Computer Science B.S. Degree — Suggested 4.5-year Plans

Track A: Students who start with CS 1420 and Calculus I.

	FALL semester		SPRING semester	
Freshman year (28 credits)	CS 1420: Accelerated Object-Oriented Prog MATH 1210: Calculus I [†] Gen Ed [†] Gen Ed [†]	4 4 3 3	CS 2420: Intro to Alg & Data Structures MATH 1220: Calculus II [†] WRTG 2010: Intermediate Writing [†] Gen Ed [†]	4 4 3 3
Sophomore year (26 credits)	CS 2100: Discrete Mathematics CS 3500: Software Practice I MATH 2270: Linear Algebra American Institutions (AI) [†]	3 4 4 3	CS 3810: Computer Organization CS 3505: Software Practice II CS 3130: Engineering Prob & Stats Gen Ed (DV) [†]	3 3 3 3
Junior year (25 credits)	CS 4150: Algorithms CS Elective Math/Science Elective Gen Ed (IR) [†]	3 3 4 3	CS 4400: Computer Systems CS Elective CS 3100 or CS 3200 Free Elective, if needed	3 3 3
Senior year (27 credits)	WRTG 3014 or 3015 [†] CS Elective CS Elective Free Elective, if needed Free Elective, if needed	3 3 3 3	CS 4000 (Project) [‡] or CS 4940 (Thesis) CS Elective CS Elective Free Elective, if needed	3 3 3 3
Fifth year (15 credits) 121 credits total	CS 4500 (Project) [‡] or CS 4970 (Thesis) [⊲] CS Elective Free Elective, if needed Free Elective, if needed Free Elective, if needed	3 3 3 3		

Track B: Students who start with CS 1400 and Precalculus.

	FALL semester		SPRING semester	
	CS 1400: Intro to Computer Programming	4	CS 1410: Intro to Object-Oriented Prog	4
Freshman year (29 credits)	MATH 1080: Precalculus	5	MATH 1210: Calculus I [†]	4
	Gen Ed [†]	3	WRTG 2010: Intermediate Writing [†]	3
	Gen Ed [†]	3	Gen Ed [†]	3
Sophomore year (28 credits)	CS 2420: Intro to Algs & Data Structures	4	CS 2100: Discrete Mathematics	3
	MATH 1220: Calculus II [†]	4	CS 3500: Software Practice I	4
	American Institutions (AI) [†]	3	MATH 2270: Linear Algebra	4
	Gen Ed (DV) [†]	3	Gen Ed (IR) [†]	3
Junior year (25 credits)	CS 3130: Engineering Prob & Stats	3	CS 4400: Computer Systems	3
	CS 3505: Software Practice II	3	CS Theory: CS 3100 or CS 3200	3
	CS 3810: Computer Organization	3	CS Elective	3
	Math/Science Elective [†]	4	Free Elective, if needed	3
Senior year (24 credits)	CS 4150: Algorithms	3	CS 4000 (Project) [‡] or CS 4940 (Thesis)	3
	CS Elective	3	CS Elective	3
	CS Elective	3	CS Elective	3
	WRTG 3014 or 3015 [†]	3	Free Elective, if needed	3
Fifth year (16 credits)	CS 4500 (Project) [‡] or CS 4970 (Thesis) [⊲]	3		
	CS Elective	3		
	CS Elective	3		
122 credits total	Free Elective, if needed	3		
	Free Elective, if needed	4		

[†] Honors options available, see https://honors.utah.edu/ for details.

[‡] Project Students pursuing the Honors degree must take CS 4998 concurrently with CS 4500 to satisfy the Honors Thesis Work.

[△] Thesis Students pursuing the Honors degree must take CS 4999 (instead of CS 4970) to satisfy the Honors Thesis Work.

^{*} Students may choose between CS 3100 (Fall/Spring semesters) or CS 3200 (SPRING semesters) to satisfy the Theory Restricted Elective.