Associate in Arts
Computer Science Concentration

Students who complete this concentration will satisfy the requirements of MassTransfer. Students should consult with an advisor about the general education course requirements.

A candidate for the Computer Science Concentration might select a schedule similar to this.

Course #	Course Title	Credits	Prerequisites
First Semester			
ENL101	English Composition I	3	Appropriate scores in Reading Comprehension & in Sentence Skills on CPT or grade of C or better in ENL020 and ENL050 or ESL201
MAT240	Calculus I	4	MAT190
CSC110	Computer Programming I: Java	3	MAT030 or satisfactory basic skills assessment score
	Physics*	4	
	Behavioral & Social Sciences	3	
Second Semester			
ENL102	English Composition II	3	A grade of C or higher in ENL101
MAT250	Calculus II	4	MAT240 or MAT185
CSC130	Computer Programming II: Java	4	CSC110
	Physics*	4	
Third Semester			
COM103	Human Communication	3	ENL010 or ESL102 or satisfactory basic skills assessment score
CSC210	Systems Software and Assembly Language Programming	4	CSC130
CSC120	Computer Programming I: C++	4	MAT030 or satisfactory basic skills assessment score & working knowledge of any programming language
	Humanities & Fine Arts	3	
	Behavioral & Social Sciences	3	
Fourth Semester			
CSC230	Data Structures	4	CSC120 & CSC130
	Mathematics/Quantitative Reasoning**	3/4	
	Humanities & Fine Arts	3	
	Behavioral & Social Sciences	3	
	Humanities & Fine Arts	3	
Total Credits		65/66	

The Associate in Arts degree does not indicate a specialized degree in a concentration.

Overview

Using hands-on projects and teamwork, Computer Science students learn to design, implement, and test programs in Java, C++, and assembly language. Students analyze and use various software development models and basic software engineering principles. Object-oriented programming methodology, systems software, and data structures are studied in depth. Students satisfy the general education requirements and MassTransfer with concentrated coursework in Calculus and Physics.

Career Outlook

Most Computer Science students continue their education at a four-year school. Computer scientists design computers, software, and information technologies. Computer engineers also work with hardware and software, often in the process of building prototypes. By far the most numerous of computer professionals and systems analysts solve computer problems and customize technology to satisfy the needs of an organization. Computer scientists, computer engineers, and systems analysts are among the fastest growing occupations.

* PHY101 Physics I and PHY102 Physics II (or)
PHY211 University Physics I and PHY212 University Physics II

** MAT150 Elementary Statistics