Software Development B.S. Degree — Suggested 4-year Plans

Track A: Students who place into Calculus I *and have programming experience*

	FALL semester		SPRING semester	
Freshman year (27 credits)	CS 1420: Accel Object-Orient Programming	3	CS 2420: Into to Algs & Data Structures	4
	MATH 1210: Calculus I [†]	4	CS 1810: Introduction to Computing Systems	3
	Gen Al	4	DS 2500: Data Wrangling	3
	Gen Ed (FF) [†]	3	WRTG 2010: Intermediate Writing	3
	Free Elective, if needed	3	Free Elective, if needed	3
Sophomore year (28 credits)	CS 3500: Software Practice I	4	CS 3505: Software Practice II	3
	CS 3540: Human Centered Experiences	3	CS 3090: Ethics in Computing	3
	Math/Science Elective [†]	3	SD Elective (QI)	3
	Des/Mgt/Ent Elective	3	Gen Ed (FF/IR) [†]	3
	Gen Ed (BF/DV) [†]	3	Free Elective, if needed	3
Junior year (24 credits)	CS 3550: Web Software I	3	CS 4550: Web Software II	3
	CS 4530: Mobile App Programming	3	CS 4440: Computer Security	3
	SD Elective	3	CS 5530: Database Systems (QI)	3
	Gen Ed (HF) [†]	3	WRTG 3014 or 3015 [†]	3
	Free Elective, if needed	3	Free Elective, if needed	3
Senior year (25 credits)	CS 4000: Senior Capstone Project	3	CS 4500: Senior Capstone Project	3
	SD Elective	3	CS 4011: Professional Development	1
	Des/Mgt/Ent Elective	3	SD Elective	3
104 credits total	Gen Ed (HF) [†]	3	Math/Science Elective [†]	3
	Free Elective, if needed	3	Gen Ed (BF) [†]	3

Track B: Students who place into CS 1400 and College Algebra.

	FALL semester		SPRING semester	
Freshman year (30 credits)	CS 1400: Intro to Computer Programming MATH 1050: College Algebra Gen Ed (BF) [†] Gen Ed (AI) [†] Free Elective, if needed	4 4 3 3 3	CS 1410: Intro to Object-Oriented Prog CS 1810: Introduction to Computing Systems MATH 1060: Trigonometry WRTG 2010: Intermediate Writing † Gen Ed (FF/IR)†	4 3 3 3 3
Sophomore year (30 credits)	CS 2420: Intro to Algs & Data Structures MATH 1210: Calculus I [†] Des/Mgt/Ent Elective Gen Ed (FF) [†] Free Elective, if needed	4 4 3 3 3	CS 3500: Software Practice I CS 3090: Ethics in Computing DS 2500: Data Wrangling Gen Ed (HF) [†] Gen Ed (BF) [†]	4 3 3 3 3
Junior year (30 credits)	CS 3505: Software Practice II CS 3550: Web Software I CS 3540: Human Centered Experiences WRTG 3014 or 3015† Des/Mgt/Ent Elective	3 3 3 3	CS 4530: Mobile App Programming CS 4550: Web Software II CS 5530: Database Systems (QI) SD Elective Gen Ed (HF/DV)†	3 3 3 3
Senior year (25 credits) 115 credits total	CS 4000: Senior Capstone Project SD Elective (QI) SD Elective Math/Science Elective [†] Free Elective, if needed	3 3 3 3	CS 4500: Senior Capstone Project [‡] CS 4440: Computer Security CS 4011: Professional Development SD Elective Math/Science Elective [†]	3 3 1 3 3

[†] 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.