[Computer and Information Technologies – Network Technologies Track](https://bluegrass.kctcs.edu/education-training/program-finder/computer-information-technology.aspx)

Microsoft, UNIX/Linux, Cisco Platform and Data Center Platforms Sequences

Associate in Applied Science

Coordinator: Robert Chirwa (robert.chirwa@kctcs.edu) 859-246-6298

Student Name: Student ID:

*Students must meet college readiness benchmarks as identified by the Council on Postsecondary Education or remedy the identified skill deficiencies.*

Semester 1

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Courses | Cr. Hrs. | Term | Grade | Prerequisites | Notes |
| CIT 105 Introduction to Computers  | 3 |  |  |  |  |
| CIT 111 Computer Hardware and Software | 4 |  |  | CIT 105 |  |
| CIT 160 Intro to Networking Concepts ORCIT 161 Introduction to Networks | 4 |  |  | Coreq: CIT 111 | CIT 161 is recommended |
| ENG 101 Writing I | 3 |  |  |  |  |
| MAT 150 or higher-level Quantitative Reasoning course recommended  | 3 |  |  |  | MAT 126 Technical Algebra and Trigonometry minimum  |
| Total Semester Credit Hours | 17 |  |  |  |  |

Semester 2

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| --- | --- | --- | --- | --- | --- |
| Courses | Cr. Hrs. | Term | Grade | Prerequisites | Notes |
| CIT 120 Computational Thinking | 3 |  |  | Coreq: MAT 126 or higher |  |
| CIT 170 Database Design Fundamentals | 3 |  |  | CIT 105 and (MAT 126 or MAT 085 or higher) |  |
| CIT 180 Security Fundamentals | 3 |  |  | CIT 160 or CIT 161 |  |
| Platform Course 1 | 3 – 4 |  |  |  | See list |
| Platform Course 2 | 3 – 4 |  |  |  | See list |
| Total Semester Credit Hours | 15 – 17 |  |  |  |  |

Semester 3

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Courses | Cr. Hrs. | Term | Grade | Prerequisites | Notes |
| CIT 219 Internet Protocols | 3 |  |  | CIT 160 or CIT 161 |  |
| Platform Course 3 | 3 – 4 |  |  |  |  |
| Platform Course 4 | 3 |  |  |  | See list |
| Heritage or Humanities course | 3 |  |  |  | See list |
| Approved Level I Programming Language | 3 |  |  |  |  |
| Total Semester Credit Hours | 15 – 16 |  |  |  |  |

Semester 4

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Courses | Cr. Hrs. | Term | Grade | Prerequisites | Notes |
| CIT 288 Network Security | 3 |  |  | CIT 180 and Level I Programming Language |  |
| CIT 293 CIT Employability Skills | 1 |  |  | Sophomore standing |  |
| Platform Course 5 | 3 |  |  |  | See list |
| Natural Sciences course | 3 |  |  |  |  |
| Social and Behavioral Sciences course | 3 |  |  |  |  |
| Total Semester Credit Hours | 13 |  |  |  |  |
| Total Degree Credit Hours | 60 – 63 |  |  |  |  |

**Graduation Requirements:**

* 25% or more of Total Degree Credit Hours must be earned at BCTC.
* Cumulative GPA must be 2.0 or higher.

Advisor Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Advisor Contact \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Additional Information**

CIT Network Technologies students must choose a primary platform and a secondary platform.

* The primary platform can be Microsoft, Cisco, or Linux.
* The secondary platform must be different from the primary platform and can be Microsoft, Cisco, Linux, or Data Center.

Students must select at least 15 hours of Platform courses. At least 8 hours must be from the primary platform and at least 4 credit hours must be from the secondary platform.

A grade of C or higher is required in each CIT, CS, IMD and INF course used to fulfill degree requirements.

**Microsoft Platform Courses**

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| --- | --- | --- | --- |
| Courses | Cr. Hr. | Prerequisites | Notes |
| CIT 213 MS Client Configuration | 3 | CIT 111 and CIT 160 or 161 | Fall only |
| CIT 214 Microsoft Server Configuration | 3 | CIT 111 and CIT 160 or 161 | Fall only (approved by CIT Coordinator) |
| CIT 215 Microsoft Server Administration | 3 | CIT 214 | Spring only (approved by CIT Coordinator) |
| CIT 216 MS Server Advanced Services | 3 | CIT 214 | Spring only (approved by CIT Coordinator) |
| CIT 261 MS Active Directory Services | 3 |  | Fall only |
| CIT 262 MS Server Infrastructure | 3 | CIT 111 and CIT 160 or 161 | Fall only |
| CIT 264 MS Server Management | 3 |  | Spring only |

**UNIX/Linux Platform Courses**

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| --- | --- | --- | --- |
| Courses | Cr. Hr. | Prerequisites | Notes |
| CIT 217 UNIX/Linux Administration | 3 | CIT 111 and CIT 160 or 161 | Spring only (1st 8 week course) |
| CIT 218 UNIX/Linux Net Infrast. | 3 | CIT 217 | Spring only (2nd 8 week course) |
| CIT 255 Web Server Administration | 3 | CIT 218 and 219 | Spring only (online) |

**Cisco Platform Courses**

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| --- | --- | --- | --- |
| Courses | Cr. Hr. | Prerequisites | Notes |
| CIT 167 Routing & Switching Ess. | 4 | CIT 161 | Spring/Summer only |
| CIT 212 Connecting Networks | 4 | CIT 209 |  |

**Data Center Platform Courses**

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| Courses | Cr. Hr. | Prerequisites | Notes |
| CIT 201 Information Storage Mgmt | 3 | CIT 167 and CIT 214 or 217 |  |
| CIT 203 Intro to Virtualization | 3 | CIT 167 and CIT 214 or 217 |  |
| CIT 204 VMWare Optimize and Scale | 3 | CIT 203 |  |
| CIT 205 Cloud Infrast and Services | 3 | CIT 201 and 203 |  |
| CIT 206 Amazon Web Services Pract | 3 | CIT 201 and 203 |  |
| CIT 207 Amazon Web Services Arch | 3 | CIT 201 and 203 |  |

**Approved Level I Programming Language Courses**

|  |  |  |  |
| --- | --- | --- | --- |
| Course | Cr. Hrs. | Prerequisites | Notes |
| INF 120 Elementary Programming | 3 |  |  |
| CIT 140 JavaScript I | 3 | CIT 120 and either CIT 150 or CIT 155 | Spring only |
| CIT 143 C# I | 3 | CIT 120 |  |
| CIT 144 Python I | 3 | CIT 120 |  |
| CIT 145 Perl I | 3 | CIT 120 |  |
| CIT 146 Swift I | 3 | CIT 120 |  |
| CIT 147 Programming I: Language | 3 | CIT 120 |  |
| CIT 148 Visual Basic I | 3 | CIT 120 | Fall only |
| CIT 171 SQL I | 3 | CIT 120 and CIT 170 | Fall only |
| CS 115 Introduction to Computer Programming | 3 |  |  |

**Embedded Credentials**

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| --- | --- | --- | --- |
| Credential | Title | Requirements | Total Cr. Hours |
| Certificate | A+ Prep | CIT 111 | 4 |
| Certificate | CIT Fundamentals | CIT 105, CIT 111, CIT 120, CIT 160 or CIT 161, CIT 170, CIT 180, Approved Level I Programming Language | 23 |
| Certificate | Computer Tech Basic | CIT 105, CIT 111, CIT 160 or CIT 161 | 11 |
| Certificate | Computer Technician | CIT 105, CIT 111, CIT 160 or CIT 161, CIT 180  | 14 |
| Certificate | Informatics Programming | CIT 120, CIT 170, CIT 149, CIT 249 | 12 |
| Certificate | Security+ Prep | CIT 180 | 3 |

**Certificate Requirements:**

* 25% or more of Total Certificate Credit Hours must be earned at BCTC.
* Grade of C or higher in each course required for certificate.

*Reviewed by: Robert Chirwa Effective Term: Fall 2021*

 *Review Date: 03-10-2021*