# TRANSFER PATHWAY GUIDE 2022-2023

Associate of Science in Computer Science at Sinclair College to a Bachelor of Science in Computer Science at Northern Kentucky University

#### Overview

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

#### Degree Requirements for Sinclair College

To earn a degree at Sinclair College, a student must complete a minimum of 60 credit hours, attain a minimum cumulative GPA of 2.0, and earn a minimum of 20 credit hours at Sinclair College.

#### **Admission Requirements for NKU**

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

#### **Tuition and Scholarships**

For information on tuition and scholarships, please visit <a href="https://nku.edu/admissions/adult/online.html">https://nku.edu/admissions/adult/online.html</a>

#### **NKU Contacts**

Students can contact the College of Informatics Advising Center by email or phone. Information can be found at https://www.nku.edu/academics/informatics/advising/ourpeople.html.

#### 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.

# SINCLAIR COLLEGE AS IN COMPUTER SCIENCE TO NKU BS IN COMPUTER SCIENCE CHECKLIST

## **Sinclair College**

Category 1: Sinclair Requirements for the AS in Computer Science

Sinclair Course	Course or Category	Credits	NKU Course	Completed
CIS 1111	Introduction to Problem Solving &	3	INF 110	
	Computer Programming			
CIS 2212	Java Software Development I	3	CSC 260	
CIS 2217	Java Software Development II	4	CSC 360	
CIS 2266 or	Python for Data Analytics or	3	INF 120	
CSI 2207	Data Structures & Algorithms			
COM 2211	Effective Public Speaking	3	CMST 101	
ENG 1101	English Composition I	3	ENG 101	
MAT 2270	Calculus & Analytic Geometry I	5	MAT 129	
MAT 2280	Calculus & Analytic Geometry II	5	MAT 229	
MAT 2600	Applied Statistics	3	STA 250	
TBS XXX	Ohio Transfer 36: Mathematics Electives	5		
TBS XXX	Ohio Transfer 36: Arts & Humanities	6		
	Electives			
TBS XXX	Ohio Transfer 36: Natural & Physical	9		
	Sciences Electives			
TBS XXX	Ohio Transfer 36: Social & Behavioral	6		
	Sciences Elective			
TBS XXX	Multicultural Elective	3		
	Total Associate Degree Hours	61	-	

TBS XXX means to be selected by Sinclair College student.

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

## **Northern Kentucky University**

Category 2: NKU Major Requirements for the BS in Computer Science

NKU Course	Course	Credits	Sinclair Course	Taken at Sinclair
INF 100	Orientation to College of Informatics	1	Waived for students with AS degree	х
INF 120	Elementary Programming	3	CIS 2266 or CIS 2207	х
INF 284 or CIT 247	Introduction to Computer Networks OR Networking Fundamentals	3	CIS 1130 or CIS 2416	

NKU Course	Course	Credits	Sinclair Course	Taken at Sinclair
	Recommend: CIT 247 for CIT Minor Req.			
INF 286	Introduction to Web Development	3	CIS 1350	
CSC 260	Object-Oriented Programming I	3	CIS 2212	х
CSC 350	Database Programming	3		
CSC 360	Object-Oriented Programming II	3	CIS 2217	х
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; only one of CSC 415 or CSC 416 may count towards this requirement.  MAT 360 may count for either a 300-level or 400-level course.	6		
MAT 128 and	Calculus A and		MAT 2270	
MAT 227 and	Calculus B and	9	and	х
MAT 228	Calculus C		MAT 2280	
STA 250	Probability and Statistics I	3	MAT 2600	х
MAT 385	Discrete mathematics	3		
	Total NKU Major Credit Hours	64		
	Less Major Credit Hours from Sinclair	22		
	Subtotal Major Credit Hours at NKU	42		

**Category 3: Additional Requirements at NKU** 

NKU Course	Course	Credits	Sinclair Course	Taken at Sinclair
	Subtotal Minor Credit Hours Taken at NKU	6-24		
	Subtotal Elective (300/400 level) Hours	0-11		
	<b>Total Baccalaureate Degree Credit Hours</b>	120-127		

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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