

INFORMATION TECHNOLOGY, ASSOCIATE IN APPLIED SCIENCE



COMPUTER AND INFORMATION TECHNOLOGY

Program Requirements

Program Prerequisites: None

Required Courses: 33-41 Credits

Complete all courses in the specialization below that best aligns with your academic and professional goals. Consult with an academic, faculty, or program advisor.

Code	Title	Credits	Semester
FYE101	Introduction to College, Career and Personal Success	1-3	_____
or FYE103	Exploration of College, Career and Personal Success		_____

Specialization 1: Cybersecurity Fundamentals

Credits: 33-38

Code	Title	Credits	Semester
Information Technology Core			
Select one of the following:		3	_____
BPC270	A+ Exam Prep: Operating System Configuration and Support		_____
MST150++	Any Microsoft Windows course		_____
CIS105	Survey of Computer Information Systems	3	_____
Select one of the following:		3	_____
CIS117DM	Microsoft Access: Database Management		_____
CIS119DO	Introduction to Oracle: SQL		_____
CIS276DA	MySQL Database		_____
CIS276DB	SQL Server Database		_____
CIS126DL	Linux Operating System	3	_____
or CIS126RH	Red Hat System Administration I		_____

CIS133DA	Internet/Web Development Level I	3	_____
CIS156	Python Programming: Level I	3	_____
CIS190	Introduction to Networking	3-4	_____
or CNT140AB	Introduction to Networks		_____
Select one of the following:		3	_____
CIS224	Project Management Microsoft Project for Windows		_____
CIS250	Management of Information Systems ¹		_____

Cybersecurity Fundamentals

CIS111	Ethics in Information Technology	3	_____
or ITS120	Legal, Ethical and Regulatory Issues		_____
CIS270	Essentials of Network and Information Security	3-6	_____
or CIS271DB & CIS272DB	Information Security Essentials and Information Security Principles		_____
or ITS110	Information Security Fundamentals		_____
ITS240	Ethical Hacking and Network Defense	3	_____

Related Area Credits

Select courses with one of the following prefixes to complete a minimum of 60 credits for the Associate in Applied Science (AAS) in Information Technology:		0-5	_____
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BPC+++++	Any BPC Business-Personal Computers courses		_____
CIS+++++	Any CIS Computer Information Systems courses		_____
CLD+++++	Any CLD Cloud Computing courses		_____
CNT+++++	Any CNT Cisco Network Technology courses		_____
ITS+++++	Any ITS Information Technology Security courses		_____

MST+++++ Any MST
Microsoft
Technology
courses

¹ Students taking CIS271DB Information Security Essentials would be required to take CIS250 Management of Information Systems.

Specialization 2: Database Development

Credits: 36-38

Code	Title	Credits	Semester
Information Technology Core			
Select one of the following:		3	
BPC270	A+ Exam Prep: Operating System Configuration and Support		
CIS126DL	Linux Operating System		
CIS126RH	Red Hat System Administration I		
MST150++	Microsoft Windows		
CIS105	Survey of Computer Information Systems	3	
CIS119DO	Introduction to Oracle: SQL	3	
CIS133DA	Internet/Web Development Level I	3	
Select one of the following:		3	
CIS156	Python Programming: Level I		
CIS162++	Any C Programming: Level I course		
CIS163AA	Java Programming: Level I		
CIS190	Introduction to Networking	3-4	
or CNT140AB	Introduction to Networks		
CIS224	Project Management Microsoft Project for Windows	3	
or CIS250	Management of Information Systems		
Database Development			
CIS117DM	Microsoft Access: Database Management	3	

or CIS154	Database Modeling and Design		
CIS150++	Programming Fundamentals	3	
Select one of the following:		3	
CIS164AB	Oracle: PL/SQL Programming		
CIS276DA	MySQL Database		
CIS276DB	SQL Server Database		
CIS217AM	Advanced Microsoft Access: Database Management	3	
or CIS276DB	SQL Server Database		
CIS225AB	Object-Oriented Analysis and Design	3	

Related Area Credits

Select courses with one of the following prefixes to complete a minimum of 60 credits for the Associate in Applied Science (AAS) in Information Technology: 0-2

BPC+++++	Any BPC Business-Personal Computers courses		
CIS+++++	Any CIS Computer Information Systems courses		
CLD+++++	Any CLD Cloud Computing courses		
CNT+++++	Any CNT Cisco Network Technology courses		
ITS+++++	Any ITS Information Technology Security courses		
MST+++++	Any MST Microsoft Technology courses		

Specialization 3: Desktop Support

Credits: 32-38

Code	Title	Credits	Semester
Information Technology Core			
BPC270	A+ Exam Prep: Operating System Configuration and Support	3	
CIS105	Survey of Computer Information Systems	3	
Select one of the following:		3	
CIS117DM	Microsoft Access: Database Management		
CIS119DO	Introduction to Oracle: SQL		
CIS276DA	MySQL Database		
CIS276DB	SQL Server Database		
CIS126DL	Linux Operating System	3	
or CIS126RH	Red Hat System Administration I		
CIS133DA	Internet/Web Development Level I	3	
Select one of the following:		3	
CIS150AB	Object-Oriented Programming Fundamentals		
CIS156	Python Programming: Level I		
CIS162++	Any C Programming: Level I course		
CIS163AA	Java Programming: Level I		
CIS190	Introduction to Networking	3-4	
or CNT140AB	Introduction to Networks		
CIS224	Project Management Microsoft Project for Windows	3	
or CIS250	Management of Information Systems		
Desktop Support			
BPC170	A+ Exam Prep: Computer Hardware Configuration and Support	3	
CIS102DA	Customer User Support	3	

Related Area Credits		
Select courses with one of the following prefixes to complete a minimum of 60 credits for the Associate in Applied Science (AAS) in Information Technology:		2-8
BPC+++++	Any BPC Business-Personal Computers courses	
CIS+++++	Any CIS Computer Information Systems courses	
CLD+++++	Any CLD Cloud Computing courses	
CNT+++++	Any CNT Cisco Network Technology courses	
ITS+++++	Any ITS Information Technology Security courses	
MST+++++	Any MST Microsoft Technology courses	

Specialization 4: Foundations of Mobile App Development

Credits: 33-38

Code	Title	Credits	Semester
Information Technology Core			
CIS105	Survey of Computer Information Systems	3	
Select one of the following:		3	
BPC270	A+ Exam Prep: Operating System Configuration and Support		
CIS126DL	Linux Operating System		
CIS126RH	Red Hat System Administration I		
MST150++	Microsoft Windows		
Select one of the following:		3	
CIS117DM	Microsoft Access: Database Management		

CIS119DO	Introduction to Oracle: SQL		
CIS276DA	MySQL Database		
CIS276DB	SQL Server Database		
CIS133DA	Internet/Web Development Level I	3	
CIS162++	Any C Programming: Level I course	3	
CIS190	Introduction to Networking	3-4	
or CNT140AB	Introduction to Networks		
CIS224	Project Management Microsoft Project for Windows	3	
or CIS250	Management of Information Systems		
Foundations of Mobile App Development			
CIS120DF	Introduction to Adobe Photoshop	3	
CIS165	Introduction to IOS Application Development	3	
CIS165DA	Introduction to Android Application Development	3	
CIS165DB	C#/VB.NET: Windows 8 App Development	3	
or CIS165DC	Xamarin/C# Cross-Platform Development		
Related Area Credits			
Select courses with one of the following prefixes to complete a minimum of 60 credits for the Associate in Applied Science (AAS) in Information Technology:		0-5	
BPC+++++	Any BPC Business-Personal Computers courses		
CIS+++++	Any CIS Computer Information Systems courses		
CLD+++++	Any CLD Cloud Computing courses		

CNT+++++	Any CNT Cisco Network Technology courses		
ITS+++++	Any ITS Information Technology Security courses		
MST+++++	Any MST Microsoft Technology courses		

Specialization 5: Microsoft Office Professional

Credits: 31-38

Code	Title	Credits	Semester
Information Technology Core			
CIS105	Survey of Computer Information Systems	3	
CIS117DM	Microsoft Access: Database Management	3	
CIS133DA	Internet/Web Development Level I	3	
Select one of the following:		3	
CIS150AB	Object-Oriented Programming Fundamentals		
CIS156	Python Programming: Level I		
CIS162++	Any C Programming: Level I course		
CIS163AA	Java Programming: Level I		
CIS190	Introduction to Networking	3-4	
or CNT140AB	Introduction to Networks		
Select one of the following:		3	
MST150++	Microsoft Windows		
BPC270	A+ Exam Prep: Operating System Configuration and Support		
Microsoft Office Professional			
Select one of the following:		0-1	
BPC/OAS111AA	Computer Keyboarding I		

or Permission from Program Director			
CIS113DE	Microsoft Word: Word Processing	3	
CIS114DE	Excel Spreadsheet	3	
CIS118DB	Desktop Presentation: PowerPoint	3	
CIS124AA & CIS124BA	Project Management Software: Level I and Project Management Software: Level II	2-3	
or CIS224	Project Management Microsoft Project for Windows		

Related Area Credits

Select courses with one of the following prefixes to complete a minimum of 60 credits for the Associate in Applied Science (AAS) in Information Technology:

BPC+++++	Any BPC Business-Personal Computers courses	0-8	
CIS+++++	Any CIS Computer Information Systems courses		
CLD+++++	Any CLD Cloud Computing courses		
CNT+++++	Any CNT Cisco Network Technology courses		
ITS+++++	Any ITS Information Technology Security courses		
MST+++++	Any MST Microsoft Technology courses		

Specialization 6: Microsoft Server

Credits: 36-38

Code	Title	Credits	Semester
Information Technology Core			
CIS105	Survey of Computer Information Systems	3	
Select one of the following:		3	

CIS117DM	Microsoft Access: Database Management		
CIS119DO	Introduction to Oracle: SQL		
CIS276DA	MySQL Database		
CIS276DB	SQL Server Database		
CIS133DA	Internet/Web Development Level I	3	
Select one of the following:		3	
CIS150AB	Object-Oriented Programming Fundamentals		
CIS156	Python Programming: Level I		
CIS162++	Any C Programming: Level I course		
CIS163AA	Java Programming: Level I		
CIS190	Introduction to Networking	3-4	
or CNT140AB	Introduction to Networks		
CIS224	Project Management Microsoft Project for Windows	3	
or CIS250	Management of Information Systems		
MST150++	Microsoft Windows	3	
Microsoft Server			
CIS121AH	Microsoft PowerShell/Command Line Operations	3	
MST155DC	Installation, Storage, and Compute with Windows Server	4	
MST157DC	Networking with Windows Server	4	
MST158DC	Identity Management with Windows Server 2016	4	

Related Area Credits

Select courses with one of the following prefixes to complete a minimum of 60 credits for the Associate in Applied Science (AAS) in Information Technology:

BPC+++++	Any BPC Business-Personal Computers courses	_____
CIS+++++	Any CIS Computer Information Systems courses	_____
CLD+++++	Any CLD Cloud Computing courses	_____
CNT+++++	Any CNT Cisco Network Technology courses	_____
ITS+++++	Any ITS Information Technology Security courses	_____
MST+++++	Any MST Microsoft Technology courses	_____

Specialization 7: Oracle Database Operations

Credits: 32-38

Code	Title	Credits	Semester
Information Technology Core			
Select one of the following:		3	_____
BPC270	A+ Exam Prep: Operating System Configuration and Support	_____	_____
CIS126DL	Linux Operating System	_____	_____
CIS126RH	Red Hat System Administration I	_____	_____
MST150++	Microsoft Windows	_____	_____
CIS105	Survey of Computer Information Systems	3	_____
CIS119DO	Introduction to Oracle: SQL	3	_____
CIS133DA	Internet/Web Development Level I	3	_____
Select one of the following:		3	_____
CIS150AB	Object-Oriented Programming Fundamentals	_____	_____
CIS156	Python Programming: Level I	_____	_____

CIS162++	Any C Programming: Level I course	_____	
CIS163AA	Java Programming: Level I	_____	
CIS190	Introduction to Networking	3-4	_____
or CNT140AB	Introduction to Networks	_____	_____
CIS224	Project Management Microsoft Project for Windows	3	_____
or CIS250	Management of Information Systems	_____	_____
Oracle Database Operations			
CIS119DP	Oracle: Database Administration	3	_____
CIS154	Database Modeling and Design	3	_____
CIS164AB	Oracle: PL/SQL Programming	3	_____

Related Area Credits

Select courses with one of the following prefixes to complete a minimum of 60 credits for the Associate in Applied Science (AAS) in Information Technology:	2-8	_____
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BPC+++++	Any BPC Business-Personal Computers courses	_____
CIS+++++	Any CIS Computer Information Systems courses	_____
CLD+++++	Any CLD Cloud Computing courses	_____
CNT+++++	Any CNT Cisco Network Technology courses	_____
ITS+++++	Any ITS Information Technology Security courses	_____
MST+++++	Any MST Microsoft Technology courses	_____

Specialization 8: Programming and Systems Analysis Level 1

Credits: 32-38

Code	Title	Credits	Semester
Information Technology Core			
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++	Microsoft Windows		
CIS133DA	Internet/Web Development Level I	3	
CIS150AB	Object-Oriented Programming Fundamentals	3	
CIS190	Introduction to Networking	3-4	
or CNT140AB	Introduction to Networks		
CIS224	Project Management Microsoft Project for Windows	3	
or CIS250	Management of Information Systems		
Programming and Systems Analysis			
Select one of the following:		3	
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	3	
GBS151	Introduction to Business	3	
Related Area Credits			

Select courses with one of the following prefixes to complete a minimum of 60 credits for the Associate in Applied Science (AAS) in Information Technology:		1-8	
BPC+++++	Any BPC Business-Personal Computers courses		
CIS+++++	Any CIS Computer Information Systems courses		
CLD+++++	Any CLD Cloud Computing courses		
CNT+++++	Any CNT Cisco Network Technology courses		
ITS+++++	Any ITS Information Technology Security courses		
MST+++++	Any MST Microsoft Technology courses		

Specialization 9: Redhat Linux Engineer

Credits: 32-38

Code	Title	Credits	Semester
Information Technology Core			
CIS105	Survey of Computer Information Systems	3	
Select one of the following:		3	
CIS117DM	Microsoft Access: Database Management		
CIS119DO	Introduction to Oracle: SQL		
CIS276DA	MySQL Database		
CIS276DB	SQL Server Database		
CIS126RH	Red Hat System Administration I	3	
CIS133DA	Internet/Web Development Level I	3	
Select one of the following:		3	
CIS150AB	Object-Oriented Programming Fundamentals		

CIS156	Python Programming: Level I		
CIS162++	Any C Programming: Level I course		
CIS163AA	Java Programming: Level I		
CIS190	Introduction to Networking	3-4	
or CNT140AB	Introduction to Networks		
CIS224	Project Management Microsoft Project for Windows	3	
or CIS250	Management of Information Systems		
Redhat Linux Engineer			
CIS238RH	Red Hat System Administration II	3	
CIS240RH	Red Hat System Administration III	3	
Related Area Credits			
	Select courses with one of the following prefixes to complete a minimum of 60 credits for the Associate in Applied Science (AAS) in Information Technology:	5-11	
BPC+++++	Any BPC Business-Personal Computers courses		
CIS+++++	Any CIS Computer Information Systems courses		
CLD+++++	Any CLD Cloud Computing courses		
CNT+++++	Any CNT Cisco Network Technology courses		
ITS+++++	Any ITS Information Technology Security courses		
MST+++++	Any MST Microsoft Technology courses		

Specialization 10: Web Foundations

Credits: 36-38

Code	Title	Credits	Semester
Information Technology Core			
Select one of the following:		3	
BPC270	A+ Exam Prep: Operating System Configuration and Support		
CIS126DL	Linux Operating System		
CIS126RH	Red Hat System Administration I		
MST150++	Microsoft Windows		
CIS105	Survey of Computer Information Systems	3	
Select one of the following:		3	
CIS117DM	Microsoft Access: Database Management		
CIS119DO	Introduction to Oracle: SQL		
CIS276DA	MySQL Database		
CIS276DB	SQL Server Database		
CIS133DA	Internet/Web Development Level I	3	
Select one of the following:		3	
CIS150AB	Object-Oriented Programming Fundamentals		
CIS156	Python Programming: Level I		
CIS162++	Any C Programming: Level I course		
CIS163AA	Java Programming: Level I		
CIS190	Introduction to Networking	3-4	
or CNT140AB	Introduction to Networks		
CIS224	Project Management Microsoft Project for Windows	3	
or CIS250	Management of Information Systems		
Web Foundation			
CIS120DF	Introduction to Adobe Photoshop	3	

CIS136	Content Management Systems: WordPress	3	_____
CIS166AA	Introduction to Javascript	3	_____
CIS233DA	Internet/Web Development Level II	3	_____
CIS235	E-Commerce	3	_____
Related Area Credits			
Select courses with one of the following prefixes to complete a minimum of 60 credits for the Associate in Applied Science (AAS) in Information Technology:		0-2	_____
BPC+++++	Any BPC Business-Personal Computers courses		_____
CIS+++++	Any CIS Computer Information Systems courses		_____
CLD+++++	Any CLD Cloud Computing courses		_____
CNT+++++	Any CNT Cisco Network Technology courses		_____
ITS+++++	Any ITS Information Technology Security courses		_____
MST+++++	Any MST Microsoft Technology courses		_____

Specialization 11: A Related Certificate of Completion (CCL) At the Discretion of the Program Director

Credits: 32-33

A related Certificate of Completion (CCL) at the discretion of the Program Director (minimum of 11 credits) AND the following core courses with permission of the Program Director.

Code	Title	Credits	Semester
Information Technology Core			
CIS105	Survey of Computer Information Systems	3	_____
Select one of the following:		3	_____

CIS117DM	Microsoft Access: Database Management		_____
CIS119DO	Introduction to Oracle: SQL		_____
CIS276DA	MySQL Database		_____
CIS276DB	SQL Server Database		_____
Select one of the following:		3	_____
BPC270	A+ Exam Prep: Operating System Configuration and Support		_____
CIS126DL	Linux Operating System		_____
CIS126RH	Red Hat System Administration I		_____
MST150++	Microsoft Windows		_____
Select one of the following:		3	_____
CIS150AB	Object-Oriented Programming Fundamentals		_____
CIS156	Python Programming: Level I		_____
CIS162++	Any C Programming: Level I course		_____
CIS163AA	Java Programming: Level I		_____
CIS190	Introduction to Networking	3-4	_____
or CNT140AB	Introduction to Networks		_____
CIS133DA	Internet/Web Development Level I	3	_____
CIS224	Project Management Microsoft Project for Windows	3	_____
or CIS250	Management of Information Systems		_____

General Education

Code	Title	Credits	Semester
General Education Core			
<i>First-Year Composition</i>			
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		
Select one of the following:		3 _____
COM100	Introduction to Human Communication	_____
COM110	Interpersonal Communication	_____
COM225	Public Speaking	_____
COM230	Small Group Communication	_____
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 _____
MAT140	College Mathematics	_____
MAT141	College Mathematics	_____
MAT142	College Mathematics	_____
MAT145	College Mathematics with Review	_____
MAT146	College Mathematics with Review	_____
Equivalent or higher level mathematics course in the Mathematical Applications (MA) area		_____
Distribution		
<i>Humanities, Arts and Design</i>		
Any approved general education course(s) from the Humanities, Arts and Design (HU) area		3 _____
<i>Social and Behavioral Sciences</i>		
Any approved general education course from the Social and Behavioral Sciences (SB) area		3 _____
<i>Natural Sciences</i>		
Any approved general education course from the Natural Science (SG) or (SQ) area		4 _____
Total Credits		22-28 _____