

Name: _____

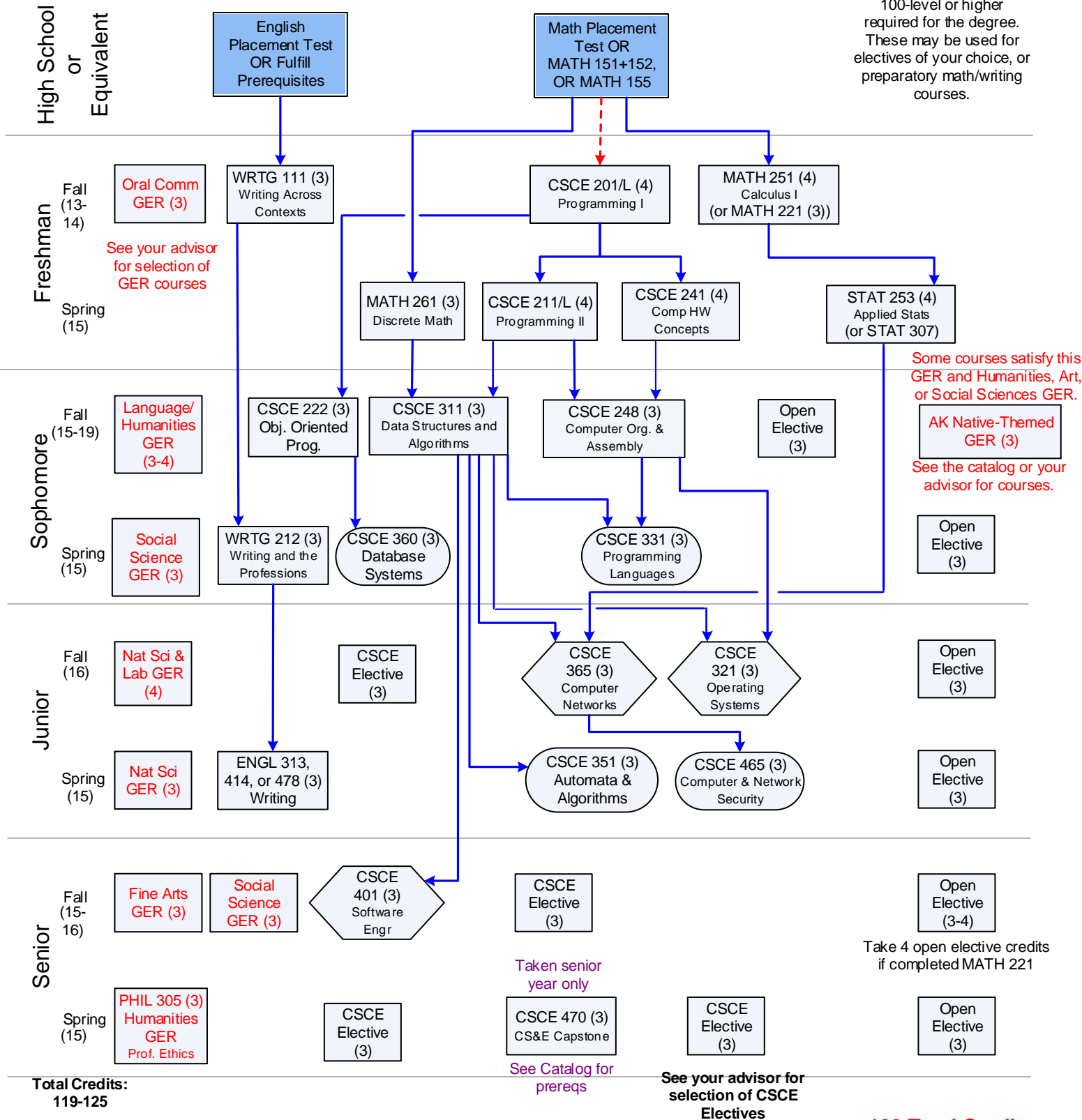
2019/2020



Bachelor of Arts in Computer Science (BACS)

Recommended Course Sequence & Prerequisites Flowchart

120 total credits at the 100-level or higher required for the degree. These may be used for electives of your choice, or preparatory math/writing courses.



120 Total Credits Required for the Degree. Credits must be at the 100-level or higher.

Bachelor of Arts in Computer Science

Catalog Year 2019-2020

Fall Year 1 (13-14 credits)

CSCE A201	Computer Programming I (Java)	4
WRTG A111	Writing Across Contexts	3
MATH A251 or 221	Calculus I	3-4
Communications GER		3

Fall Year 2 (15-16 credits)

CSCE A222	Object-Oriented Programming	3
CSCE A248	Computer Org & Assembly	3
CSCE A311	Data Structures & Algorithms	3
Open elective		3
Humanities/Foreign Language/AK Native-Themed GER		3-4

Fall Year 3 (16 credits)

CSCE A321	Operating Systems	3
CSCE A365	Computer Networks	3
**Upper Division CSCE Elective		3
Open elective		3
Natural Science GER + Lab		4

Fall Year 4 (15-16 credits)

CSCE A401	Software Engineering	3
**Upper Division CSCE Elective		3
Open elective		3-4
Fine Arts GER		3
Social Science GER		3

Spring Year 1 (15 credits)

CSCE A211	Computer Programming II	4
CSCE A241	Computer Hardware Concepts	4
MATH A261	Discrete Math	3
STAT A253 or 307	Probability	4

Spring Year 2 (15 credits)

CSCE A331	Programming Languages	3
CSCE A360	Database Systems	3
WRTG A212	Writing and the Professions	3
Open elective		3
Social Science GER		3

Spring Year 3 (15 credits)

CSCE A351	Automata & Algorithms	3
CSCE A465	Computer & Network Security	3
ENGL A313 or 414 or 478	Professional/Research/Public Writing	3
Open elective		3
Natural Science GER		3

Spring Year 4 (15 credits)

CSCE A470	CS&E Capstone Project	3
PHIL A305	Professional Ethics	3
**Upper Division CSCE Elective		3
**Upper Division CSCE Elective		3
Open elective		3

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

**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

<u>Course</u>	<u>Number</u>	<u>Title</u>	<u>Course</u>	<u>Number</u>	<u>Title</u>
CSCE	A302	Object-Oriented Programming II	CSCE	A415	Machine Learning
CSCE	A305	Android Programming	CSCE	A448	Computer Architecture
CSCE	A342	Digital Circuits Design	CSCE	A462	Data Mining
CSCE	A385	Computer Graphics	CSCE	A490	Topics in Computer Science
CSCE	A395	Internship in Computing	CSCE	A495	Computing Internship Project
CSCE	A405	Artificial Intelligence	CSCE	A498	Individual Research
CSCE	A412	Evolutionary Computing			