Associate of Science to Bachelor of Science in Computer Science
(with a Minor in Computer Information Technology)

Completion of the following curriculum will satisfy the requirements for the **Associate of Science** degree at Gateway Community and Technical College and leads to the **Bachelor of Science in Computer Science** degree at Northern Kentucky University.

Degree requirement for GCTC:
1) completion of minimum 60 credit hours, 2) minimum cumulative GPA 2.0, 3) minimum of 15 credit hours earned at the institution awarding the degree, 4) cultural studies course, and 5) demonstration of computer/digital literacy.

Degree requirements for a Bachelor of Science in Computer Science:
Student must meet pre-requisites for each course, must earn a minimum average GPA 2.0 across all major coursework AND earn at least a C- in each course counted toward the major.

GCTC AS TO NKU BS IN COMPUTER SCIENCE
(WITH MINOR IN COMPUTER INFORMATION TECHNOLOGY) CHECKLIST

Gateway Community and Technical College

Category I: General Education Core Requirements				
GCTC Course	**Course or Category**	**Credits**	**NKU Course**	✓
ENG 101	Writing I (WC)	3	ENG 101	
ENG 102	Writing II (WC)	3	ENG 102	
COM 181	Basic Public Speaking (OC)	3	CMST 101	
TBS XXX	Arts & Humanities (AH) – Heritage	3	TBD XXX	
TBS XXX	Arts & Humanities (AH) – Humanities	3	TBD XXX	
TBS XXX	Social & Behavioral Sciences Course (SB)	3	TBD XXX	
TBS XXX	Social & Behavioral Sciences Course (SB)	3	TBD XXX	
TBS XXX	Social & Behavioral Sciences Course (SB) Suggested: BIO 120 Human Ecology	3	TBD XXX	
TBS XXX	Natural Science Course with Lab (SL) Suggested: GLY 101/111 Physical Geology/Lab	4	TBD XXX	
MAT 126	Technical Algebra and Trigonometry (QR)	3	MAT 100T	
TBS XXX	Quantitative Reasoning Course (QR)	3	TBD XXX	
Subtotal General Education Courses		**34**		

TBS XXX means to be selected by GCTC student.
TBD XXX means to be determined by NKU based on course selected.

Category II: AS Requirements				
GCTC Course	**Course or Category**	**Credits**	**NKU Course**	✓
TBS XXX	Quantitative Reasoning (QR) or Natural Science (NS)	3	TBD XXX	
TBS XXX	Quantitative Reasoning (QR) or Natural Science (NS)	3	TBD XXX	
TBS XXX	General Education Elective	3	TBD XXX	
TBS XXX	General Education Elective	3	TBD XXX	
Subtotal AA Requirement Courses		**12**		

Category III: Electives				
GCTC Course	**Course or Category**	**Credits**	**NKU Course**	✓
CIT 105 OR OST 105	Introduction to Computing OR Introduction to Information Systems (Fulfills Digital Literacy Requirement)*	3	BIS 101	
CIT 144 CIT 145 CIT 147 CIT 148 CIT 149	Choose One: Python I Perl I Programming I: Language Visual Basic I Java I	3	INF 120	
CIT 170	Database Design Fundamentals	3	INF 282	
CIT 155	Web Page Development	3	INF 286	

CIT 238	Android Programming I	3	CSC 260	
	Subtotal Elective Courses	**15**		
	Total Associate Degree Hours	**61**		

* If Fulfilling Digital Literacy Requirement in another way besides CIT 105 or OST 105, may need additional hours; CIT 105 or OST 105 is also a pre-req for CIT 170 (unless you get consent from instructor).

Northern Kentucky University

NKU Course	Course	Credits	GCTC Course	Taken at GCTC
Category IV: Major Requirements for the BS in Computer Science				
INF 120	Elementary Programming	3	CIT 144 OR CIT 145 OR CIT 147 OR CIT 148 OR CIT 149 OR	X
INF 282	Introduction to Databases	3	CIT 170	X
INF 284 OR CIT 247	Introduction to Networks and Data… OR Networking Fundamentals Recommend: CIT 247 for CIT Minor Req.	3		
INF 286	Introduction to Web Development	3	CIT 155	X
CSC 260	Object-Oriented Programming I	3	CIT 238	X
CSC 360	Object-Oriented Programming II	3		
CSC 362	Computer Systems	3		
CSC 364	Data Structures and Algorithms	3		
CSC 402	Advanced Programming Methods	3		
CSC 439	Software Testing and Maintenance	3		
CSC 440	Software Engineering	3		
CSC 460	Operating Systems	3		
CSC 485	Theory of Computation	3		
CSC 491	Comprehensive Examination	0		
TBS XXX	Select one 300/400-level CSC course not included above. (see catalog)	3		
TBS XXX TBS XXX	Select two CSC 400-level CSC courses not included above; only one of CSC 415 or CSC 416 may count towards this requirements. MAT 360 may count for either a 300-level or 400-level course.	6		
MAT 128	Calculus A	3		
MAT 227	Calculus B	3		
MAT 228	Calculus C	3		
STA 250	Probability and Statistics I	3		
MAT 385	Discrete mathematics	3		
Subtotal Major Credit Hours Taken at NKU		**51**		

Graduation from NKU requires that a student successfully complete a minimum of 120 hours in college-level coursework, 45 of which must be earned at the 300/400 level. Unless otherwise noted, students are required to have a minor and should work closely with their NKU academic advisor to ensure all major/minor and graduation requirements are fulfilled.

Category V: Minor Requirements for the Minor in Computer Information Technology				
NKU Course	**Course**	**Credits**	**GCTC Course**	**Taken during AA or Major Requirements?**
INF 120 OR CSC 260	Elementary Programming OR Object-Oriented Programming I	3	CIT 144 OR CIT 145 OR CIT 147 OR CIT 148 OR CIT 149 OR CIT 238	X
CIT 130	Information Technology Fundamen...	3		
CIT 247	Networking Fundamentals**	3		(X)
CIT 271 OR CIT 371	Windows Administration OR Unix Systems	3		
TBS XXX	Select One CIT course not listed above. (See catalog)	3		
TBS XXX TBS XXX	Select 6 credit hours of INF, CIT, or CSC courses not included above.	6		X***
Subtotal Major Credit Hours Taken at NKU		**9**		
Total Baccalaureate Degree Credit Hours:		**121**		

**CIT 247 may be taken during major course requirements if student chooses. If student chooses INF 284 instead, it will still need to be taken for the minor.
***Choose most any two INF, CIT, or CSC courses from the major that are not listed above to count toward these six hours in the minor.

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