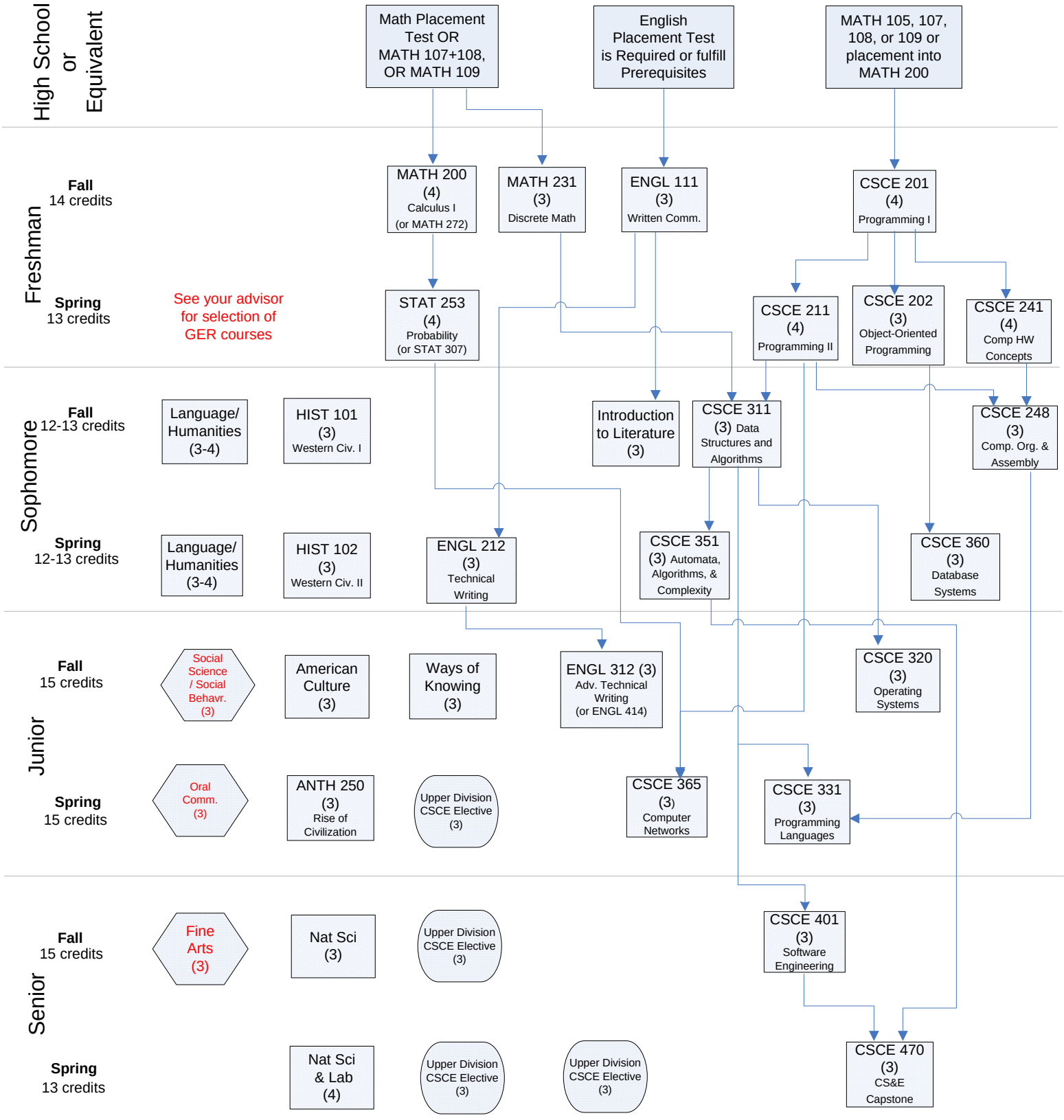
UAA Bachelor of Arts in Computer Science
Recommended Course Sequence & Prerequisites Flowchart

2013/2014



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

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

V. 3-27-2013

Bachelor of Arts in Computer Science

Catalog Year 2013-2014

Fall Year 1 (14 credits)			**Spring Year 1 (15 credits)**		
CSCE A201	Computer Programming I (Java)	4	CSCE A202	Object Oriented Programming	3
ENGL A111	Methods of Written Comm.	3	CSCE A211	Computer Programming II	4
MATH A200 or 272	Calculus I	4	CSCE A241	Computer Hardware Concepts	4
MATH A231	Intro to Discrete Math	3	STAT A307 or 253	Probability	4

Fall Year 2 (15-16 credits)			**Spring Year 2 (15-16 credits)**		
CSCE A248	Computer Org. & Assembly	3	CSCE A351	Automata, Algorithms, & Complexity	3
CSCE A311	Data Structures & Algorithms	3	CSCE A360	Database Systems	3
HIST A101	Western Civilization I	3	ENGL A212	Technical Writing	3
ENGL A121, 301, 302, 305, 306, or 307		3	HIST A102	Western Civilization II	3
Humanities/Foreign Language		3-4	Humanities/Foreign Language		3-4

Fall Year 3 (15 credits)			**Spring Year 3 (13 credits)**		
ENGL A312 or 414	Advanced Technical Writing	3	CSCE A331	Programming Language Concepts	3
CSCE A320	Operating Systems	3	CSCE A365	Computer Networks	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	Design Patterns	CSCE	A446	Digital Media & Interactive Systems
CSCE	A305	Android Programming	CSCE	A448	Computer Architecture
CSCE	A385	Computer Graphics	CSCE	A450	Robotics
CSCE	A395	Internship in Computing	CSCE	A460	Advanced Database Systems
CSCE	A411	Artificial Intelligence	CSCE	A462	Data Mining
CSCE	A412	Evolutionary Computing	CSCE	A485	Computer & Machine Vision
CSCE	A415	Machine Learning	CSCE	A490	Topics in Computer Science
CSCE	A431	Compilers	CSCE	A498	Individual Research