

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 NETWORK SOFTWARE

Business Division

Upon successful completion of the Network Software Technician AS Degree program, the student demonstrates the skills, knowledge, and training for employment as an Information Technology Specialist, a Computer Technician, Network Support Technician, Microcomputer Specialist, sales in computer-network-related fields, or for transfer to a four-year computer program. Individuals who complete this program demonstrate the skills necessary to design and implement network software using Microsoft® Windows 2000 and/or similar operating systems software. Students will also demonstrate skills in improving networks through troubleshooting and problem solving techniques, install, administer and maintain networks, and train and support users to maximize the benefits of the use of networks. General education courses in the areas of Learning Skills, Social Science, Natural Science, the Humanities, and Contemporary Perspectives are required.

Total Units Required: 60.5-69.5

Recommended Sequence:

<u>First Semester</u>		<u>Units</u>
CS 011	Computer Science Fundamentals	3
CSP 017	Computer Logic (CSP 17 is equivalent to CS 17)	3
CS 054	Fundamentals of Data Communications OR	3
CS 056	Networking Essentials	
GE Course	Learning Skills, (Group A)	3
GE Course	Social Science, (Group A)	3

<u>Second Semester</u>		<u>Units</u>
CS 014B	Microcomputer Evaluation and Installation	3
CS 042	UNIX	3
CSN 058A	Microsoft Windows XP Professional	3
CSW 023	HTML for Web Publishing	3
GE Course	Learning Skills, (Group B) (Math 10, Math 13, Math 36, or Math 87)	3

<u>Third Semester</u>		<u>Units</u>
CSN 058B	Microsoft Windows 2003 Server	3
CSW 021	Beginning Javascript Programming	3
GE Course	Social Science, (Group B) (ECON 01A, SOCS 030, SOCIO 001A, or POLSC 010)	3
GE Course	Learning Skills, (Group C)	3
ELECTIVE		3

<u>Fourth Semester</u>		<u>Units</u>
CSN 060	Network Security	3
One of the following courses:		
CSW 021	Javascript Programming	3
CSP 026A	Java Programming	3
CSP 028A	Visual BASIC.NET Programming	3
CSP 031A	"C" Programming	3
CSP 031B	C++ Programming	3
Elective		
GE Course	(Humanities)	3
GE Course	(Natural Science) (CHEM 001A,003A, Physical Science 010, or Physics 010)	3
GE Course	(Contemporary Perspective) (Choice of one: BUS 008, 020; COM ST 007; FCHS 002,003,005,023)	3

<u>Electives:</u>		
CS 070	Introduction to the Internet	1
CS 032	Operating Systems	3
CS 033	Systems Analysis and Design	3
CS 042	Unix	3
CSN 058C	Implementing Microsoft Windows 2003 Network Infrastructure	3
CSN 058D	Implementing Microsoft Windows 2003 Directory Services	3

Group I (Electives) Choose one
Learning Skills Group B General Education Electives

MATH 010	Introduction to Contemporary Mathematics	3
MATH 013	Survey of Calculus	3
MATH 036	Pre-Calculus	5
MATH 087	Technical Mathematics	5

Group II (Electives) Choose one
Social Science Group C General Education Electives

		<u>Units</u>
ECON 001A	Principles of Economics: Macro	3
SOCS 030	American Immigrant Experience	3
SOCIO 001A	Introduction to Sociology	3
POLSC 010	Introduction to Political Science	3

Group III (Electives) Choose one
Natural Science General Education Electives

CHEM 001A	General Chemistry	5
CHEM 003A	Introduction to Chemistry	4
PHYS 001	Introduction to Physics	4
PHSCI 010	Matter and Energy	3

Group IV (Electives) Choose one
Contemporary Perspective General Education Electives

BUS 008	Introduction to the American Legal System	3
BUS 020	Introduction to Business	3
COM ST 007	Intercultural Communication	3
FCS 002	Life Management	3
FCS 003	Home Management and Finance	3
FCS 005	Basic Nutrition	3
FCS 023	Marriage and the Family	3

Group V (Electives) 3 units minimum

CS 070	Introduction to the Internet	1
CS 032	Operating Systems	3
CS 033	System Analysis and Design	3

CS 058C	Microsoft Windows 2000 Network Infrastructure: Implementation and Administration	2
CS 058D	Microsoft Windows 2000 Directory Services Infrastructure: Implementation and Administration	2
CS 042	UNIX	3