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 (28 credit hours):
- CPSC 2020, Fundamentals of Computational Thinking and Programming, 4 credit hours[1]
- CPSC 2030, Object-Oriented Analysis and Design, 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
- MATH 2200/CPSC 2250, Discrete Mathematical Structures, 4 credit hours

Professional Core (17 credit hours):
- CPSC 3410, Computer Networks, 4 credit hours
- CPSC 4420, Operating Systems, 4 credit hours
- CPSC 4430, Software Engineering, 4 credit hours
- Any 3 credit hours from the following:
    - CPSC 4480, Technical Certification, 1 credit hour
    - CPSC 4800, Software Engineering Internship, 2-4 credit hours
    - CPSC 4970, Senior Project, 2-4 credit hours
- CPSC 4950, Senior Seminar: Professional Development, 1 credit hour
- CPSC 4960, Senior Seminar: Ethics, 1 credit hour

Mathematics Elective (4 credit hours):
- Choose one of the following:
    - MATH 2010, Calculus I, 4 credit hours
    - MATH 2120, Introduction to Statistics with Applications, 4 hours

Computer Science Elective (10 credit hours):
- Any 10 credit hours from CPSC/ENGR/MATH/PHYS 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 2020; CPSC 2030, MATH 2200/CPSC 2250
Sophomore: CPSC 2100, 2500; CPSC 2330, 2420, 2430 , MATH 2010 or 2120
Junior: CPSC 3410, 4430, Elective; CPSC 4420
Senior: CPSC 4950, CPSC 4480/4900/4970, Elective; CPSC 4960, Elective

Computer Science BA Major: 4 Year Suggested Course Sequence

SEMESTER 1	16	SEMESTER 2	16
CPSC 2020 (Quant. Reasoning)	4 Hours	CPSC 2030	4 Hours
Scientific Ways of Knowing	4 Hours	MATH 2200/CPSC 2250	4 Hours
ENGL 1110	3 Hours	ENGL 1120	3 Hours
LART 1050	1 Hours	COMM 1000	3 Hours
Foreign Language	4 Hours	Personal Wellness	2 Hours

SEMESTER 3	17	SEMESTER 4	15
CPSC 2100	4 Hours	CPSC 2330	4 Hours
CPSC 2500	4 Hours	CPSC 2420	2 Hours
BIBL 2000	3 Hours	CPSC 2430	2 Hours
Civic Ways of Knowing	3 Hours	MATH 2010 or MATH 2120	4 Hours
Additional Class	3 Hours	Christian Ways of Knowing	3 Hours

SEMESTER 5	15	SEMESTER 6	17
CPSC 3410	4 Hours	CPSC 4420	4 Hours
CPSC 4430	4 Hours	Global/Intercultural Ways of Knowing	3 Hours
Major Elective	4 Hours	Social + Behavioral Ways of Knowing	3 Hours
Writing Intensive Class	3 Hours	Civil Discourse + C.R.	2-4 Hours
		Additional Class	3 Hours

SEMESTER 7	13	SEMESTER 8	13
CPSC 4950 (SI)	1 Hour	CPSC 4960 (WI)	1 Hour
CPSC 4480/4800/4970	3 Hours	Major Elective	3 Hours
Major 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

Questions? Please contact the Department of Computer Science.

Proposed 3 Year Course Sequence:

Freshman: CPSC 2020; CPSC 2030, MATH 2200/CPSC 2250
Sophomore: CPSC 2100, 2500; CPSC 2330, 2420, 2430 , MATH 2010 or 2120, Elective
Junior: CPSC 3410, 4430, 4950, Elective; CPSC 4420, 4480/4800/4970, 4960, Elective

Computer Science BA Major: 3 Year Suggested Course Sequence

SEMESTER 1	18	SEMESTER 2	17
CPSC 2020 (Quant. Reasoning)	4 Hours	CPSC 2030	4 Hours
Scientific Ways of Knowing	4 Hours	MATH 2200/CPSC 2250	4 Hours
ENGL 1110	3 Hours	ENGL 1120	3 Hours
LART 1050	1 Hours	COMM 1000	3 Hours
Foreign Language	4 Hours	Global/Intercultural Ways of Knowing	3 Hours
Personal Wellness	2 Hours		

SUMMER 1	9		
Additional Classes	9 Hours		

SEMESTER 3	17	SEMESTER 4	18
CPSC 2100	4 Hours	CPSC 2330	4 Hours
CPSC 2500	4 Hours	CPSC 2420	2 Hours
BIBL 2000	3 Hours	CPSC 2430	2 Hours
Civic Ways of Knowing	3 Hours	MATH 2010 or MATH 2120	4 Hours
Aesthetic Ways of Knowing	3 Hours	Major Elective	3 Hours
		Christian Ways of Knowing	3 Hours

SUMMER 1	9		
Additional Classes	9 Hours		

SEMESTER 5	16	SEMESTER 6	18
CPSC 3410	4 Hours	CPSC 4420	4 Hours
CPSC 4430	4 Hours	CPSC 4480/4800/4970	3 Hours
CPSC 4950 (SI)	1 Hour	CPSC 4960 (WI)	1 Hour
Major Elective	4 Hours	Major Elective	3 Hours
Writing Intensive Class	3 Hours	Civil Discourse + C.R.	2-4 Hours
		Social + Behavioral Ways of Knowing	3 Hours

Questions? Please contact the Department of Computer Science.