

**COMPUTER SCIENCE**  
**Associate of Science Degree**  
**Catalog 2009-2010**

The Computer Science Associate of Science degree is designed for students interested in software design and programming. Those wishing to transfer to a baccalaureate granting institution and pursue a degree program are strongly encouraged to check with their advisor and carefully coordinate their coursework at San Juan College with the requirements of the transfer institution. The rigorous nature of this degree fulfills the expectations at the baccalaureate level. This degree also begins prospective computing professors and/or research students on their path leading to graduate degrees. Consider taking a foreign language at San Juan College if your intended transfer institution has such a requirement. These courses will be in addition to the requirements listed below.

Pre-requisite course must be completed prior to the courses listed below (e.g., MATH 180 and 185 prior to MATH 188). In general, however, it is suggested that students complete the New Mexico Transfer Module as outlined below. Students must earn a grade of "C" or higher in all COSC courses for the course to count toward a degree.

				<b>Credit Hours</b>	<b>Grade</b>
<b>1st Semester</b>					
_____	COSC	118*	Computer Programming Fundamentals I with C++	3	_____
_____	ENGL	111	Freshman Composition	3	_____
_____	MATH	188	Calculus I	4	_____
_____	PHYS	211**	General Physics I	4	_____
_____	_____	_____	Approved Social & Behavioral Science Course***	3	_____
<b>2nd Semester</b>					
_____	COSC	218	Computer Programming Fundamentals II with C++	3	_____
_____	ENGL	211	Advanced Composition	3	_____
_____	MATH	189	Calculus II	4	_____
_____	PHYS	212**	General Physics II	4	_____
_____	_____	_____	Approved Humanities & Fine Arts***	3	_____
<b>3rd Semester</b>					
_____	COSC	190	Database Concepts & Principles	3	_____
_____	COSC	236	UNIX	3	_____
_____	COSC	240	Java Programming	3	_____
_____	COSC	262^	Data Structure with C++	3	_____
_____	MATH	231	Discrete Mathematics	3	_____
_____	_____	_____	Approved Humanities & Fine Arts***	3	_____
<b>4th Semester</b>					
_____	COSC	270	Windows GUI Programming	3	_____
_____	COSC	243	Web Programming on UNIX Systems	3	_____
_____	SPCH	110	Public Speaking <b>OR</b>		
_____	SPCH	111	Interpersonal Communication	3	_____
_____	_____	_____	Approved Social & Behavioral Science Course***	3	_____
_____	_____	_____	Approved Humanities and Fine Arts Course*** <b>OR</b>		
_____	_____	_____	Approved Social & Behavioral Science Course***	3	_____

Total credit hours required for this degree is 67

\* You need to be able to use a computer, type, create documents, save files, etc. before taking COSC 118. If your computer skills are low you should take COSC 097 concurrently.

\*\* Read the current catalog of your intended transfer degree institution to take the most appropriate laboratory science courses. (See page 169). Any SJC approved Lab course may be substituted as deemed appropriate by your Computer Science advisor. This course satisfies General Education laboratory science requirement. For information about NM Tech go to [www.nmt.edu](http://www.nmt.edu),

NMSU at [www.nmsu.edu](http://www.nmsu.edu), and Fort Lewis College at [www.fortlewis.edu](http://www.fortlewis.edu)

\*\*\* See page 158, 2009-2010 San Juan College catalog. Visit your advisor for Approved Humanities and Fine Arts Course and Approved Social and Behavioral Science Courses.

^ COSC 262 is considered an upper division course by most four-year institution so it will probably not transfer and you will have to retake it. Our course will make it much easier to do well in the four-year school Data Structures course.