

ASSOCIATE IN SCIENCE

Major Requirements for an A.S. Degree

The student shall complete a discipline-specific major which will require an approved program of study with a minimum of 18 units of course work as specified in the College Catalog.

The General Education Requirements

Students must complete one of the following General Education patterns:

Completion of San Joaquin Delta College Associate Degree General Education pattern with a minimum of twenty-four (24) semester units.

OR

Completion of California State University General Education pattern.

OR

Completion of the Intersegmental General Education Transfer Curriculum (IGETC/CSU) General Education pattern.

Students planning to transfer should see a counselor to choose the appropriate courses to complete the entire CSU or IGETC General Education pattern.

Unit Requirement

Completion of not less than sixty (60) associate degree applicable semester units of course work with not less than a 2.0 cumulative grade point average.

Competency Requirement

A minimum competency must be demonstrated by a grade of "C" or higher in courses offered in satisfaction of written communication, oral communication, and quantitative reasoning (IV Learning Skills). *

Residence Requirement

Of the minimum required sixty (60) semester units, the student must complete at San Joaquin Delta College:

The last twelve (12) semester units and attend during the semester of qualification for graduation.

OR

A total of at least twenty-four (24) units.

Units earned through Credit by Examination do not apply.

* "C-" grade is not acceptable.

A.S. Degree Majors:

- Accounting
- Agricultural Business
- Architecture Drafting
- Baking & Pastry
- Caterpillar Dealer Service Technician, Apprenticeship
- Communication: Speech & Language Pathology Assistant
- Computer Networking Technology
- Computer Science
- Correctional Science
- Culinary Arts
- Diesel Equipment Technician
- Engineering Technology (Civil, Electro-Mechanical, or Mechanical)
- Fire Science
- Fluid Power & Automation Technology
- Heating & Air Conditioning - Refrigeration
- Heavy Equipment Technician
- Law Enforcement
- Network Software
- Nursing, R.N.
- Office Management
- Ornamental Horticulture

Limitation on Enrollment

Limitation on enrollment is a condition of enrollment, which limits how students qualify for a particular program. Limitations apply to courses that include public performance or intercollegiate competition where a tryout or audition is necessary. Some courses require formal admission to a particular program in order to enroll (e.g. Associate Degree Nursing, Caterpillar Dealer Service Technician, Fire Academy, Peace Officer Academy, Psychiatric Technician, Radiologic Technology, and Speech-Language Pathology Assistant).

AS Degree - Major in COMPUTER NETWORKING TECHNOLOGY

Applied Science & Technology Division

Upon successful completion of the Computer Networking Technology A.S. Degree program, the student will demonstrate the ability to function as an entry-level computer networking technician. The student will attain the required skills to: design and implement Local Area Networks (LANs) and autonomous Wide Area Networks (WANs), wire infrastructure as per industry standards, select and implement appropriate protocols, configure network devices such as routers and switches, as well as manage, maintain and troubleshoot networks. The program prepares the students for industry certification such as CCNA and entry-level positions in the IT industry such as network technician, network administrator, network system installer, network system sales/marketing, or independent network services contractor.

Total Units Required: 60-69

Recommended Sequence:

<u>First Semester</u>	<u>Units</u>
ELECT 030A Basic Electronic Computer Networks	4
ELECT 030B Advanced Electronic Computer Networks	4
ELECT 014C Troubleshooting Computers	3
GE CHOICE Social Science - Group B	3

Second Semester

ELECT 030C Basic Electronic Network Systems	4
ELECT 030D Advanced Electronic Network Systems	4
CS 014B Microcomputer Evaluation and Installation	3
GE CHOICE Natural Science	3-5

Third Semester

ELECT 077I Network Associate Hardware Testing	2
CS 042 UNIX	3
CS 035/BUS 035 Multimedia Presentations	3
GE CHOICE Learning Skills - Group C	3
GE CHOICE Social Science - Group A	3
GE CHOICE Humanities	3-5

Fourth Semester

CS 058A Microsoft Windows 2000 Professional	3
CS 020 Microsoft Word, Excel, and Access	3
GE CHOICE Contemporary Perspectives	3
GE CHOICE Learning Skills - Group A	3-6
GE CHOICE Learning Skills - Group B	3-5

A grade of "C" or better is required in each course.

AS Degree - Major in COMPUTER SCIENCE

Business Division

Upon successful completion of the Associate in Science Degree, the student demonstrates the skills and training for employment and/or transfer to a four-year college or university.

Total Units Required: 60-61

Recommended Sequence:

<u>First Semester</u>	<u>Units</u>
CS 011 Fundamentals of Computer Science	3
CSP 017 Computer Logic OR (CSP 17 is equivalent to CS 17)	
CSP 029A Pascal Programming	3
GE Choice* Learning Skills, (Group A)	3
GE Choice* Social Science, (Group A)	3
ELECTIVE** Course of Choice	3

Second Semester

CSA 020 Microsoft Word, Excel, & Access	3
CS 054 Fundamentals of Data Communications	3
GE Choice* Learning Skills, (Group B)	3
GE Choice* Social Science, (Group B)	3
ELECTIVE** Course of Choice	3

Third Semester

CSP 024 Beginning COBOL Programming OR	
CSP 026A Java Programming OR	
CSP 028A Visual BASIC.NET Programming OR	
CSP 031A "C" Programming	3-5
GE Choice* Learning Skills, (Group C)	3
GE Choice* Natural Science Course	3
ELECTIVE** Course of Choice	3
ELECTIVE** Course of Choice	3

Fourth Semester

CSP 026B Data Structures with Java OR	
CSP 028B Adv. Visual BASIC.NET Programming OR	
CS 031B C++ Programming	3
GE Choice * Humanities	3
GE Choice * Contemporary Perspectives	3
ELECTIVE** Course of Choice	3
ELECTIVE** Course of Choice	3

***GE CHOICE**

Courses must be selected from the appropriate area of the General Education requirements for the Associate degree.

****GE CHOICE**

Any courses that are Associate degree applicable.