

# TRANSFER PATHWAY GUIDE

## 2021-2022

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 <https://nku.edu/admissions/adult/online.html>

### ***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. 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 & Computer Programming       | 3         | INF 100T   |           |
| CIS 2212                | Java Software Development I                                  | 3         | CSC 260    |           |
| CIS 2217                | Java Software Development II                                 | 4         | CSC 360    |           |
| CIS 2266 or<br>CSI 2207 | Python for Data Analytics or<br>Data Structures & Algorithms | 3         | INF 120    |           |
| 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<br>Electives             | 6         |            |           |
| TBS XXX                 | Ohio Transfer 36: Natural & Physical<br>Sciences Electives   | 9         |            |           |
| TBS XXX                 | Ohio Transfer 36: Social & Behavioral<br>Sciences Elective   | 6         |            |           |
| TBS XXX                 | Multicultural Elective                                       | 3         |            |           |
|                         | <b>Total Associate Degree Hours</b>                          | <b>61</b> |            |           |

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 | x                 |
| INF 120               | Elementary Programming  | 3       | CIS 2266 or<br>CIS 2207            | x                 |
| INF 284 or<br>CIT 247 | Introduction to Computer Networks OR<br>Networking Fundamentals | 3       | CIS 1130 or<br>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                    | x                 |
| CSC 350                               | Database Programming  | 3         |                             |                   |
| CSC 360                               | Object-Oriented Programming II  | 3         | CIS 2217                    | x                 |
| 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<br>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<br>MAT 227 and<br>MAT 228 | Calculus A and<br>Calculus B and<br>Calculus C  | 9         | MAT 2270<br>and<br>MAT 2280 | x                 |
| STA 250                               | Probability and Statistics I  | 3         | MAT 2600                    | x                 |
| MAT 385                               | Discrete mathematics  | 3         |                             |                   |
|                                       | <b>Total NKU Major Credit Hours</b>   | <b>64</b> |                             |                   |
|                                       | <b>Less Major Credit Hours from Sinclair</b>  | <b>22</b> |                             |                   |
|                                       | <b>Subtotal Major Credit Hours at NKU</b>   | <b>42</b> |                             |                   |

### Category 3: Additional Requirements at NKU

| NKU Course | Course  | Credits        | Sinclair Course | Taken at Sinclair |
|------------|---|----------------|-----------------|-------------------|
|            | <b>Subtotal Minor Credit Hours Taken at NKU</b> | <b>12-24</b>   |                 |                   |
|            | <b>Subtotal Elective (300/400 level) Hours</b>  | <b>0-5</b>     |                 |                   |
|            | <b>Total Baccalaureate Degree Credit Hours</b>  | <b>120-127</b> |                 |                   |

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