All Bachelor of Science programs require a minimum of 128 credits and a 2.00 cumulative average.

### B.S. COMPUTER SCIENCE AND INFO SYSTEMS

**COMPUTER SCIENCE CONCENTRATION**

Fall 2017 – Spring 2018

**CSIS REQUIREMENTS:** A grade of “C” or better is required in CSIS 1206, CSIS 2101, CSIS 2102, CSIS 2210, and CSIS 3230. 80 credits

- CSIS 1206 Statistics (4)
- CSIS 2101 Programming & Problem Solving I (4)
- CSIS 2102 Programming & Problem Solving II (4)
- CSIS 2210 Systems Analysis & Design (4)
- CSIS 3230 Computer Networking Principles (4)
- MATH 2215 Calculus I (5)
- MATH 2225 Discrete Mathematics I (4)
- CSIS 2226 Foundations of Computer Science (4)
- CSIS 3103 Data Structures & Algorithms I (4)
- CSIS 3250 Computer Organization (4)
- MATH 2216 Calculus II (5)

**Transfer students may use additional transferred courses in CSIS or MATH* as cognates.**

- Select at least six from the following courses:
  - CSIS 3381 Info. Assurance & Security
  - CSIS 4014 Data Structures & Algorithms II
  - CSIS 4135 Web Application Engineering
  - CSIS 4244 Programming Lang. Concepts
  - CSIS 4251 Operating Systems
  - CSIS 4263 Artificial Intelligence
  - CSIS 4266 Computer Graphics
  - CSIS 4469 Computer Architecture
  - CSIS 4481 Cryptography and Data Security
  - CSIS 4485 Software & Secur. Engineering
  - MATH 4471 Computer Algorithms

- CSIS or MATH* elective (4)
- CSIS or MATH* elective (4)
- Internship or CSIS or MATH* elective (2+)

**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)
  - GIS-General Integration & Synthesis (Jr. yr.) (4)
  - GAH General Arts & Humanities (4)
  - GAH General Arts & Humanities (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
- (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

**GENERAL STUDIES QUANTITATIVE REASONING REQUIREMENT:** (3 courses)

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

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

*The student is responsible for insuring that all graduation requirements are met* (Bulletin). Consult with your preceptor and/or the Center for Academic Advising on a regular basis.
B.S. in CSIS (Computer Science Concentration)

Year 1
- CSIS 1206
  Statistics
- MATH 1100 or eq.
  Pre-Calculus
- MATH 2215
  Calculus I
- MATH 2225
  Discrete Math

Year 2
- CSIS 2216
  Calculus II
- CSIS 2101
  Programming I
- CSIS 2210
  Syst. Anal. & Des.
- CSIS 2226
  + Foundations of CS

Year 3
- CSIS 3103
  Data Strucs. & Algorithms I
- CSIS 3250
  Computer Org.
- CSIS 3230
  Networking Prin.
- CSIS 3381
  Info. Security

Year 4
- CSIS 4104
  Data Strucs and Algorithms II
- CSIS 4135*
  Web Aps
- CSIS 4244
  Programming Lang
- CSIS 4251
  Operating Sys
- CSIS 4463
  Art. Intelligence
- CSIS 4485++
  Software & Sec. Eng.
- CSIS 4469
  Computer Architecture
- CSIS 4481**
  Crypt. & Data Security
- MATH 4471***
  Computer Alg.

^ Alternate pre-req: CSIS 2101. Note: MATH 3325 can be substituted for MATH 2225
* Alternate pre-req: CSIS 3470
** MATH 3325 can be used instead of CSIS 2226 & MATH 3323 can be used instead of CSIS 2102
*** plus MATH 2217 & MATH 3323 & (MATH 3225 or CSIS 2226)
  + Alternate pre-req: MATH 3325
  ++Alternate pre-req: CSIS 3222 and CSIS 3470
  +++ pre-req: GNM 1125 or GNM 1126 or GEN 1126 or GNM 2310 or FRST 2310 or GEN 1125 min. Grade C or
  SAT Math score of 570 or ACT Math score of 24 or Accuplacer score of 55 or higher.