COMPUTER SCIENCE CORE REQUIREMENTS				BS-COSC2 -COSC
COURSE #	**COURSE TITLE**	**PREREQUISITE**	**CR**	**SEMESTER**
▶CS 1400	Fundamentals of Programming	MAT 1010 or 1015 with a B or higher, or ACT 23+ or ALEKS 38+. CS 1030 recommended	3.0	F,Sp,Su
▶CS 1410	Object-Oriented Programming	CS 1400 and (MATH 1050 or MATH 1055 with a C+ or higher, or MATH above 1050)	3.0	F,Sp,Su
▶CS 2300	Discrete Mathematical Structures I	CS 1410 and (MATH 1050 or higher)	3.0	F,Sp,Su
CS 2370	C plus plus Programming	CS 1410	3.0	F,Sp
▶CS 2420	Intro to Algorithms and Data Structures	CS 1410	3.0	F,Sp,Su
CS 2550	Web Programming I	CS 1410 or INFO 1200 or DGM 2760	3.0	F,Sp,Su
CS 2600	Computer Networks I	CS 2810 or (INFO 1200 & IT 1600)	3.0	F,Sp
CS 2690	Computer Networks II	CS 1410, 2300, 2370, 2600, and pre- or Corequisite: MATH 1210	3.0	F,Sp
CS 2810	Computer Organization and Architecture	CS 1400	3.0	F,Sp,Su
CS 305G	Global Social & Ethical Issues in Computing	ENGL 2010 & (CS 1030 or CS 1400 or INFO 1120)	3.0	F, Sp, Su
CS 3060	Operating Systems Theory	CS 2370, 2420, 2810, & COSC	3.0	F, Sp
CS 3100	Data Privacy and Security	CS 2420 & UAS	3.0	F
CS 3240	Discrete Mathematical Structures II	CS 2300, 2420, 2810, COSC	3.0	F, Sp
CS 3320	Numerical Software Development	MATH 1210, COSC, & UAS	3.0	F, Sp
CS 3520	Database Theory	COSC & UAS	3.0	F,Sp,Su
STAT 2050	Introduction to Statistical Methods	Within last 2 years: MATH 1050 or 1055 or 1080 with a grade of C or higher, or appropriate test score.	4.0	F,Sp,Su
COMPUTER SCIENCE EMPHASIS REQUIREMENTS				
CS 2450	Software Engineering	CS 2300, CS 2420	3.0	F,Sp,Su
CS 3250 or 3260 or 3270 or 3370 or 3380	Java Software Development CsharpNET Software Development Python Software Development C++ Software Development JavaScript Software Development	CS 2420, COSC & UAS COSC & UAS CS 2420 (or INFO 2200), COSC & UAS CS 2370, 2810, COSC, & UAS CS 2420, 2550, COSC, & UAS	3.0	F F, Sp Sp F, Sp F, Sp
CS 3310	Analysis of Algorithms	MATH 1210, COSC, & UAS	3.0	F, Sp
CS 3450	Principles and Patterns of Software Design	(CS 3250 or 3260 or 3270 or 3370) & UAS	3.0	F, Sp
CS 4380	Adv. High Performance Computer Architec.	CS 3060 & UAS. (CS 3370 recommended)	3.0	F, Sp
CS 4450	Analysis of Programming Languages	CS 3240, (one of CS 3250 or 3260 or 3270 or 3370) and UAS	3.0	F
CS 4470	Artificial Intelligence	CS 3240, CS 3310, CS 3320, (CS 3250 or 3260 or 3270 or 3370), & UAS	3.0	F, Sp
CS 4490	Compiler Construction	CS 4380, 4450 & UAS	3.0	F, Sp
Complete 9 credits of any CS course numbered CS 3000 or higher not already required. (See Wolverine Track)			9	varies
		Core Credit Required	87	

✓ *Minimum grade of "C-" required unless a higher grade is designated.*

UAS - University Advanced Standing Requirement: Before students can register for upper-division coursework (3000 or higher), they must qualify for University Advanced Standing (UAS) by:
- Completing, and/or transferring in, at least 24 credits of college-level coursework (1000 or higher);
- Having a cumulative GPA of 2.0 or higher;
- Complete Quantitative Literacy, (MAT 1030 or higher) and ENGL 2010 or equivalent.

ADVISOR SITE: https://www.uvu.edu/cet/advising/departments/cs.html

COURSE #	COURSE TITLE	PREREQUISITE	CR
ENGL 1010 OR ENGH 1005	Introduction to Writing Literacies and Compositions Across Contexts CC	ENGH 1000 with C- or higher (or appropriate test scores within 5 yrs.) ENGH 0890 (or appropriate placement scores.)	3.0
ENGL 2010	Intermediate Writing	Completion of ENGL 1010 or ENGL 101H with a grade of C- or higher, or ENGH 1005 with a grade of C or higher. (Or appropriate ACT test scores taken within the last 3 years.)	3.0
MATH 1210	Calculus I	One of the following within the past 2 years: (MATH 1050 or MATH 1055) & MATH 1060, each with a grade of C or higher; OR MATH 1080 with a grade of C or higher; OR by appropriate math placement score.	4.0
AMERICAN INSTITUTIONS Choose option 1 or 2	1. (One class) HIST 1700 American Civilization, or HIST 1740 US Economic History, or POLS 1000 American Heritage, or POLS 1100 American National Gov't 2. (Two classes) HIST 2700 & HIST 2710		3.0
HLTH1100 or PES1097	Personal Health & Wellness or Fitness for Life		2.0
PHIL 2050	Ethics & Values	ENGL 1010. ENGL 2020 highly recommended	3.0
HUMANITIES DISTRIBUTION	COMM 1020 & 1025	Public Speaking and Lab are Required. A grade of C- or higher is required.	3.0
THIRD SCIENCE DISTRIBUTION—Complete one of the following:			5.0
BIOL 1610 & 1615	College Biology I and Lab	ACT (or equivalent) composite score of 21+, or completion of ENGL1010 (or higher) with a minimum grade of C-	
CHEM 1210 & 1215	Principles of Chemistry I and Lab	MATH 1080, 1050, 1055 with C- or better or placement into 1060 or higher, (CHEM 1010 or high school recommended.) Corequisite: CHEM 1215	
GEO 1010, 1015 & 202R	Intro to Geology, Lab, & Excursion	All three classes are required if you choose Geology	
PHYS 2020 & 2025	Physics for Scientists and Engineers I and Lab	PHYS 2010 Corequisite(s): PHYS 2025	
PHYS 2220 & 2225	Physics for Scientists and Engineers II and Lab	PHYS 2210 Corequisite(s): PHYS 2225 and Pre or Corequisite: MATH 1220	
SOCIAL/BEHAVIORAL SCIENCE DIST	COMM 2110	Interpersonal Communication is Required. A grade of C- or higher is required.	3.0
PHYSICAL SCIENCE DISTRIBUTION (see Wolverine Track for class list)			3.0
BIOLOGY SCIENCE DISTRIBUTION (see Wolverine Track for class list)			3.0
FINE ARTS DISTRIBUTION (see Wolverine Track for class list)			3.0
		GE Credits Required	33
		Core Credits Required	87
Total Credits Required for Degree:			120

▸ **Matriculation Requirements (COSC):**

1. Completion of CS 1400, CS 1410, CS 2300, and CS 2420 with a grade of C+ or better.
2. Completion of MATH 1210 and ENGL 1010 or ENGH 1005 with a grade of C or better.
3. Overall GPA of 2.5 or higher. Each class cannot be taken more than twice to obtain the required grade.

GRADUATION REQUIREMENTS:

1. Completion of a minimum of 120 semester credits, with a minimum of 40 upper-division credits.
2. Overall grade point average of 2.0 or above.
3. Must have a minimum grade of C- with a combined GPA of 2.5 or higher in all discipline requirements and the General Education requirements that are marked with an *.
4. Residency hours - - minimum of 30 credit hours through course attendance at UVU. 10 of these hours must be within the last 45 hours earned.
5. All transfer credit must be approved in writing by UVU courses.
6. No more than 80 semester hours and no more than 20 hours in CDS-type courses of transfer credit from a two-year college.
7. No more than 30 semester hours may be earned through independent study and/or extension classes.
8. Successful completion of at least one Global/Intercultural course. CS 305G satisfies this requirement.