PROGRAMMING AND SYSTEMS ANALYSIS, ASSOCIATE IN APPLIED SCIENCE

COMPUTER AND INFORMATION TECHNOLOGY

Associate in Applied Science: AAS 3844
62-71 Credits
Program Contact
Prema Rayappa | 480-732-7230 | prema.rayappa@cgc.edu

Program Description

The Associate in Applied Science (AAS) in Programming and Systems Analysis program provides an in-depth exploration of different computer language and technical skills. The AAS includes, but is not limited to the following: operating systems, local area networks, business communication, team roles, and dynamics. Certificate of Completions (CCLs) in Programming and Systems Analysis Level I and Level II and iOS App Development are also 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			_____
CIS105	Survey of Computer Information Systems	3	_____
GBS151	Introduction to Business	3	_____
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	_____
Select one of the following:		3	_____
CIS150	Programming Fundamentals		_____
CIS150AB	Object-Oriented Programming Fundamentals [1]		_____
CIS166++	Any Web Scripting course(s)	3	_____
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 one of the following:		3	_____
CIS119DO	Introduction to Oracle: SQL		_____
CIS276DA	MySQL Database		_____
CIS276DB	SQL Server Database		_____
FYE101	Introduction to College, Career and Personal Success	1-3	_____
or FYE103	Exploration of College, Career and Personal Success		_____
Select a programming language from below that best aligns with academic and professional goals (2 courses for a total of 6 credits) in one of the following areas:		6	_____
CIS156 & CIS256	Python Programming: Level I and Python Programming Level II		_____
CIS159 & CIS259	Visual Basic Programming I and Visual Basic Programming II		_____

CIS162++	Any C Programming: Level I course		_____
& CIS262++	Any C Programming: Level II course		_____
CIS163AA & CIS263AA	Java Programming: Level I and Java Programming: Level II		_____
CIS265	Advanced iOS Application Development		_____
& CIS165++ Any Mobile Application Development course			_____

Restricted Electives _____

Students may not use courses from the Required Courses Area. _____

Select two of the following:		6	_____
CIS224	Project Management Microsoft Project for Windows		_____
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		_____
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		_____

General Electives _____

Core _____

First-Year Composition _____

ENG101	First-Year Composition	3	_____
or ENG107	First-Year Composition for ESL		_____
ENG102	First-Year Composition	3	_____
or ENG108	First-Year Composition for ESL		_____

Oral Communication _____

Any approved General Education course from the Oral Communication area		3	_____

Critical Reading _____

Select one of the following:		0-3	_____
CRE101	College Critical Reading and Critical Thinking		_____
Or equivalent as indicated by assessment			_____

Mathematics _____

Select one of the following:		3-6	_____
MAT150	College Algebra/ Functions		_____
MAT151	College Algebra/ Functions		_____
MAT152	College Algebra/ Functions		_____
MAT155	College Algebra/ Functions with Review		_____
MAT156	College Algebra/ Functions with Review		_____

Distribution _____

Humanities, Arts and Design _____

Any approved general education course(s) from the Humanities, Arts and Design (HU) area		3	_____

Social and Behavioral Sciences _____

Select one of the following:		3	_____
ECN211	Macroeconomic Principles		_____
ECN212	Microeconomic Principles		_____
SBU200	Society and Business		_____

Natural Sciences _____

See https://www.cgc.edu/CourseDescriptions for current course description information.

Any approved general education course(s) in the Natural Sciences (Quantitative) (SQ) area or the Natural Sciences (General) (SG) area.	4	_____
Total Credits	**62-71**	_____

[1] Students interested in pursuing an iOS Certificate of Completion (CCL) are recommended to take CIS150AB Object-Oriented Programming Fundamentals