B.S. COMPUTER SCIENCE 80 credits CS Core (all courses required): Math/Science Elective (choose 1)*: MATH 2217 Calculus III CSCI 2101 Programming & Problem Solving I (4)(5)CSCI 2102 Programming & Problem Solving II (4)MATH 3323 Linear Algebra (4)CSCI 3103 Data Structures & Algorithms I (4) BIOL 1400/1405 Biodiversity & Evolution (w/ lab) (5) CIST 3230 Computer Networking Principles (4)CHEM 2120/2125 Chemistry II (w/ lab) (5)CSCI 3250 Computer Organization (4) PHYS 2230/2235 Physics II (w/ lab) (6)CS Electives (choose 4): CSCI 4104 Data Structures & Algorithms II (4)CSCI 4485 Software & Security Engineering (4) CIST 3222 Database Systems (4) CSCI 4600 Senior Seminar (2)CIST 3381 Information Assurance & Security (4)Math Core (all courses required): CSCI 4105 Knowledge Discovery & Data Mining (4)MATH 2215 Calculus I (5) CSCI 4135 Web Application Engineering (4)MATH 2216 Calculus II (5) CSCI 4251 Operating Systems (4)MATH 2225 Discrete Mathematics I (4)CSCI 4463 Artificial Intelligence (4)CSCI 2226 Foundations of Computer Sci (4) CSCI 4464 Computer Vision (4) CSCI 3327 Probability & Applied Statistics (4)CSCI 4465 Machine Learning (4)Science Core (choose 1): CSCI 4469 Computer Architecture (4)BIOL 1200/1205 Cells and Molecules (w/ lab) CSCI 4481 Cryptography and Data Security (5)(4)CHEM 2110/2115 Chemisty I (w/ lab) CSCI 4510 Topics in Computer Science (5) (4)PHYS 2220/225 Physics I (w/ lab) (6)CSCI 4800 Independent Study** (0-4)Cognates** (0-3+ credits as needed): CSCI 4800 Independent Study / CSCI 4900 Internship 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 submit 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 GNM General Natural Science & Math $\overline{(4)}$ (4) GIS-General Integration & Synthesis (Jr. yr.) GNM General Natural Science & Math (4)(4)GAH General Arts & Humanities (4) GSS General Social Science (4)GAH General Arts & Humanities (4)**GSS** General Social Science (4)AT SOME DISTANCE Electives: (16 total credits) Courses unrelated to your major (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 (I) International/Multicultural (H) Historical Consciousness **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 **GENERAL STUDIES QUANTITATIVE REASONING REQUIREMENT: (3 courses)** Two Q1 courses may be in transfer. Q2 courses must be taken at Stockton.

Q1 or Q2

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

Q2

