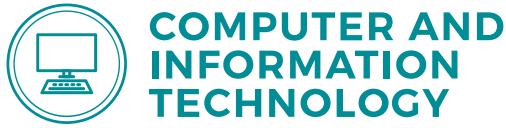


PROGRAMMING AND SYSTEMS ANALYSIS LEVEL II, CERTIFICATE OF COMPLETION



Program Requirements

Program Prerequisites: None

Code	Title	Credits	Semester
Required Courses			
The following courses are required and included in CCL Programming and Systems Analysis Level I			
CIS105	Survey of Computer Information Systems	3	_____
Select one of the following:		3	_____
CIS119DO	Introduction to Oracle: SQL		_____
CIS276DA	MySQL Database		_____
CIS276DB	SQL Server Database		_____
Select one of the following:		3	_____
CIS126DL	Linux Operating System		_____
CIS126RH	Red Hat System Administration I		_____
MST150++	Any Microsoft Windows course		_____
CIS133DA	Internet/Web Development Level I	3	_____
CIS150	Programming Fundamentals	3	_____
or CIS150AB	Object-Oriented Programming Fundamentals		_____
Select one of the following:		3	_____
CIS156	Python Programming: Level I		_____
CIS159	Visual Basic Programming I		_____
CIS162++	Any C Programming: Level I course		_____
CIS163AA	Java Programming: Level I		_____

CIS165++	Any Mobile Application Development course		_____
CIS166++	Any Web Scripting course(s)	3	_____
GBS151	Introduction to Business	3	_____
The following courses are required for CCL Programming and Systems Analysis Level II			
Select one of the following:		3-4	_____
CIS190	Introduction to Networking		_____
CNT140AB	Introduction to Networks		_____
MST140	Microsoft Networking Essentials		_____
Select one of the following:		3	_____
CIS225	Business Systems Analysis and Design		_____
CIS225AB	Object-Oriented Analysis and Design		_____
CIS250	Management of Information Systems		_____
Select a programming language from below that best aligns with academic and professional goals in one of the following areas:		3	_____
CIS256	Python Programming Level II		_____
CIS259	Visual Basic Programming II		_____
CIS262++	Any C Programming: Level II course		_____
CIS263AA	Java Programming: Level II		_____
CIS265	Advanced iOS Application Development		_____
Restricted Electives			
Select one of the courses below that best aligns with academic and professional goals :		3	_____
Students may not choose courses they have taken from the Required Courses area			
CIS151	Computer Game Development - Level I		_____

2 *Programming and Systems Analysis Level II, Certificate of Completion*

CIS156	Python Programming: Level I	_____
CIS159	Visual Basic Programming I	_____
CIS162++	Any C Programming: Level I course	_____
CIS163AA	Java Programming: Level I	_____
CIS165++	Any Mobile Application Development course	_____
CIS224	Project Management Microsoft Project for Windows	_____
CIS251	Computer Game Development - Level II	_____
CIS256	Python Programming Level II	_____
CIS259	Visual Basic Programming II	_____
CIS262++	Any C Programming: Level II course	_____
CIS263AA	Java Programming: Level II	_____
CIS265	Advanced iOS Application Development	_____
GBS211	Legal, Ethical and Regulatory Issues of the Internet Studies	_____
Total Credits	36-37	_____