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## TWO DEGREES, ONE PATH

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### **TRANSFER PATHWAY GUIDE 2023-2024**

#### Associate in Science to Bachelor of Science in Computer Science

##### ***Overview***

Completion of the following curriculum will satisfy the requirements for the Associate in Science (AS) degree at Gateway Community and Technical College (GCTC) and leads to the Bachelor of Science (BS) in Computer Science degree at Northern Kentucky University (NKU).

##### ***Applying to the Gateway2NKU Program***

Students can apply to participate in the pathway program by completing the online application on the NKU transfer webpage. Students must be enrolled in at least six credit hours at Gateway CTC, enrolled in an associate degree program, plan to transfer to NKU, and maintain a minimum 2.0 cumulative GPA at Gateway CTC.

##### ***Degree Requirements 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 competence course, 5) demonstration of digital literacy, 6) college success requirement.

##### ***Admission Requirements to NKU***

Students completing an associate degree with a cumulative GPA of 2.0 or higher will be accepted into NKU.

##### ***Degree Requirements for NKU***

To earn a bachelor's degree at NKU, students must complete a minimum of 120 credit hours with at least 45 credit hours numbered 300 and above. In addition, at least 25% of the credit hours required for the degree and the last 30 credit hours must be completed at NKU. Students must have an overall GPA of 2.0 and meet all prerequisites for courses and requirements for the major including a grade of C- or better in each course counted toward the major. Students must complete a focus or minor as indicated on the pathway.

##### ***General Transfer Information***

Students must complete the online application to NKU. There is no application fee for students who are transferring from GCTC.

**KCTCS Scholars Award:** Students who are KY residents transferring directly from a KCTCS institution with at least 36 hours from that institution and minimum GPA of 3.0, were never enrolled as a degree-seeking student at NKU, and will be enrolled in at least 12 credit hours both fall and spring semester are eligible for a limited number of \$2,500 annual scholarships (\$1,250 per fall and spring). Students must gain admission to NKU by June 15 for fall and November 1 for spring to be eligible for a possible scholarship. Online accelerated programs are not eligible for the KCTCS Scholars Award.

**Credits for Certifications:** Students with a current certification at the time of registering for classes will receive credit for equivalent NKU courses based on the following course mappings.

**Cisco**

NKU students who have taken and passed an examination from Cisco, and hold a current certification (at the time of registering for classes) will receive credit for an equivalent NKU course. The chart below shows the semester credit hours and the equivalent NKU course.

EXAMINATION	EQUIVALENT NKU COURSE	TOTAL SEMESTER HOURS
CCNA Exam (200-301)*	CIT 247 Networking Fundamentals CIT 447 Network Design/Troubleshooting	6
CCNP Security Core Exam (350-701)*	CYS 484 Network Security	3
Certified Entry Networking	CIT 247 Networking Fundamentals	3

\*Credit given for exams taken after Summer 2020

**Computing Technology Industry Association (CompTIA)**

NKU students who have taken and passed an examination from CompTIA, and hold a current certification (at the time of registering for classes) will receive credit for an equivalent NKU course. The chart below shows the semester credit hours and the equivalent NKU course.

EXAMINATION	EQUIVALENT NKU COURSE	TOTAL SEMESTER HOURS
Security+ (versions SY0-501 and later)	CYS 285 Cybersecurity Fundamentals	3
Network+	INF 284 Introduction to Computer Networks	3
Linux+	CIT 371 Unix Systems	3

Note: Students with Security+ exams SY0-401 and before will be required to take CYS 285.

## GCTC AS TO NKU BS IN COMPUTER SCIENCE CHECKLIST

### Gateway Community and Technical College

#### Category 1: GCTC General Education Core Requirements

GCTC Course	Course or Category	Credits	NKU Course	Completed
ENG 101	Writing I (WC)	3	ENG 101	
ENG 102	Writing II (WC)	3	ENG 102	
TBS XXX	Oral Communication (OC)	3	TBD XXX	
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	
INF 120U	Elementary Programming (NS)	3	INF 120	
TBS XXX	Natural Science Course with Lab (SL)	4	TBD XXX	
MAT 171	Precalculus (QR)	5	MAT 103 + MAT 119	
MAT 175	Calculus I (QR)	5	MAT 129	
	<b>Subtotal General Education Core Courses</b>	<b>38</b>		

TBS XXX means to be selected by GCTC student.

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

For Social and Behavioral Sciences courses, two disciplines must be represented and different from those in the Arts and Humanities category.

#### Category 2: GCTC AS Requirements

GCTC Course	Course or Category	Credits	NKU Course	Completed
MAT 185	Calculus II (QR)	5	MAT 229	
	<b>Subtotal AS Requirement Courses</b>	<b>5</b>		

#### Category 3: GCTC Electives

GCTC Course	Course or Category	Credits	NKU Course	Completed
FYE 105	Achieving Academic Success	3	UNV 100T	
CIT 105	Introduction to Computers (Fulfills Digital Literacy Requirement)	3	BIS 101	
CIT 120	Computational Thinking	3	INF 100T	
CIT 149	Java I	3	CSC 260	
CIT 155	Web Page Development	3	INF 286	
CIT 160	Introduction to Networking Concepts	4	INF 284	
	<b>Subtotal Elective Courses</b>	<b>19</b>		
	<b>Total Associate Degree Hours</b>	<b>62</b>		

Degree Requirement: One course must be selected from the KCTCS identified Cultural Competence course list in the KCTCS catalog.

### Northern Kentucky University

#### Category 4: NKU Major Requirements for BS in Computer Science

NKU Course	Course	Credits	GCTC Course	Taken at GCTC
INF 100	Orientation to College of Informatics	1	Waived for students with AS degree	
INF 120	Elementary Programming	3	INF 120U	x
INF 284 or CIT 247	Introduction to Networks and Data... OR Networking Fundamentals Recommend: CIT 247 for CIT Minor Req.	3	CIT 160, CIT 161, CIT 167, CIT 209, CIT 214, CIT 219	x
INF 286	Introduction to Web Development	3	CIT 155	x
CSC 260	Object-Oriented Programming I	3	CIT 149	x
CSC 350	Database Programming	3		
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		
CSC XXX	Select one 300/400-level CSC course not included above. CIT 381 may count toward this elective. (see catalog)	3		
TBS XXX TBS XXX	Select two 400-level CSC courses not included above. MAT 360 may count for either a 300-level or 400-level course.	6		
MAT 128	Calculus A	3	MAT 175 + MAT 185	x
MAT 227	Calculus B	3	MAT 175 + MAT 185	x
MAT 228	Calculus C	3	MAT 175 + MAT 185	x
STA 250	Probability and Statistics I	3		
MAT 385	Discrete mathematics	3		
	<b>Subtotal Major Credit Hours at NKU</b>	<b>42</b>		
	<b>Subtotal Major Credit Hours at GCTC</b>	<b>21</b>		
	<b>Total Major Credit Hours</b>	<b>63</b>		

**Category 5: Additional Requirements at NKU**

<b>NKU Course</b>	<b>Course</b>	<b>Credits</b>	<b>GCTC Course</b>	<b>Taken at GCTC</b>
	<b>Subtotal Minor Credit Hours Taken at NKU</b>	<b>3-24</b>		
	<b>Subtotal Elective (300/400 level) Hours</b>	<b>0-13</b>		
	<b>Minimum Baccalaureate Degree Credit Hours</b>	<b>120+</b>		

Note: In order to complete a BS degree in Computer Science at NKU, a student must complete a minor. A mathematics, computer information technology, or information systems minor are popular choices for students pursuing Computer Science, as some of the requirements are fulfilled through courses taken in the major.

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