

PROGRAMMING AND SYSTEMS ANALYSIS LEVEL II, CERTIFICATE OF COMPLETION



**COMPUTER AND
INFORMATION
TECHNOLOGY**

Certificate of Completion: CCL 5962

36-37 Credits

Program Contact

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Program Description

The Certificate of Completion (CCL) in Programming and Systems Analysis Level II provides an in-depth exploration of different computer language and technical skills. This CCL includes, but is not limited to the following: local area networks, team roles, and dynamics. A Certificate of Completion (CCL) in iOS App Development and an Associate in Applied Science (AAS) in Programming and Systems Analysis are available.

Program Notes

Students must earn a grade of "C" or better for all courses required within the program. Overall program minimum GPA = 2.00.

Consultation with an Academic Advisor is recommended for course selection.

Courses within any of the following prefixes must be taken within five (5) years prior to completion of the program to be applied toward this award: AIM, BPC, CIS, CLD, CNT, CSC, ITS, and MST.

++ indicates any suffixed course may be selected.

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 3-4 _____
that best aligns with academic and professional goals :

Students may not choose courses they have taken from the Required Courses area _____

CIS151	Computer Game Development - Level I	_____
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	_____
CIS267	Pega System Architect Essentials	_____
GBS211	Legal, Ethical and Regulatory Issues of the Internet Studies	_____
Total Credits		36-38 _____