

Computer Specialist – Programming Concentration A.A.S. (CSP)

Graduates will be prepared to program applications using a variety of computer languages. These applications will be developed for the desktop, the Internet, and mobile devices. In addition, databases will be used to implement applications requiring persistent data. Project management best practices are used for all projects.

Upon successful completion of this program, graduates will be able to:

- apply critical thinking, team building, and problemsolving skills.
- use programming languages to develop computerized solutions for a range of problems.
- develop applications for the desktop, the Internet, and mobile environments.
- plan and execute Information Technology projects using appropriate project development approaches and project management techniques.

First Semester		Credits	
CIS 105	Introduction to Computers		
	and Applications	3 3	
CMN 120	Small Group Communication	3	
CIS 155	Introduction to Computer		
	Science–Structured		
	Programming-C++	3.5	
ENG 105	Research and Composition	3	
CIS 112	Computational Thinking and	_	
	Programming Logic	3	
		15.5	
Second Semester			
CIS 141	Client-Side Scripting I	3.5	
CIS 133	User Experience Design	3	
ENG 107	Writing in the Workplace	3 3	
CIS 250	Operating Systems	3	
Elective*	Mathematics	3	
		15.5	
Third Semester			
CIS 172	Java I	3	
CIS 255	The Database Environment	3.5	
CIS 280	Object-Oriented Programming		
	with Visual Basic.NET	3	
CIS 180	Introduction to Project		
	Management	3	
Electives	Social Science/Humanities	3	
		15.5	
Fourth Semester			
CIS 207	Unix Server-Side Scripting	3	
CIS 145	Systems Analysis and Design	3	
CIS 222	Application Development for		
	Mobile Devices	3	
Elective	Social Science/Humanities	3	
Elective*	Mathematics	3 3 3	
		15	
	Credit Total	61.5	

^{*}Mathematics electives may include all courses from MAT 105 or higher with the exception of MAT 121.

Prior Learning Assessment: Previous job training, certificates and work experience that may qualify for college credit (see academic advisor).

Gateway Courses: Based on placement testing in reading, writing and math, these prerequisite courses may have to be taken before placement in College English or Mathematics beginning the first semester and concurrently.

RSS 099	Basic Skills Reading	3
RSS 100	Critical Reading	3
ENG 099	Basic Skills Writing	3
ENG 100	Fundamentals of Writing	3
MAT 090	Mathematical Literacy	6
ESL 251	English for Academic Purpose	6
	(Required for ESL students only.)	

Please note, taking gateway courses will increase your time for completion.