



TWO DEGREES, ONE PATH

TRANSFER PATHWAY GUIDE 2023-2024

Associate of Applied Science in Computer and Information Technologies – Programming Track to Bachelor of Science in Computer Information Technology

Overview

Completion of the following curriculum will satisfy the requirements for the Associate of Applied Science (AAS) in Computer and Information Technologies – Programming Track degree at a Kentucky Community and Technical College System (KCTCS) institution and leads to the Bachelor of Science (BS) in Computer Information Technology degree at Northern Kentucky University (NKU).

Applying to the KCTCS2NKU 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 their KCTCS institution, enrolled in an associate degree program, plan to transfer to NKU, and maintain a minimum 2.0 cumulative GPA at their KCTCS institution.

Degree Requirements for KCTCS

1) Minimum cumulative GPA 2.0, 2) minimum of 25 percent of credit hours required for the degree earned at the institution awarding the degree, and 3) demonstration of digital literacy.

Admission Requirements to NKU

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

The Computer Information Technology, B.S. – Cloud and Systems Administration Track is offered both face-to-face and online.

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 earning a C- or

better in all courses that count toward the major or minor. 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 a KCTCS institution.

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.

**KCTCS AAS IN COMPUTER & INFORMATION TECHNOLOGIES – PROGRAMMING TRACK TO NKU
BS IN COMPUTER INFORMATION TECHNOLOGY TRACK CHECKLIST**

Kentucky Community and Technical College System

Category 1: KCTCS General Education Requirements

| KCTCS Course | Course or Category | Credits | NKU Course | Completed |
|--------------------------|--|----------------|---|------------------|
| ENG 101 | Writing I (WC) | 3 | ENG 101 | |
| MAT 150 or MAT 161 | College Algebra (QR) or Statistics and Algebra (QR) | 3-5 | (MAT 102 or MAT 103) + MAT 100T or MAT 101 + MAT 102 | |
| TBS XXX | Social & Behavioral Sciences (SB) | 3 | TBD XXX | |
| TBS XXX | Arts & Humanities (AH) Heritage or Humanities | 3 | TBD XXX | |
| TBS XXX | Natural Science (NS or SL) | 3 | TBD XXX | |
| | Subtotal General Education Courses | 15-17 | | |

TBS XXX means to be selected by KCTCS student.

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

A grade of A or B in MAT 150 equates to MAT 103 + MAT 100T. Grade of C or D in MAT 150 equates to MAT 102 + MAT 100T.

Students who do not complete a science course with a lab will be required to take an additional science with a lab at NKU.

Category 2: KCTCS AAS Requirements Computer and Information Technologies – Programming Track

| KCTCS Course | Course or Category | Credits | NKU Course | Completed |
|--|--|----------------|-------------------|------------------|
| CIT 105 | Introduction to Computers | 3 | BIS 101 | |
| CIT 111 | Computer Hardware and Software | 4 | CIT 130 | |
| CIT 120 | Computational Thinking | 3 | INF 100T | |
| CIT 144 | Python I (Level I Programming Language) | 3 | INF 120 | |
| CIT 149 | Java I (Level I Programming Language) | 3 | CSC 260 | |
| CIT 249 | Java II (Level II Programming Language) | 3 | CSC 200T | |
| CIT 141 or CIT 142 or CIT 143 or CIT 145 or CIT 146 or CIT 147 or | Level I Programming Language Course: PHP I or C++ I or C# I or Perl I or Swift I or Programming I: Language or | 3 | INF 120 | |

| KCTCS Course | Course or Category | Credits | NKU Course | Completed |
|--|--|--------------|--|-----------|
| CIT 148 or CS 115 | Visual Basic I or Introduction to Computer Programming | | | |
| CIT 237 or CIT 238 or CIT 241 or CIT 242 or CIT 243 or CIT 244 or CIT 247 or CIT 248 or CS 215 | Level II Programming Language Course: iOS Programming or Android Programming or PHP II or C++ II or C# II or Python II or Programming II: Language or Visual Basic II or Intro Program Design, Instruction, and Problem Solving | 3 | CSC 200T CSC 260 ASE 230 CSC 200T INF 120 INF 200T INF 120 INF 110 CSC 260 | |
| CIT 150 or CIT 155 | Internet Technologies (CIT Technical) or Web Page Development (CIT Technical) | 3 | INF 286 | |
| CIT 160 or CIT 161 | Intro to Networking Concepts (Level I Networking) or Introduction to Networks (Level I Networking) | 4 | INF 284 | |
| CIT 170 | Database Design Fundamentals | 3 | INF 282 | |
| CIT 180 + CIT 182 | Security Fundamentals and Perimeter Defense (CIT Technical) | 3 3 | CYS 285 + CIT 200T | |
| CIT 253 | Data Driven Web Pages: Topic | 3 | ASE 220 | |
| CIT 290 or CIT 291 or CIT 293 or CIT 297 | Internship or CIT Capstone or CIT Employability Studies or CIT Professional Preparation | 1-3 | BIS 310 BIS 310 INF 201 | |
| | Total Associate Degree Hours | 60-64 | | |

Northern Kentucky University

Category 3: NKU Additional General Education Courses

| NKU Course | Course or Category | Credits | KCTCS Course | Taken at KCTCS |
|------------|--|-----------|--------------|----------------|
| ENG 102 | Advanced College Writing | 3 | ENG 102 | |
| CMST 101 | Public Speaking | 3 | COM 181 | |
| TBS XXX | Science with Lab | 4 | | |
| TBS XXX | Self & Society | 6 | | |
| TBS XXX | Culture & Creativity | 3 | | |
| TBS XXX | Global Viewpoints | 3 | | |
| | Subtotal General Education Credit Hours | 22 | | |

Category 4: NKU Major Requirements for BS in Computer Information Technology

| NKU Course | Course | Credits | KCTCS Course | Taken at KCTCS |
|--------------------|--|--------------|--|----------------|
| INF 100 | Orientation to College of Informatics | 1 | Waived for students with AAS degree | |
| INF 120 | Elementary Programming | 3 | CIT 141 or CIT 142 or CIT 143 or CIT 144 or CIT 145 or CIT 146 or CIT 147 or CIT 148 or CS 115 | x |
| INF 282 | Introduction to Databases | 3 | CIT 170 | x |
| INF 284 | Introduction to Computer Networks | 3 | CIT 160 or CIT 161 | x |
| INF 286 | Introduction to Web Development | 3 | CIT 150 or CIT 155 | x |
| CIT 130 | Information Technology Fundamentals | 3 | CIT 111 | x |
| CIT 171 | Introduction to Linux | 1 | CIT 217 | |
| CIT 271 | Windows Administration | 3 | CIT 215 or CIT 216 | |
| CIT 371 | Unix Systems | 3 | | |
| CIT 383 | Scripting I | 3 | | |
| CYS 285 | Cybersecurity Fundamentals | 3 | CIT 180 + CIT 182 = CYS 285 + CIT 100T | x |
| STA 205 or STA 250 | Statistical Methods or Probability and Statistics | 3 | STA 220 or (MAT 151 or STA 151 or MAT 161) + STA 251 | |
| PHI 310 | Information Ethics | 3 | | |
| ENG 347 | Technical Writing | 3 | ENG 204 | |
| | Select one track from following tracks: Network and Administration Track Cloud and System Administration Track Cybersecurity Track (Required courses are listed in Categories 6-8 tables below.) | 18-21 | | |
| | Subtotal Major Credit Hours at NKU | 37-40 | | |
| | Subtotal Major Credit Hours KCTCS | 18 | | |
| | Total Major Credit Hours | 55 | | |

Category 5: Additional Requirements at NKU

| NKU Course | Course | Credits | KCTCS Course | Taken at KCTCS |
|------------|--|------------|--------------|----------------|
| | Electives | 0-8 | | |
| | Subtotal Focus/Minor Credit Hours | 9-24 | | |
| | Minimum Total Baccalaureate Degree Credit Hours | 128 | | |

Note: Any NKU focus or minor may be selected. Information Systems and Computer Science are common choices and require only 9-15 additional credit hours beyond the major.

Note: Depending on track, focus/minor, and courses chosen, students may need additional electives to meet the 45-hour upper-level graduation requirement. Work with your NKU advisor to make sure you meet all graduation requirements.

Category 6: NKU Major Requirements for the Network and System Administration Track

| NKU Course | Course | Credits | KCTCS Course | Taken at KCTCS |
|------------|---|-----------|--------------|----------------|
| CIT 247 | Networking Fundamentals | 3 | CIT 167 | |
| CIT 447 | Network Design/Troubleshooting | 3 | | |
| CIT 470 | Advanced Network and System Administration | 3 | | |
| CYS 484 | Network Security | 3 | | |
| CIT XXX | 300/400-level CIT Course (not listed above) | 3 | | |
| CIT XXX | 300/400-level CIT Course (not listed above) | 3 | | |
| | Additional Credit Hours for Track | 18 | | |

Category 7: NKU Major Requirements for the Cloud and System Administration Track

| NKU Course | Course | Credits | KCTCS Course | Taken at KCTCS |
|-----------------------|---|-----------|--------------|----------------|
| CIT 436 | Web Server Administration | 3 | | |
| CIT 438 | Cloud Computing | 3 | | |
| CIT 470 | Advanced Network and System Administration | 3 | | |
| CIT 472 | Database Administration | 3 | | |
| CIT XXX or CYS 439 | Add two electives from CIT 300/400 or CYS 439 | 6 | | |
| | Additional Credit Hours for Track | 18 | | |

Category 8: NKU Major Requirements for the Cybersecurity Track

| NKU Course | Course | Credits | KCTCS Course | Taken at KCTCS |
|-------------|---|-----------|--------------|----------------|
| CYS 330 | Introduction to Ethical Hacking | 3 | | |
| CYS 385 | Cybersecurity Analysis I | 3 | | |
| CYS 484 | Network Security | 3 | | |
| CYS 485 | Advanced Cybersecurity | 3 | | |
| CIT/CYS XXX | Two 300/400-level CIT or CYS courses (not included above); BIS 382, CSC 482, and CSC 483 may count toward these electives | 6 | | |
| TBS XXX | 300/400-level CIT or CYS Course (not listed above) | 3 | | |
| | Additional Credit Hours for Track | 21 | | |

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