

Computer Science Major Bachelor of Arts (59 credit hours)

The Computer Science Bachelor of Arts program allows students to move directly into high-paying industry jobs after graduation. The B.A. in Computer Science is designed to develop each student's problem solving, critical thinking, and communication abilities while also developing the computer science knowledge and skills needed by programmers, software developers and software engineers.

Major Requirements:

Foundational Courses (30 credit hours):

- CPSC 1400, Computer Science I, 4 credit hours¹
- CPSC 1500, Computer Science II, 4 credit hours
- CPSC 2100, Database Programming, 4 credit hours
- CPSC 2330, Introduction to Web Applications, 4 credit hours
- CPSC 2420, Computer Architecture, 2 credit hours
- CPSC 2430, Programming Languages and Compilers, 2 credit hours
- CPSC 2500, Data Structures and Algorithms, 4 credit hours
- ENGR 2200, Elementary Digital Electronics, 2 credit hours
- MATH 2200/CPSC 2250, Discrete Mathematical Structures, 4 credit hours

Professional Core (20 credit hours)

- CPSC 3380, Applied Cryptography and Security, 4 credit hours
- CPSC 3410, Computer Networks, 4 credit hours
- CPSC 4420, Operating Systems, 4 credit hours
- CPSC 4430, Software Engineering, 4 credit hours
- CPSC 4950, Senior Design Capstone 1, 2 credit hours
- CPSC 4960, Senior Design Capstone 2, 2 credit hours

Mathematics Elective (3-4 credit hours):

- Any 3-4 credit hours from MATH 1300 or above.

Computer Science Elective (6 credit hours):

- Any 6 credit hours from CPSC 2000 or above.

NOTE: All students must complete 120 total credit hours to graduate from Anderson University.

¹ This course fulfills the Quantitative Ways of Knowing requirement in the Liberal Arts Program. Questions? Please contact the [Department of Computer Science](#).

Proposed 4 Year course sequence:

- Freshman: CPSC 1400, Math Elective; CPSC 1500, MATH 2200/CPSC 2250
- Sophomore: CPSC 2100, 2500, ENGR 2200; CPSC 2420, 2430, 2330
- Junior: CPSC 3380, 3410, 4430; CPSC 4420, Computer Science Elective
- Senior: CPSC 4950, Computer Science Elective; CPSC 4960

Computer Science BA Major 4 year Suggested Course Sequence

SEMESTER 1		SEMESTER 2	
CPSC 1400 (Quant. Reason.)	4 Hours	CPSC 1500	4 Hours
MATH Elective	4 Hours	MATH 2200/CPSC 2250	4 Hours
ENGL 1100/ENGL 1110	3-4 Hours	ENGL 1120	3 Hours
LART 1050	1 Hour	COMM 1000	3 Hours
Foreign Language	4 Hours	Personal Wellness	2 Hours

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SEMESTER 3		SEMESTER 4	
CPSC 2100	4 Hours	CPSC 2420	2 Hours
CPSC 2500	4 Hours	CPSC 2430	2 Hours
ENGR 2200	2 Hours	CPSC 2330	4 Hours
BIBL 2000	3 Hours	Scientific Ways of Knowing	4 Hours
Civic Ways of Knowing	3 Hours	Christian Ways of Knowing	3 Hours

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SEMESTER 5		SEMESTER 6	
CPSC 3380	4 Hours	CPSC 4420	3 Hours
CPSC 3410	4 Hours	CPSC Elective	3 Hours
CPSC 4430	4 Hours	Social & Behavioral Ways of Knowing	3 Hours
Writing Intensive Course	3 Hours	Global/Intercultural Ways of Knowing	3 Hours
		Civil Discourse & C.R.	2-4 Hours

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SEMESTER 7		SEMESTER 8	
CPSC 4950 (WI)	2 Hours	CPSC 4960 (SI, Exp. Learn.)	2 Hours
CPSC Elective	3 Hours	Additional Class	3 Hours
Aesthetic Ways of Knowing	3 Hours	Additional Class	3 Hours
Additional Class	3 Hours	Additional Class	3 Hours
Additional Class	3 Hours	Additional Class	3 Hours

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Questions? Please contact the [Department of Computer Science](#).

Proposed 3 Year Course Sequence:

Freshman: CPSC 1400, Math Elective; CPSC 1500, MATH 2200/CPSC 2250
 Sophomore: CPSC 2100, 2500, ENGR 2200, Computer Science Elective; CPSC 2420, 2430, 2330
 Junior: CPSC 3380, 3410, 4430, 4950; CPSC 4420, 4960, Computer Science Elective

Computer Science BA Major 3 year Suggested Course Sequence

SEMESTER 1		SEMESTER 2	
CPSC 1400 (Quant. Reason.)	4 Hours	CPSC 1500	4 Hours
MATH Elective	4 Hours	MATH 2200/CPSC 2250	4 Hours
ENGL 1100/ENGL 1110	3-4 Hours	ENGL 1120	3 Hours
LART 1050	1 Hour	COMM 1000	3 Hours
Foreign Language	4 Hours	Social & Behavioral Ways of Knowing	3 Hours
Personal Wellness	2 Hours		

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SUMMER 1	
Additional Classes	9 Hours

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SEMESTER 3		SEMESTER 4	
CPSC 2100	4 Hours	CPSC 2420	2 Hours
CPSC 2500	4 Hours	CPSC 2430	2 Hours
ENGR 2200	2 Hours	CPSC 2330	4 Hours
CPSC Elective	3 Hours	Scientific Ways of Knowing	4 Hours
BIBL 2000	3 Hours	Civic Ways of Knowing	3 Hours
		Civil Discourse & C.R.	2-4 Hours

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SUMMER 2	
Additional Classes	9 Hours

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SEMESTER 5		SEMESTER 6	
CPSC 3380	4 Hours	CPSC 4420	3 Hours
CPSC 3410	4 Hours	CPSC 4960 (SI, Exp. Learn.)	2 Hours
CPSC 4430	4 Hours	CPSC Elective	3 Hours
CPSC 4950 (WI)	2 Hours	Aesthetic Ways of Knowing	3 Hours
Christian Ways of Knowing	3 Hours	Global/Intercultural Ways of Knowing	3 Hours
		Writing Intensive Course	3 Hours

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Questions? Please contact the [Department of Computer Science](#).