

COMPUTER SCIENCE

Academic Year 2019 - 2020

FALL

SPRING

Course number	Course Title	USP / CMTS	Credits	Min Grade	Grade Earned	Course Number	Course Title	USP / CMTS	Credits	Min Grade	Grade Earned
FRESHMAN YEAR											
COSC 1010	Intro to Computer Science		4	C		COSC 1030	Computer Science I		4	C	
							C in COSC 1010				
MATH 2200	Calculus I	Q	4	C		ENGL 1010	College Composition	C1	3	C	
	C or better in Math 1405 or 1450 or 5 on MPE or Math ACT 27 or Math SAT 640						None				
USP H	USP Human Culture	H	3			MATH 2205	Calculus II	Q	4	C	
							C or better in Math 2200				
_____ 1101	First Year Seminar	FYS	3	C		USP-V	US & Wyoming Constitution	V	3		
Total						Total					
14						14					

SOPHOMORE YEAR											
COSC 2030	Computer Science II		4	C		COSC 3011	Intro to Software Design		3	C	
	C in COSC 1030						Spring only C in COSC 2030				
MATH 2300	Discrete Structures		3	C		COSC 3020	Alg & Data Structures		4	C	
	C in COSC 1030 and MATH 2200 or 2350						C in COSC 2030 and COSC 2300				
COSC 2150	Computer Organization		3	C		MATH 2250	Elementary Linear Algebra		3	C	
Fall only	C in COSC 1030						C in Math 2200 or Math 2350				
	Science Elective	PN	4			USP-COM2	USP Communication 2	C2	3	C	
							C in USP-COM1				
	General Elective		3				Science Elective	PN	4		
Total						Total					
17						17					

JUNIOR YEAR											
COSC 3015	Functional Programming		3	C		Systems ⁶	Choose one: COSC 4760 or 4820		3	C	
Fall only	C in COSC 2030 and COSC 2300						Spring only C in COSC 2030				
COSC	COSC Elective		3	C		Prog Lang ⁷	Choose one: COSC 4780 or 4785		3	C	
							Spring only				
STAT	STAT 2010, 2050, or 2070		4				COSC elective		3	C	
MATH/SCI	Math/Science Elective		4			USP-H	USP Human Culture	H	3		
	General Elective		3								
Total						Total					
17						16					

SENIOR YEAR											
COSC 4950	Senior Design I		1	C		COSC 4955	Senior Design II		2	C	
Fall only	C in COSC 3020						Spring only C in COSC 4950				
Op Sys ⁸	Choose one: COSC 3750 or 4740		3			Theory ⁹	Choose one: COSC 4100 or 4200		3		
Fall only	C in COSC 3020						Spring only C in COSC 3020				
ENGL 4010	Technical Writing	C3	3	C		COSC 3050	Ethics for Computer Prof		1	C	
	C or better in USP-COM2						C in COSC 2030				
	COSC elective		3	C			COSC elective		3	C	
	General Elective		3				General Elective ¹		3		
Total						Total					
13						12					

KEY

Fall only
Spring only
Prerequisite(s)

- Note 1:** A minimum of 42 credit hours must be upper division. One "General Elective" may need to be upper division to fulfill upper division credit requirements.
- Note 2:** Must take a minimum of 30 credit hours of Math/Stats/Science
- Note 3:** All COSC and MATH courses require a minimum of C.
- Note 4:** Math/Science Electives must be courses at or above MATH 2205 or STAT 3000. Cannot count MATH 2205, 2350, 2355, 4000 or any variable credit course.
- Note 5:** COSC electives: Must be at or above the 3000 level. At most, 3 credit hours of COSC 3970 (internship) can be counted towards total COSC elective hours.
- Note 6:** **Systems Course:** Choose either COSC 4760, Networks (pre-req: COSC 2030), or COSC 4820, Databases (pre-req: COSC 2030).
- Note 7:** **Programming Language Course:** Choose either COSC 4780, Principles of Programming Languages (pre-req: COSC 3015), or COSC 4785, Compiler Construction (pre-req: COSC 3020).
- Note 8:** **Operating Systems Course:** Choose either COSC 3750, Linux Programming (pre-req: COSC 3020), or COSC 4740, Operating Systems (pre-req: COSC 3020).
- Note 9:** **Theory Course:** Choose either COSC 4100, Foundations (pre-req: COSC 3020), or COSC 4200, Computability & Complexity (pre-req: COSC 3020).

Total Program Credits: 120