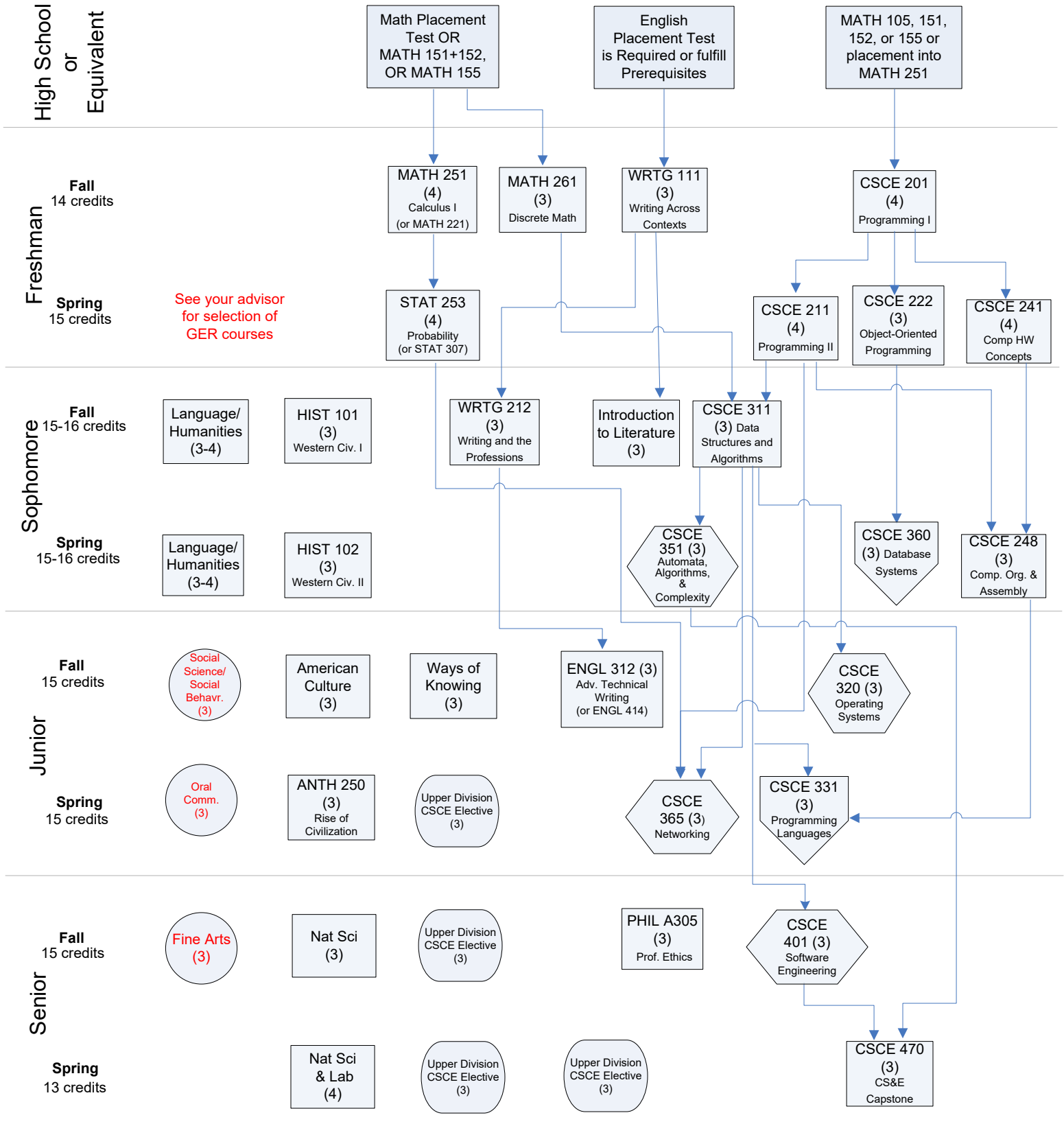
UAA Bachelor of Arts in Computer Science
Recommended Course Sequence & Prerequisites Flowchart

2017/2018



120 Total Credits Required for the degree, of which 42 must be upper division.

Key:

- Major Requirement
- GER
- Upper Division CSCE Elective
- See your advisor for list of Upper Division CS Electives and Prerequisites
- Fall Only
- Spring Only

Find more information on the web at http://www.uaa.alaska.edu/collegeofengineering

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Bachelor of Arts in Computer Science

Catalog Year 2017-2018

Fall Year 1 (14 credits)			**Spring Year 1 (15 credits)**		
CSCE A201	Computer Programming I (Java)	4	CSCE A222	Object Oriented Programming	3
WRTG A111	Writing Across Contexts	3	CSCE A211	Computer Programming II	4
MATH A251 or 221	Calculus I	4	CSCE A241	Computer Hardware Concepts	4
MATH A261	Intro to Discrete Math	3	STAT A253 or 307	Probability	4
Fall Year 2 (15-16 credits)			**Spring Year 2 (15-16 credits)**		
CSCE A311	Data Structures & Algorithms	3	CSCE A351	Automata, Algorithms, & Complexity	3
WRTG A212	Writing and the Professions	3	CSCE A248	Computer Org. & Assembly	3
HIST A101	Western Civilization I	3	CSCE A360	Data Structures & Algorithms	3
ENGL A121, 301, 302, 305, 306, or 307		3	HIST A102	Western Civilization II	z
Humanities/Foreign Language		3-4	Humanities/Foreign Language		3-4
Fall Year 3 (15 credits)			**Spring Year 3 (15 credits)**		
CSCE A320	Operating Systems	3	CSCE A331	Programming Language Concepts	3
CSCE A365	Computer Networks	3	ENGL A312 or 414	Advanced Technical Writing	3
ENGL A120, PHIL A101, A201, A301, or A421		3	ANTH A250	The Rise of Civilization	3
HIST A131, A132, or PS A101		3	**Upper Division CSCE Elective		3
Social Sciences GER/Social Behavior		3	COMM A111, 235, 237, or 241		3
Fall Year 4 (15 credits)			**Spring Year 4 (13 credits)**		
CSCE A401	Software Engineering	3	CSCE A470	CS&E Capstone Project	3
PHIL A305	Professional Ethics	3	**Upper Division CSCE Elective		3
**Upper Division CSCE Elective		3	**Upper Division CSCE Elective		3
Fine Arts GER		3	Natural Science GER		4
Natural Science GER		3			

A total of 120 credits is required for this degree, 42 of which must be upper division. Any additional credits to reach 120 total must be earned at the 100 level or higher.

**Students completing the Bachelor of Arts need an additional 12 upper division credits in CSCE, Mathematics (excluding MATH A420 and MATH A495), or Statistics. Nine of these credits must be in courses with a CSCE prefix. A maximum of 3 credits of CSCE A395, a maximum of 3 credits of CSCE A495, and a maximum of 6 credits of CSCE A498 may be applied to degree requirements.

Upper Division Computer Science Electives

Course	Number	Title	Course	Number	Title
CSCE	A302	Object-Oriented Programming II	CSCE	A415	Machine Learning
CSCE	A305	Android Programming	CSCE	A448	Computer Architecture
CSCE	A342	Digital Circuits Design	CSCE	A465	Computer & Network Security
CSCE	A385	Computer Graphics	CSCE	A462	Data Mining
CSCE	A395	Internship in Computing	CSCE	A490	Topics in Computer Science
CSCE	A411	Artificial Intelligence	CSCE	A495	Computing Internship Project
CSCE	A412	Evolutionary Computing	CSCE	A498	Individual Research