

# B.S. COMPUTER SCIENCE

Fall 2020 – Spring 2021

**CS REQUIREMENTS: A grade of "C" or better is required in the CS Core and the Math Core**

**80 credits**

**CS Core (all courses required):**

CSCI 2101 Programming & Problem Solving I	(4)
CSCI 2102 Programming & Problem Solving II	(4)
CSCI 3103 Data Structures & Algorithms I	(4)
CIST 3230 Computer Networking Principles	(4)
CSCI 3250 Computer Organization	(4)
CSCI 4104 Data Structures & Algorithms II	(4)
CSCI 4485 Software & Security Engineering	(4)
CSCI 4600 Senior Seminar	(2)

**Math Core (all courses required):**

MATH 2215 Calculus I	(5)
MATH 2216 Calculus II	(5)
MATH 2225 Discrete Mathematics I	(4)
CSCI 2226 Foundations of Computer Sci	(4)
CSCI 3327 Probability & Applied Statistics	(4)

**Science Core (choose 1):**

BIOL 1200/1205 Cells and Molecules (w/ lab)	(5)
CHEM 2110/2115 Chemistry I (w/ lab)	(5)
PHYS 2220/225 Physics I (w/ lab)	(6)

**Math/Science Elective (choose 1)\*:**

MATH 2217 Calculus III	(5)
MATH 3323 Linear Algebra	(4)
BIOL 1400/1405 Biodiversity & Evolution (w/ lab)	(5)
CHEM 2120/2125 Chemistry II (w/ lab)	(5)
PHYS 2230/2235 Physics II (w/ lab)	(6)

**CS Electives (choose 4):**

CIST 3222 Database Systems	(4)
CIST 3381 Information Assurance & Security	(4)
CSCI 4105 Knowledge Discovery & Data Mining	(4)
CSCI 4135 Web Application Engineering	(4)
CSCI 4251 Operating Systems	(4)
CSCI 4463 Artificial Intelligence	(4)
CSCI 4469 Computer Architecture	(4)
CSCI 4481 Cryptography and Data Security	(4)
CSCI 4510 Topics in Computer Science	(4)
CSCI 4800 Independent Study***	(4)

**Cognates\*\* (0-3+ credits as needed):**

CSCI 4800 Independent Study	(0-4)
CSCI 4900 Internship	(0-4)
Other cognates**	as needed

\*Students may also use a 2nd course from the Science Core here

\*\*Any Stockton CSCI may be used as a cognate. (CSCI 1100 may not be taken by any CSCI major who has credit for a CSCI course at the 2000 level or above.) Any other course used for a cognate requires preceptor approval.

\*\*\*To use CSCI 4800 as a CS elective, student must meet eligibility guidelines listed in the Stockton Bulletin, including submitting a proposal to the CSCI faculty mapping topic to CS learning goals.

++MATH 1100 and any CIST courses other than those listed above, if taken, count only as At Some Distance.

**GENERAL STUDIES REQUIREMENTS:**

**48 credits**

**G COURSES:** (32 total credits) No more than 12 credits in any "G" category may be applied towards the BS degree.

GEN General Interdisciplinary	(4)	GNM General Natural Science & Math	(4)
GIS-General Integration & Synthesis (Jr. yr.)	(4)	GNM General Natural Science & Math	(4)
GAH General Arts & Humanities	(4)	GSS General Social Science	(4)
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**AT SOME DISTANCE Electives:** (16 total credits) Courses unrelated to your major

	(4)		(4)
	(4)		(4)

**GENERAL STUDIES OUTCOME REQUIREMENTS:** These course attributes should be completed within the 128 credits needed to graduate.

(A) Arts		(V) Values/Ethics	
(H) Historical Consciousness		(I) International/Multicultural	

**GENERAL STUDIES WRITING REQUIREMENT: (4 courses)**

Two W1 courses may be in transfer. W2 courses must be taken at Stockton.

W1		W1/W2		W1/W2		W1/W2 at 3000 Level	
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**GENERAL STUDIES QUANTITATIVE REASONING REQUIREMENT: (3 courses)**

Two Q1 courses may be in transfer. Q2 courses must be taken at Stockton.

Q1		Q2		Q1 or Q2	
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Prerequisites must be met, check course description on the web.