

# 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	
<b>Freshman year (28 credits)</b>	CS 1420: Accelerated Object-Oriented Prog	4	CS 2420: Intro to Algs & Data Structures	4
	MATH 1210: Calculus I <sup>†</sup>	4	MATH 1220: Calculus II <sup>†</sup>	4
	Gen Ed <sup>†</sup>	3	WRTG 2010: Intermediate Writing <sup>†</sup>	3
	Gen Ed <sup>†</sup>	3	Gen Ed <sup>†</sup>	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) <sup>†</sup>	3	MATH 2270: Linear Algebra	4
	Gen Ed (DV) <sup>†</sup>	3	WRTG 3014 or 3015 <sup>†</sup>	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
	Gen Ed (IR) <sup>†</sup>	3	Math/Science Elective <sup>†</sup>	3
<b>Senior year (27 credits)</b>	CS 4150: Algorithms	3	CS 4000 (Project) <sup>‡</sup> or CS 4940 (Thesis)	3
	CS Elective	3	CS Elective	3
	CS Elective	3	Math/Science Elective <sup>†</sup>	3
	Gen Ed <sup>†</sup>	3	Math/Science Elective <sup>†</sup>	3
	Free Elective, if needed	3		
<b>Fifth year (15 credits)</b>	CS 4500 (Project) <sup>‡</sup> or CS 4970 (Thesis) <sup>◊</sup>	3		
	CS Elective	3		
	Free Elective, if needed	3		
<b>121 credits total</b>	Free Elective, if needed	3		
	Free Elective, if needed	3		

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

	FALL semester		SPRING semester	
<b>Freshman year (29 credits)</b>	CS 1400: Intro to Computer Programming	4	CS 1410: Intro to Object-Oriented Prog	4
	MATH 1080: Precalculus	5	MATH 1210: Calculus I <sup>†</sup>	4
	Gen Ed <sup>†</sup>	3	WRTG 2010: Intermediate Writing <sup>†</sup>	3
	Gen Ed <sup>†</sup>	3	Gen Ed <sup>†</sup>	3
<b>Sophomore year (28 credits)</b>	CS 2420: Intro to Algs & Data Structures	4	CS 2100: Discrete Mathematics	3
	MATH 1220: Calculus II <sup>†</sup>	4	CS 3500: Software Practice I	4
	Math/Science Elective <sup>†</sup>	3	MATH 2270: Linear Algebra	4
	Gen Ed (DV) <sup>†</sup>	3	WRTG 3014 or 3015 <sup>†</sup>	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
	Gen Ed (IR) <sup>†</sup>	3	Math/Science Elective <sup>†</sup>	3
<b>Senior year (24 credits)</b>	CS 4150: Algorithms	3	CS 4000 (Project) <sup>‡</sup> or CS 4940 (Thesis)	3
	CS Elective	3	CS Elective	3
	CS Elective	3	CS Elective	3
	Gen Ed <sup>†</sup>	3	Math/Science Elective <sup>†</sup>	3
<b>Fifth year (16 credits)</b>	CS 4500 (Project) <sup>‡</sup> or CS 4970 (Thesis) <sup>◊</sup>	3		
	CS Elective	3		
	CS Elective	3		
<b>122 credits total</b>	American Institutions (AI) <sup>†</sup>	3		
	Free Elective, if needed	4		

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

<sup>‡</sup> Project Students pursuing the Honors degree must take CS 4998 concurrently with CS 4500 to satisfy the Honors Thesis Work.

<sup>◊</sup> 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.