Two Degrees, One Path

Associate of Science in Cyber Security/Information Assurance To Bachelor of Science in Computer Information Technology

Completion of the following curriculum will satisfy the requirements for the **Associate of Science in Cyber Security/Information Assurance** degree at Ivy Tech Community College and leads to the **Bachelor of Science in Computer Information Technology** degree at Northern Kentucky University.

Admission Requirements for a Bachelor of Science in Computer Information Technology
- A grade point average of 2.0 or higher on a 4-point scale
- A grade of C- or better in each course that counts as part of the Computer Information Technology major
- A completed application to Northern Kentucky University

Ivy Tech Community College of Indiana

Students must complete the following courses for an Associate of Science in Cyber Security/Information Assurance.

ITCC Course	Course or Category	Credits	NKU Course	✓
Category I: Transfer General Education Core (TGEC) Competencies				
ENGL 111	Written Communication	3	ENG 101	
COMM 101 or COMM 102	Speaking and Listening	3	CMST 101 or CMST 220	
TBS XXX	Quantitative Reasoning	3-4	TBD XXX	
TBS XXX	Quantitative Reasoning	3	TBD XXX	
TBS XXX	Scientific Ways of Knowing	3	TBD XXX	
TBS XXX	Scientific Ways of Knowing	3-5	TBD XXX	
TBS XXX	Social and Behavioral Ways of Knowing	3-4	TBD XXX	
TBS XXX	Humanistic and Artistic Ways of Knowing	3-4	TBD XXX	
TBS XXX	TGEC Elective	3	TBD XXX	
TBS XXX	TGEC Elective	3	TBD XXX	
Subtotal General Education Core		**30-35**		

TBS=to be selected by Ivy Tech student

TBD=to be determined by NKU based on course selected at Ivy Tech

ITCC Course	Course or Category	Credits	NKU Course	✓
Category II: Degree Requirements for Associate of Science in Cyber Security/Information Assurance and NKU Recommendations				
IVYT 111	Student Success in University Transfer	1	UNV 100T	
INFM 109 and CSIA 105	Informatics Fundamentals and Introduction to Cyber Security/Information Assurance	6	CIT 130 and CIT 100T	
ITSP 135	Hardware/Software Support	4	CIT 100T	
NETI 105 and CSIA 210	Network Fundamentals and Network Protocol Analysis	6	CIT 247 and CIT 200T	
SDEV 120	Computer Logic	3	INF 100T	
CPIN 279	Computing and Informatics Exploration and Evaluation	1	INF 200T	
SDEV 153	Transfer Cluster Elective – Web Site Development	3	INF 286	
ENGL 112	Transfer Cluster Elective – Exposition and Persuasion	3	ENG 291	
	Transfer Cluster Elective	3		
Total Associate Degree Credit Hours		**60-65**		

Northern Kentucky University

Students must complete the following for a B.S. in Computer Information Technology: the core requirements, a minor or area of focus, and one of the four tracks.

Students with an associate degree can earn course credit by meeting the following criteria:

For CIT 247 credit, <u>one</u> of the following criteria must be met.

- C- or better in NETI 105 and (CSIA 210 or NETI 115)
- Cisco Certified Entry Level (CCENT) certification

For CIT 447 credit, <u>both</u> of the following criteria must be met.

- C- or better in NETI 105 and (CSIA 210 or NETI 115)
- Cisco Certified Network Associate Routing and Switching (CCNA R&S) certification

Category III: Core Requirements for the B.S. in Computer Information Technology				
NKU Course	**Course**	**Credits**	**ITCC Course**	**Taken at ITCC**
INF 120	Elementary Programming	3	SDEV 200 or SDEV 210 or SDEV 220 or SDEV 230 or SDEV 240	
INF 282	Introduction to Databases	3	DBMS 110 and DBMS 210	
INF 286	Introduction to Web Development	3	SDEV 153	x
CIT 130	Information Technology Fundamentals	3	INFM 109 and CSIA 105	x
CIT 247	Networking Fundamentals	3	NETI 105 and CSIA 210*	x
CIT 271	Windows Administration	3		
CIT 371	Unix Systems	3		
CIT 383	Scripting I	3		
CIT 480	Securing Computer Systems	3		
STA 205 or STA 212 or STA 250	Statistics	3		
PHI 310	Information Ethics	3		
ENG 347	Technical Writing	3	ENGL 211	
	Minor or Area of Focus	15-24		
Subtotal Core Courses Credit Hours		**42-51**		

*An alternative equivalency is NETI 105 and NETI 115 or CCENT certification.

Students must choose one of the following tracks: Network and System Administration Track, Web and Database Administration Track, Cybersecurity Track, or Non-Specialist Track

Category IV: Requirements for the Network and System Administration Track				
NKU Course	**Course**	**Credits**	**ITCC Course**	**Taken at ITCC**
CIT 447	Network Design/Troubleshooting	3	C- or better in NETI 105 and (CSIA 210 or NETI 115), A.S., and CCNA R&S certification	
CIT 470	Advanced Network and System Administration	3		
CIT 484	Network Security	3		
Select three 300/400 level CIT courses	CIT Electives	9		
Additional Track Credit Hours		**18**		
Total Bachelor Degree Credit Hours**		**120-134**		

**Credits hours for the bachelor degree can vary based on the courses taken at ITCC and the minor selected at NKU. The lowest total credit hours for this track is based on the student completing an A.S. in Cyber Security/Information Assurance at ITCC and an Information Systems Minor at NKU.

Category IV: Requirements for the Web and Database Administration Track				
NKU Course	**Course**	**Credits**	**ITCC Course**	**Taken at ITCC**
CSC 260	Object-Oriented Programming I	3		
CSC 360 or CIT 483	Object-Oriented Programming II or Scripting II	3		
CSC 301	Web Programming	3		
CIT 436	Web Server Administration	3		
CIT 472	Database Administration	3		
CSC 456 or One 300/400 CIT	Advanced Web Application Development or CIT Elective	3	C- or better in NETI 105 and (CSIA 210 or NETI 115), A.S., and CCNA R&S certification equates to CIT 447 and satisfies elective requirement	
Additional Track Credits		**18**		
Total Bachelor Degree Credit Hours**		**120-134**		

**Credits hours for the bachelor degree can vary based on the courses taken at ITCC and the minor selected at NKU. The lowest total credit hours for this track is based on the student completing an A.S. in Cyber Security/Information Assurance at ITCC and an Information Systems Minor at NKU.

Category IV: Requirements for the Cybersecurity Track				
NKU Course	**Course**	**Credits**	**ITCC Course**	**Taken at ITCC**
CIT 430	Computer Forensics	3		
CIT 484	Network Security	3		
CIT 485	Advanced Cybersecurity	3		
Select one 300/400 level CIT course or BIS 382 or CSC 482 or CSC 483	Track Elective	3	C- or better in NETI 105 and (CSIA 210 or NETI 115), A.S., and CCNA R&S certification equates to CIT 447 and satisfies elective requirement	
Select two 300/400 level CIT courses or BIS 382 or CSC 482 or CSC 483	Track Electives	6		
Additional Track Credits		**18**		
Total Bachelor Degree Credit Hours**		**120-134**		

**Credits hours for the bachelor degree can vary based on the courses taken at ITCC and the minor selected at NKU. The lowest total credit hours for this track is based on the student completing an A.S. in Cyber Security/Information Assurance at ITCC and an Information Systems Minor at NKU.

Category IV: Requirements for the Non-Specialist Track				
NKU Course	**Course**	**Credits**	**ITCC Course**	**Taken at ITCC**
CSC 260	Object-Oriented Programming I	3		
CSC 360 or CSC 483	Object-Oriented Programming II or Scripting II	3		
CIT 436 or CIT 438 or CIT 472	Web Server Administration or Cloud Computing or Database Administration	3		
CIT 470 or CIT 485	Advanced Network and System Administration or Advanced Cybersecurity	3		
Select one 300/400 level CIT course	CIT Elective	3	C- or better in NETI 105 and (CSIA 210 or NETI 115), A.S., and CCNA R&S certification equates to	

				CIT 447 and satisfies elective requirement	
Select one 300/400 level CIT course	CIT Elective		3		
Additional Track Credits			**18**		
Total Bachelor Degree Credit Hours**			**120-134**		

**Credits hours for the bachelor degree can vary based on the courses taken at ITCC and the minor selected at NKU. The lowest total credit hours for this track is based on the student completing an A.S. in Cyber Security/Information Assurance at ITCC and an Information Systems Minor at NKU.

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