

Appendix B: Course Mapping

The transfer guides below do not represent all courses required for DeVry programs; rather, they provide a list of courses that, when completed at CIAT have been determined to be equivalent to DeVry courses. For a complete list of course requirements in each DeVry program, please see the [Academic Catalog](#).

The CIAT courses below are clock hour courses, while DeVry University courses are semester-credit hour courses. DeVry University converts clock hours to semester-credit hours.

The following are the CIAT programs that were evaluated and the corresponding DeVry University programs in which some credit may transfer.

CIAT Program	DeVry Program
Associate of Applied Science in Computer Information Systems – Networking Concentration	<ul style="list-style-type: none"> • Bachelor of Science in Technical Management • Bachelor of Science in Information Technology and Networking • Bachelor of Science in Network and Communications Management
Associate in Applied Science in Software Development	<ul style="list-style-type: none"> • Bachelor of Science in Computer Information Systems • Bachelor of Science in Software Development • Bachelor of Science in Multimedia Design and Development
Certificate in Computer Information Systems - Networking Concentration	<ul style="list-style-type: none"> • Bachelor of Science in Technical Management • Bachelor of Science in Information Technology and Networking • Bachelor of Science in Network and Communications Management • Bachelor of Science in Computer Information Systems • Bachelor of Science in Software Development • Bachelor of Science in Multimedia Design and Development
Certificate as Cisco Networking Professional / Cisco Certified Network Associate – Security Specialist (CCNP / CCNA-SEC)	
Certificate as Networking Security Technician (CNST)	
Certificate in Computer Application Development	

Technical Management Bachelor's Degree Program			
DeVry Courses		CIAT Courses	
Communication Skills			
• ENGL112	Composition	• ENG 100	College Reading and Composition
• ENGL135	Advanced Composition	• ENG 101	English Composition
Humanities		Three semester-credit hours of coursework in any applicable humanities discipline can be applied as humanities credit toward this program.	
Social Sciences		Up to 6 semester-credit hours of coursework in any applicable social science discipline can be applied as social science credit toward this program.	
Mathematics and Natural Sciences		Three semester-credit hours of coursework in any applicable natural sciences discipline can be applied as natural science credit toward this program.	
• MATH114	Algebra for College Students	• MTH 105	College Algebra
• MATH221	Statistics for Decision-Making	• MTH 140	Statistics
Additional General Education Selection		Three semester-credit hours of coursework in any applicable general education discipline can be applied toward this program requirement.	
Business, Management and Technology			
• BIS245	Database Essentials for Business with Lab	• ASD 103	Relational Database Mgmt. System & SQL
Electives		Up to 25 credit hours of qualifying prior college coursework not meeting other program requirements may be applied toward elective hours.	
The following are suggested electives.			
• CIS115	Logic and Design	• ASD 215	C# Business Programming
• CIS170C	Programming with Lab	• ASD 102	Object Oriented Programming with C++
• CIS206	Architecture and Operating Systems with Lab	• CIS 101B	Computer Operating Systems
• SEC310	Principles and Theory of Security Management	• CIS 221	Advanced Network Security
Technical Specialty			
General Technical Option		Up to 27 credit hours of qualifying prior college coursework not meeting other program requirements may be applied toward the technical specialty hours.	
<p><i>The general technical option is designed for students who wish to apply prior coursework to a particular career area. DeVry coursework, qualifying coursework from a prior college experience, or a combination of DeVry and qualifying prior coursework may apply.</i></p> <p><i>The following disciplines can apply to the General Technical Option with a minimum of 23 credit hours in a particular career area. The remaining four credit hours are taken at DeVry. The following are examples of course distribution into the GTO. Other courses not listed may apply to the GTO.</i></p>			
Computer Information Systems Networking			
• CIS 101A	Computer Hardware Fund	• CIS 120B	Network Fundamentals Part 2
• CIS 101B	Computer Operating Systems	• CIS 266	Administering Microsoft Windows Server
• CIS 102A	Network Fundamentals Part 1	• CIS 267	Configuring Advanced Windows Server Services
• CIS 120	Network Security		
Software Development			
• ASD 101	The Fundamentals of Software Design	• ASD 150	Operating Systems Concepts
• ASD 102	Object Oriented Programming with C++	• ASD 170	Front End Development with HTML, CSS, and JavaScript

Technical Management Bachelor's Degree Program			
 DeVry Courses		 CIAT Courses	
• ASD 103	<i>Regional Database Mgmt. Systems & SQL</i>	• ASD 190	<i>Internet Architecture with HTTP and REST</i>
Business Administration Specialty <i>The following business administration specialties are designed for students who wish to focus on a particular career area in a business or management field.</i>			
Information Technology – Cisco Networking Fundamentals			
• NETW203	Cisco Networking Academy – Introduction to Networking with Lab	• CIS 270A	Cisco Configuration ICND1
• NETW205	Cisco Networking Academy – Introduction to Routing with Lab	• CIS 270B	Cisco Configuration ICND2
• NETW207	Cisco Networking Academy – Introduction to Switching with Lab	• CIS 273	Implementing CISO IP Switched Networks
• NETW230	Network Operating Systems – Windows, with Lab	• CIS 265	Installing and Configuring Windows Server
• SEC280	Principles of Information Systems Security	• CIS 120	Network Security
• SEC440	Information Systems Security Planning and Audit	• CIS 221	Advanced Network Security
Information Technology – Networking Fundamentals			
• NETW202	Introduction to Networking with Lab	• CIS 102B	Networking Fundamentals Part 2
• NETW206	Introduction to Switching with Lab	• CIS 273	Implementing CISO IP Switched Networks
• NETW230	Network Operating Systems – Windows, with Lab	• CIS 265	Installing and Configuring Windows Server
• SEC280	Principles of Information Systems Security	• CIS 120	Network Security
• SEC440	Information Systems Security Planning and Audit	• CIS 221	Advanced Network Security

Computer Information Systems Bachelor's Degree Program			
DeVry University Courses		CIAT Courses	
Communication Skills		Up to 6 semester-credit hours of coursework in an applicable communication skills discipline can be applied as communication skills credit toward this program.	
• ENGL112	Composition	• ENG 100	College Reading and Composition
• ENGL135	Advanced Composition	• ENG 101	English Composition
Humanities		Up to 3 semester-credit hours of coursework in any applicable humanities discipline can be applied as humanities credit toward this program	
Social Sciences		Up to 9 semester-credit hours of coursework in any applicable social science discipline can be applied as social science credit toward this program.	
• SOCS185	Culture and Society	• SBS 120	Sociology
Mathematics and Natural Sciences			
• MATH114	Algebra for College Students	• MTH 105	College Algebra
• MATH221	Statistics for Decision-Making	• MTH 140	Statistics
Tech Core			
• CEIS106	Introduction to Operating Systems	• CIS 101B	Computer Operating Systems
• CEIS110	Introduction to Programming	• ASD 215	C# Business Programming
• NETW190	Fundamentals of Information Technology & Networking I	• CIS 102A	Network Fundamentals Part 1
• NETW200	Fundamentals of Information Technology & Networking II	• CIS 102B	Networking Fundamentals Part 2
• SEC285	Fundamentals of Information Security	• CIS 120	Network Security
Information Systems and Programming			
• CEIS236	Database Systems and Programming Fundamentals	• ASD 103	Regional Database Mgmt System and SQL
• CIS170C	Programming with Lab	• ASD 102	Object Oriented Programming with C++
Program Core – selection by track			
Cyber Security Programming & Software Programming students			
Network Systems Administration			
• NETW260	Intermediate Information Technology & Networking I	• CIS 273	Implementing CISO IP Switched Networks
Information Technology and Networking			
• CEIS305	Operating Systems	• CIS 230A & • CIS 230B	Installation and Configuration of Linux Part 1 Installation and Configuration of Linux Part 2
• SEC311	Ethical Hacking	• CIS 220	Certified Ethical Hacker
All other students			
Application Development			
• CIS363B	Web Interface Design with Lab	• ASD 170	Front End Development with HTML,CSS
• CIS407A	Web Application Development with Lab	• ASD 255	Web Development with ASP. Net
Track – one option is selected			
Computer Forensics			
• SEC440	Information Systems Security Planning and Audit	• CIS 221	Advanced Network Security
Information Systems Security			
• SEC440	Information Systems Security Planning and Audit	• CIS 221	Advanced Network Security

Information Technology & Networking Bachelor's Degree Program			
DeVry University Courses		CIAT Courses	
Communication Skills		Up to 6 semester-credit hours of coursework in an applicable communication skills discipline can be applied as communication skills credit toward this program.	
• ENGL112	Composition	• ENG 100	College Reading and Composition
• ENGL135	Advanced Composition	• ENG 101	English Composition
Humanities		Up to 3 semester-credit hours of coursework in any applicable humanities discipline can be applied as humanities credit toward this program.	
Social Sciences		Up to 9 semester-credit hours of coursework in any applicable social science discipline can be applied as social science credit toward this program.	
• SOCS185	Culture and Society	• SBS 120	Sociology
Mathematics and Natural Sciences			
• MATH114	Algebra for College Students	• MTH 105	College Algebra
• MATH221	Statistics for Decision-Making	• MTH 140	Statistics
Tech Core			
• CEIS106	Introduction to Operating Systems	• CIS 101B	Computer Operating Systems
• CEIS110	Introduction to Programming	• ASD 215	C# Business Programming
• NETW190	Fundamentals of Information Technology & Networking I	• CIS 102A	Network Fundamentals Part 1
• NETW200	Fundamentals of Information Technology & Networking II	• CIS 102B	Networking Fundamentals Part 2
• SEC285	Fundamentals of Information Security	• CIS 120	Network Security
Network Systems Administration			
• NETW260	Intermediate Information Technology & Networking I	• CIS 273	Implementing CISO IP Switched Networks
Information Systems and Programming			
• CEIS236	Database Systems and Programming Fundamentals	• ASD 103	Regional Database Mgmt System and SQL
• CIS170C	Programming with Lab	• ASD 102	Object Oriented Programming with C++
Track – one option is selected			
Cloud Based Networking and Virtualization			
• NETW414	Cloud Computing Fundamentals	• ASD 265	Cloud Computing with Microsoft Azure
Cyber Security			
• SEC311	Ethical Hacking	• CIS 220	Certified Ethical Hacker
• SEC440	Information Systems Security Planning and Audit	• CIS 221	Advanced Network Security
Mobile and Network Devices			
• CEIS375	Information Technology and Mobility Essentials	• ASD 277	Internet of Things

Network & Communications Management Bachelor's Degree Program			
DeVry University Courses		CIAT Courses	
Communication Skills		Up to 6 semester-credit hours of coursework in an applicable communication skills discipline can be applied as communication skills credit toward this program.	
• ENGL112	Composition	• ENG 100	College Reading and Composition
• ENGL135	Advanced Composition	• ENG 101	English Composition
Humanities		Up to 6 semester-credit hours of coursework in any applicable humanities discipline can be applied as humanities credit toward this program	
Social Sciences		Up to 9 semester-credit hours of coursework in any applicable social science discipline can be applied as social science credit toward this program.	
• SOCS185	Culture and Society	• SBS 120	Sociology
Mathematics and Natural Sciences		Three semester-credit hours of coursework in any applicable natural sciences discipline can be applied as natural science credit toward this program.	
• MATH114	Algebra for College Students	• MTH 105	College Algebra
• MATH221	Statistics for Decision-Making	• MTH 140	Statistics
Computing			
• CIS206	Architecture and Operating Systems with Lab	• CIS 101B	Computer Operating Systems
• SEC280	Principles of Information Systems Security	• CIS 120	Network Security
Network Operating Systems and Technologies			
• NETW230	Network Operating Systems – Windows, with Lab	• CIS 265	Installing and Configuring Windows Server
• NETW240	Network Operating Systems – UNIX, with Lab	• CIS 230A & • CIS 230B	Installation and Configuration of Linux Part 1 Installation and Configuration of Linux Part 2
Track – one option is selected			
<i>Cisco Network Fundamentals</i>			
• NETW203	Cisco Networking Academy – Introduction to Networking with Lab	• CIS 270A	Cisco Configuration ICND1
• NETW205	Cisco Networking Academy – Introduction to Routing with Lab	• CIS 270B	Cisco Configuration ICND2
• NETW207	Cisco Networking Academy – Introduction to Switching with Lab	• CIS 273	Implementing CISO IP Switched Networks
• SEC453	Cisco Networking Academy – Advanced Network Security with Lab	• CIS 271	Implementing CISCO IOS Network Security
<i>Networking Fundamentals</i>			
• NETW202	Introduction to Networking with Lab	• CIS 102B OR • CIS 272	Networking Fundamentals Part 2 Implementing Cisco IP Routing
• NETW206	Introduction to Switching with Lab	• CIS 273	Implementing CISO IP Switched Networks
• SEC450	Advanced Network Security with Lab	• CIS 271	Implementing CISCO IOS Network Security

Software Development Bachelor's Degree Program			
DeVry University Courses		CIAT Courses	
Communication Skills		Up to 6 semester-credit hours of coursework in an applicable communication skills discipline can be applied as communication skills credit toward this program.	
• ENGL112	Composition	• ENG 100	College Reading and Composition
• ENGL135	Advanced Composition	• ENG 101	English Composition
Humanities		Up to 6 semester-credit hours of coursework in any applicable humanities discipline can be applied as humanities credit toward this program.	
Social Sciences		Up to 9 semester-credit hours of coursework in any applicable social science discipline can be applied as social science credit toward this program.	
• SOCS185	Culture and Society	• SBS 120	Sociology
Mathematics and Natural Sciences			
• MATH114	Algebra for College Students	• MTH 105	College Algebra
• MATH221	Statistics for Decision-Making	• MTH 140	Statistics
Tech Core			
• CEIS106	Introduction to Operating Systems	• CIS 101B	Computer Operating Systems
• CEIS110	Introduction to Programming	• ASD 215	C# Business Programming
• NETW190	Fundamentals of Information Technology & Networking I	• CIS 102A	Network Fundamentals Part 1
• NETW200	Fundamentals of Information Technology & Networking II	• CIS 102B	Networking Fundamentals Part 2
• SEC285	Fundamentals of Information Security	• CIS 120	Network Security
Information Systems and Programming			
• CIS170C	Programming with Lab	• ASD 102	Object Oriented Programming with C++
Information Technology and Networking			
• CEIS305	Operating Systems	• CIS 230A &	Installation and Configuration of Linux Part 1
		• CIS 230B	Installation and Configuration of Linux Part 2
Track – one option is selected			
Software Design and Programming			
• CEIS320	Introduction to Mobile Device Programming	• ASD 227	iOS Programming
Web and Mobile Application Development			
• CIS363B	Web Interface Design with Lab	• ASD 170	Front End Development with HTML,CSS

Multimedia Design & Development Bachelor's Degree Program			
DeVry University Courses		CIAT Courses	
Communication Skills		Up to 6 semester-credit hours of coursework in an applicable communication skills discipline can be applied as communication skills credit toward this program.	
Humanities		Up to 6 semester-credit hours of coursework in any applicable humanities discipline can be applied as humanities credit toward this program	
Social Sciences		Up to 9 semester-credit hours of coursework in any applicable social science discipline can be applied as social science credit toward this program.	
• SOCS185	Culture and Society	• SBS 120	Sociology
Mathematics and Natural Sciences		Three semester-credit hours of coursework in any applicable natural sciences discipline can be applied as natural science credit toward this program.	
• MATH114	Algebra for College Students	• MTH 105	College Algebra
• MATH221	Statistics for Decision-Making	• MTH 140	Statistics
Multimedia Core			
• WGD232	Web Design	• ASD 170	Front End Development with HTML,CSS
• WGD242	Advanced Web Design	• ASD 190	Internet Architecture with PHP and Other OSS
Track – one of the following is selected			
Web Design and Development			
• CIS336	Introduction to Database with Lab	• ASD 103	Regional Database Mgmt System and SQL