BACHELOR OF SCIENCE IN COMPUTER SCIENCE – COMP ASSOCIATE DEGREE FOR TRANSFER ROADMAP

This is a sample pathway for students who transfer to San Francisco State University in the current Bulletin year with an AS-T in Computer Science. 29 units in the major (MATH 226, MATH 227, PHYS 220/PHYS 222, PHYS 230/PHYS 232, CSC 210, CSC 211, CSC 220, CSC 230, CSC 256) and all lower division GE requirements have been satisfied. Additional units in the major may have been satisfied. Check with a major advisor about the most appropriate course sequence. Degree completion guaranteed in 60 units; see the Associate Degree for Transfer (ADT) section for more information (http://bulletin.sfsu.edu/undergraduate-admissions/transfer-students).

Course | Title | Units
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**First Semester**
CSC 300GW | Ethics, Communication, and Tools for Software Development - GWAR | 3
CSC 340 | Programming Methodology | 3
MATH 324 | Probability and Statistics with Computing | 3
MATH 325 | Linear Algebra | 3
University Elective | | 3
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**Units** | **15**

**Second Semester**
CSC 317 | Introduction to Web Software Development | 3
CSC 413 | Software Development | 3
CSC 510 | Analysis of Algorithms I | 3
GE Area UD–C: Upper-Division Arts and/or Humanities | | 3
University Elective | | 3
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**Units** | **15**

**Third Semester**
CSC 415 | Operating System Principles | 3
CSC 600 | Programming Paradigms and Languages | 3
Major Elective - Take Two | | 6
GE Area UD-B: Upper-Division Physical and/or Life Sciences | | 3
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**Units** | **15**

**Fourth Semester**
CSC 648 | Software Engineering | 3

Major Elective – Take Two | 6
GE Area UD-D: Upper-Division Social Sciences | 3
University Elective | 3
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**Units** | **15**

**Total Units** | **60**

1 If US History and/or US/CA Government not met, these courses satisfy multiple areas:
- UD-C and US History – HIST 449, HIST 455, HIST 465 HIST 466, HIST 478, HIST 484, JS 449, MUS 506, MUS 559, TH A 559
- UD-D and US History – AIS 460, HIST 466, RRS 600
- UD-D and CA Government – HIST 450

**To Do at SF State:**
Enough total units to reach 120 minimum for graduation; 30 units minimum at the upper division level; to include the following:

**University-Wide Requirements: 9–15 Units**
- American Institutions (0-6 units): US History, US Government, CA Government. If not met in transfer, see next bullet.
- Upper division GE (9 units): Courses may satisfy the US History or US/CA Government requirements, and UD-C or UD-D at the same time, if approved for multiple areas. Check Note 1.
- Students entering the major with the AS-T in Computer Science are not required to fulfill SF State Studies and Complementary Studies requirements.

**Computer Science Major: 42 Units**
- Mathematics: 6 units
- Core/GWAR: 12 units
- Advanced CSC requirements: 24 units, including electives.
- Senior Presentation: required oral presentation during senior year (0 units)

**University Electives: Eight or More Units**
Depends on course choices made at the community college, how transferred units are applied to the requirements above, and course choices at SF State. Some courses may meet more than one requirement, e.g. in both UD GE and in the major.