 2420◆	Intro to Algorithms and Data Structures	CS 1410	3	F, Sp, Su
CS 2550*	Web Programming I	CS 1410 or DGM 2760 or INFO 1200	3	F, Sp
CS 2600*	Computer Networks I	CS 2810 or (INFO 1200 and IT 1600)	3	F, Sp
CS 2690*	Computer Networks II	CS 1410, CS 2300, CS 2370, CS 2600, Pre- or Corequisite: MATH 1210	3	F, Sp
CS 2810*	Computer Organization and Architecture	CS 1400	3	F, Sp, Su
CS 305G*	Global Social & Ethical Issues in Computing	ENGL 2010 & (CS 1030 or CS 1400 or INFO 1120 or DGM 1110)	3	F, Sp
CS 3060*	Operating Systems Theory	CS 2370, CS 2810, COSC	3	F, Sp
CS 3100	Data Privacy and Security	CS 2420, UAS	3	F
CS 3240*	Discrete Mathematical Structures II	CS 2810, COSC	3	F, Sp
CS 3320*	Numerical Software Development	COSC	3	F, Sp
CS 3520*	Database Theory	COSC	3	F, Sp, Su
CS 496R*	Senior Seminar (1 credit required for graduation.)	Take Senior Year	1	F, Sp
ECE 3710*	Applied Probability & Stats for Engineers	MATH 1210	3	F, Sp, Su
FULL STACK WEB DEVELOPMENT EMPHASIS REQUIREMENTS				
CS 2450*	Software Engineering	CS 2300, CS 2420	3	F, Sp, Su
CS 3250* or 3260*	Java Software Development CsharpNET Software Development	COSC COSC	3	F F, Sp
CS 3380*	JavaScript Software Development	CS 2550, COSC	3	F
CS 3410*	Human Factors in Software Development	(CS 3250 or CS 3260 or CS 3370 or INFO 2200)	3	F
CS 3660*	Web Programming II	CS 2420, CS 2550 & (CS 3250 or CS 3260 or CS 3270 or CS 3370) & COSC	3	F, Sp
CS 3680*	Mobile Device Programming	COSC	3	Sp
CS 4660*	NoSQL Database Development	CS 3520, COSC	3	F
CS 4690*	Distributed Internet Application Development	CS 3660 & (CS 3250 or CS 3260 or CS 3270 or CS 3370)	3	F
CS 4880*	Cloud Computing	CS 4690, COSC	3	Sp
CS 4900*	Full Stack Web Senior Capstone	CS 3410, CS 4660, (CS 3250 or CS 3260)	3	Sp
Elective Credits 3: Choose any CS 3000 or higher course not required			6	

COSC: Matriculation into Advanced Standing required: (CS 1400, 1410, 2300, 2420 Min grade C+) & (MATH 1210, ENGL 1010 Min grade C). Each class cannot be taken more than twice to obtain the required grade.

GENERAL EDUCATION REQUIREMENTS

COURSE #	COURSE TITLE	PREREQUISITE	CR
ENGL 1010◆	Introduction to Writing	ENGL 1000 (or appropriate test scores within 5 years)	3
ENGL 2010	Intermediate Writing	ENGL 1010 (or appropriate test scores within 5 years)	3
MATH 1210◆	Calculus I	One of the following within the past two years: (MATH 1050 or MATH 1055) and MATH 1060, OR; MATH 1080 OR appropriate placement by math placement test.	5
American Institutions: HIST 1700 American Civilization or HIST 1740 US Economic History or POLS 1000 American Heritage or POLS 1100 American National Gov't or HIST 2700 & HIST 2710 US History			3
HLTH 1100 OR PES 1097	Personal Health & Wellness Fitness for Life		2
PHIL 2050	Ethics & Values	ENGL 1010. (ENGL 2010 highly recommended)	3
COMM 1020 and COMM 1025 Lab	Public Speaking & Public Speaking Lab	COMM 1020 & 1025 required for Computer Science also counts as Social Science	3
COMM 2110*	Interpersonal Communication	COMM 2110 required for Computer Science also counts as Humanities	3
PHYS 2210* & 2215* Physics for Scientists and Engineers I & Lab		MATH 1210	5
Complete one of the following course/lab combinations:*			5
BIOL 1610 & 1615 College Biology I & Lab (5)		ACT composite score of 21+, or completion of ENGL1010 (or higher) with a minimum grade of C- MATH 1050, prior chemistry experience highly recommended.	
CHEM 1210 & 1215 Principles of Chemistry I & Lab (5)			
GEO 1010 & 1015 & 202R Introduction to Geology & Labs (5)			
PHYS 2020 & 2025 College Physics II & Lab (5)			
PHYS 2220 & 2225 Physics for Scientists & Engineers II & Lab (5)			
Fine Arts Distribution			3
Biology Science Distribution			3
Total Credits Required for Degree:			120

◆ **Matriculation into Advanced Standing (COSC) Requirements**

Students must be Formally Matriculated to this program before they can graduate. *Please see your advisor for more information*

Completion of the following:

CS 1400 Minimum grade C+

CS 1410 Minimum grade C+

CS 2300 Minimum grade C+

CS 2420 Minimum grade C+

MATH 1210 Minimum grade C

ENGL 1010 Minimum grade C

Overall UVU GPA of 2.5 or higher. Each class cannot be taken more than twice.

Advisor link:

<https://www.uvu.edu/cet/advising/departments/cs.html>