

# Computer Science B.S. Degree – Suggested 4.5-year Plans

Track A: Students who place into CS 1410 and Calculus I.

	FALL semester		SPRING semester	
<b>Freshman year (28 credits)</b>	CS 1410: Intro to Object-Oriented Prog	4	CS 2420: Intro to Algs & Data Structures	4
	MATH 1210: Calculus I†	4	MATH 1220: Calculus II†	4
	Gen Ed†	3	WRTG 2010: Intermediate Writing†	3
	Gen Ed†	3	Gen Ed†	3
<b>Sophomore year (26 credits)</b>	CS 2100: Discrete Mathematics	3	CS 3200: Sci Comp* or CS Elective	3
	CS 3500: Software Practice I	4	CS 3505: Software Practice II	3
	American Institutions (AI)†	3	MATH 2270: Linear Algebra	4
	Gen Ed (DV)†	3	WRTG 3012, 3014, or 3015†	3
<b>Junior year (25 credits)</b>	CS 3100: Models of Comp* or CS Elective	3	CS 4400: Computer Systems	3
	CS 3130: Engineering Prob & Stats	3	CS Elective	3
	CS 3810: Computer Organization	4	CS Elective	3
	Ged Ed (IR, 3000+)†	3	Math/Science Elective†	3
<b>Senior year (28 credits)</b>	CS 4150: Algorithms	3	CS 4000 (Project) or CS 4940 (Thesis)	3
	CS Elective	3	CS Elective	3
	CS Elective	3	PHYS 2210: Physics for Scientists & Eng†	4
	Gen Ed (3000+)†	3	Math/Science Elective†	3
	Free Elective, if needed	3		
<b>Fifth year (15 credits)</b>	CS 4500 (Project)‡ or CS 4970 (Thesis)	3		
	CS Elective	3		
	Free Elective, if needed	3		
	Free Elective, if needed	3		
<b>122 credits total</b>	Free Elective, if needed	3		
	Free Elective, if needed	3		

Track B: Students who place into CS 1030 and Precalculus.

	FALL semester		SPRING semester	
<b>Freshman year (28 credits)</b>	CS 1030: Foundations of CS	3	CS 1410: Intro to Object-Oriented Prog	4
	MATH 1080: Precalculus	5	MATH 1210: Calculus I†	4
	Gen Ed†	3	WRTG 2010: Intermediate Writing†	3
	Gen Ed†	3	Gen Ed†	3
<b>Sophomore year (29 credits)</b>	CS 2420: Intro to Algs & Data Structures	4	CS 2100: Discrete Structures	3
	MATH 1220: Calculus II†	4	CS 3500: Software Practice I	4
	PHYS 2210: Physics for Scientists & Eng†	4	MATH 2270: Linear Algebra	4
	Gen Ed (DV)†	3	WRTG 3012, 3014, or 3015†	3
<b>Junior year (25 credits)</b>	CS 3100: Models of Comp* or CS Elective	3	CS 3130: Engineering Prob & Stats	3
	CS 3505: Software Practice II	3	CS 3200: Sci Comp* or CS Elective	3
	CS 3810: Computer Organization	4	CS 4400: Computer Systems	3
	Ged Ed (IR, 3000+)†	3	Math/Science Elective†	3
<b>Senior year (24 credits)</b>	CS 4150: Algorithms	3	CS 4000 (Project) or CS 4940 (Thesis)	3
	CS Elective	3	CS Elective	3
	CS Elective	3	CS Elective	3
	Gen Ed (3000+)†	3	Math/Science Elective†	3
<b>Fifth year (16 credits)</b>	CS 4500 (Project)‡ or CS 4970 (Thesis)	3		
	CS Elective	3		
	CS Elective	3		
	American Institutions (AI)†	3		
<b>122 credits total</b>	Free Elective, if needed	4		

† Honors options available, see <https://honors.utah.edu/> for details.

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

\*Students may choose between CS 3100: Models of Computation (FALL semesters) or CS 3200: Introduction to Scientific Computing and Data Computing (SPRING semesters) to satisfy the Theory Restricted Elective.