Computer Science B.S. Degree — Suggested 5-year Plans

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

	FALL semester		SPRING semester	
	CS 1420: Accelerated Object-Oriented Prog	4	CS 2420: Intro to Algs & Data Structures	4
Freshman year (24 credits)	MATH 1210: Calculus I [†]	4	MATH 1220: Calculus II [†]	4
	Gen Ed [†]	3	WRTG 2010: Intermediate Writing [†]	3
	Free Elective, if needed	1	Free Elective, if needed	1
	CS 3500: Software Practice I	4	CS 2100: Discrete Mathematics	3
Sophomore year (24 credits)	CS 3810: Computer Organization	4	CS 3505: Software Practice II	3
	MATH 2270: Linear Algebra	4	Gen Ed [†]	3
			Free Elective, if needed	3
Junior year (24 credits)	CS 3100: Models of Comp* or CS Elective	3	CS 3200: Sci Comp* or CS Elective	3
	CS 4400: Computer Systems	3	CS 3130: Engineering Prob & Stats	3
	Math/Science Elective [†]	3	WRTG 3014 or 3015 [†]	3
	Gen Ed [†]	3	American Institutions (AI)†	3
Senior year (25 credits)	CS 4150: Algorithms	3	CS Elective	3
	CS Elective	3	CS Elective	3
	Math/Science Elective [†]	3	PHYS 2210: Physics for Scientists & Eng [†]	4
	Gen Ed (DV) [†]	3	Gen Ed (IR, 3000+) [†]	3
Fifth year	CS 4000 (Project) [‡] or CS 4940 (Thesis)	3	CS 4500 (Project) [‡] or CS 4970 (Thesis) [⊲]	3
(25 credits)	CS Elective	3	CS Elective	3
,	CS Elective	3	Gen Ed (3000+) [†]	3
122 credits total	Free Elective, if needed	3	Free Elective, if needed	4

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

	FALL semester		SPRING semester	
	CS 1400: Intro to Computer Programming	3	CS 1410: Intro to Object-Oriented Prog	4
Freshman year (24 credits)	MATH 1080: Precalculus	5	MATH 1210: Calculus I [†]	4
	Gen Ed [†]	3	Gen Ed [†]	3
	Free Elective, if needed	1	Free Elective, if needed	1_
Sophomore year (24 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
	WRTG 2010: Intermediate Writing [†]	3	MATH 2270: Linear Algebra	4
	Free Elective, if needed	1	Free Elective, if needed	1
Junior year (25 credits)	CS 3130: Engineering Prob & Stats	3	CS 3200: Sci Comp* or CS Elective	3
	CS 3505: Software Practice II	3	CS 3810: Computer Organization	4
	WRTG 3014 or 3015 [†]	3	Math/Science Elective [†]	3
	Gen Ed [†]	3	Gen Ed (DV) [†]	3
Senior year (24 credits)	CS 3100: Models of Comp* or CS Elective	3	CS 4150: Algorithms	3
	CS 4400: Computer Systems	3	CS Elective	3
	CS Elective	3	CS Elective	3
	Gen Ed (IR, 3000+) [†]	3	Math/Science Elective†	3
Fifth year	CS 4000 (Project) [‡] or CS 4940 (Thesis)	3	CS 4500 (Project) [‡] or CS 4970 (Thesis) [⊲]	3
(25 credits)	CS Elective	3	CS Elective	3
(1 1 0 0 0 0 0)	CS Elective	3	PHYS 2210: Physics for Scientists & Eng [†]	4
122 credits total	American Institutions (AI) [†]	3	Gen Ed (3000+) [†]	3

[†] 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.

⁴ 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 semesters) or CS 3200 (SPRING semesters) to satisfy the Theory Restricted Elective.