Artificial Intelligence B.S. Degree — Suggested 4-year Plans

Students who start with CS 1400 and Precalculus.

	FALL semester		SPRING semester	
Freshman year (35 credits)	CS 1400: Intro to Computer Programming	4	CS 1410: Intro to Object-Oriented Prog	4
	MATH 1080: Precalculus	5	MATH 1310: Engineering Calculus I†	4
	Gen Ed†	3	WRTG 2010: Intermediate Writing†	3
	Gen Ed	3	Gen Ed†	3
	WRTG 1010	3	Gen Ed†	3
Sophomore year (34 credits)	CS 2420: Intro to Algs & Data Structures	4	CS 3500: Software Practice I	4
	MATH 1320: Engineering Calculus II†	4	CS 2100: Discrete Mathematics	3
	DS 2500: Data Wrangling	3	MATH 2270: Linear Algebra	4
	CS 2395: Ethics in AI	3	American Institutions	3
	Gen Ed†	3	Gen Ed†	3
Junior year (27 credits)	CS 4150: Algorithms	3	CS 4405: AI Systems	3
	CS 3350: Intro to Machine Learning	3	AI Elective	3
	CS 3130: Engineering Prob & Stats	3	AI Elective	3
	AI Depth Elective	3	Gen Ed	3
	WRTG 3014 or 3015†	3		
Senior year (24 credits)	CS 4000 (Project) or CS 4940 (Thesis)	3	CS 4500 (Project)‡ or CS 4970 (Thesis)◁	3
	CS 4300: Artificial Intelligence	3	AI Elective	3
	AI Depth Elective	3	AI Depth Elective	3
	Free Elective, if needed	3	Free Elective, if needed	3
120 credits total				

Students who start with CS 1420 and Engineering Calculus I.

	FALL semester		SPRING semester	
Freshman year (34 credits)	CS 1420: Accelerated Object-Oriented Prog	4	CS 2420: Intro to Algs & Data Structures	4
	MATH 1310: Engineering Calculus I†	4	MATH 1320: Engineering Calculus II†	4
	Gen Ed†	3	DS 2500: Data Wrangling	3
	Gen Ed†	3	CS 2395: Ethics in AI	3
	WRTG 1010 Introduction to Writing	3	WRTG 2010: Intermediate Writing†	3
Sophomore year (32 credits)	CS 3500: Software Practice I	4	CS 4150: Algorithms	3
	CS 2100: Discrete Mathematics	3	CS 3350: Intro to Machine Learning	3
	MATH 2270: Linear Algebra	4	CS 3130: Engineering Prob & Stats	3
	American Institutions (AI)†	3	Gen Ed	3
	Gen Ed†	3	Gen Ed†	3
Junior year (30 credits)	CS 4300: Artificial Intelligence	3	CS 4405: AI Systems	3
	AI Depth Elective	3	AI Elective	3
	AI Depth Elective	3	AI Elective	3
	Gen Ed†	3	WRTG 3014 or 3015†	3
	Free Elective	3	Free Elective	3
Senior year (24 credits)	CS 4000 (Project) or CS 4940 (Thesis)	3	CS 4500 (Project)‡ or CS 4970 (Thesis)◁	3
	AI Depth Elective	3	AI Elective	3
	Gen Ed†	3	Free Elective, if needed	3
	Free Elective, if needed	3	Free Elective, if needed	3
120 credits total				

† 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.