



TWO DEGREES, ONE PATH

TRANSFER PATHWAY GUIDE 2019-2020

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 degree at Gateway Community and Technical College and leads to the Bachelor of Science in Computer Science degree at Northern Kentucky University.

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 studies 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.

GCTC AS TO NKU BS IN COMPUTER SCIENCE CHECKLIST

Gateway Community and Technical College

Category 1: GCTC General Education Core Requirements (38 hours)

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	
TBS XXX	Social & Behavioral Sciences Course (SB)	3	TBD XXX	
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	
	Subtotal General Education Core Courses	38		

TBS XXX means to be selected by GCTC student.

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

One of these courses must be selected from the KCTCS identified Cultural Studies course list, indicate by placing (CS) next to the course name in Category 1 or 2 table.

Category 2: GCTCS AS Requirements (8 hours)

GCTC Course	Course or Category	Credits	NKU Course	Completed
MAT 185	Calculus II (QR)	5	MAT 227	
TBS XXX	Natural Science (NS)	3	TBD XXX	
	Subtotal AS Requirement Courses	8		

Category 3: GCTCS Electives (18 hours)

GCTC Course	Course or Category	Credits	NKU Course	Completed
FYE 105	Achieving Academic Success	3	UNV 100T	
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	

GTC Course	Course or Category	Credits	NKU Course	Completed
	Subtotal Elective Courses	18		
	TOTAL Associate Degree Hours	64		

Northern Kentucky University

Category 4: Major Requirements for BS in Computer Science

NKU Course	Course	Credits	GTC Course	Taken at GTC
INF 100	Orientation to College of Informatics	1	Waived for students with AS degree	
INF 120	Elementary Programming	3	CIT 144 OR CIT 145 OR CIT 147 OR CIT 148 OR CIT 149 OR	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 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. (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 175	x
MAT 227	Calculus B	3	MAT 185	x
MAT 228	Calculus C	3		
STA 250	Probability and Statistics I	3		
MAT 385	Discrete mathematics	3		
	Subtotal Major Credit Hours at NKU	49		
	Subtotal Major Credit Hours at GTC	15		
	Total Major Credit Hours	64		

Category 5: Additional Requirements at NKU

NKU Course	Course	Credits	GCTC Course	Taken at GCTC
	Subtotal Minor Credit Hours Taken at NKU	3-21		
	Subtotal Elective (300/400 level) Hours	0-6		
	Minimum Baccalaureate Degree Credit Hours	122		

Note: In order to complete a B.S. degree in Computer Science at NKU, a student must complete a minor. A mathematics, computer information technology, or information systems minor would be a good choice. Category 6 tables below show the courses needed for the suggested minors. Students should discuss options for minors with an NKU advisor after transferring to NKU.

Category 6: Additional Requirements for Minor in Mathematics

NKU Course	Course	Credits	GCTC Course	Taken at GCTC
MAT 119	Precalculus	3	MAT 171	x
MAT 129	Calculus A	3	MAT 175	x
MAT 227	Calculus B	3	MAT 185	x
MAT 228	Calculus C	3		
MAT 234	Linear Algebra	3		
STA 250	Probabilities and Statistics	3		
MAT 385	Discrete Math	3		
	Additional Credit Hours for Mathematics Minor (MAT 228, STA 250, and MAT 385 are required for the B.S. degree in Computer Science, so they are not counted as additional credit hours)	3		

Category 6: Additional Requirements for Minor in Computer Information Technology

NKU Course	Course	Credits	GCTC Course	Taken at GCTC
CIT 130	Information Technology Fundamentals	3		
CIT 271 or CIT 371	Windows Administration or Unix Systems	3		
INF 110 or INF 120 or CSC 260	Elementary Programming	3	One of CIT 144 CIT 145 CIT 147 CIT 148 CIT 149	x
INF 284	Introduction to Computer Networks	3		
CIT XXX	Select one 300/400 level CIT course not listed above	3		
	Select 6 credit hours of INF, CIT, or CSC courses not included above	6		
	Additional Credit Hours for Computer Information Technology Minor (INF 120,	9		

NKU Course	Course	Credits	GCTC Course	Taken at GCTC
	INF 284 and six credits of CSC courses are required for the B.S. degree in Computer Science, so they are not counted as additional credit hours)			

Category 6: Additional Requirements for Minor in Information Systems

NKU Course	Course	Credits	GCTC Course	Taken at GCTC
INF 120	Elementary Programming	3	One of CIT 144 CIT 145 CIT 147 CIT 148 CIT 149	x
INF 282	Introduction to Databases	3	CIT 170	x
INF 286	Introduction to Web Development	3	CIT 155	x
BIS 275	Introduction to Business Analysis	3		
BIS 300	Management Information Systems	3		
BIS 310	Systems Analysis and Design	3		
BIS 330	IT Project Management	3		
Select one: BIS 305, BIS 357, BIS 380, BIS 382, BIS 384, BIS 402, BIS 420, BIS 430, BIS 435, BIS 440	BIS Elective	3		
	Additional Credit Hours for Information Systems Minor	15		

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