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

Amazon Web Services Sequence and Data Center Technologies Sequences

Associate in Applied Science

Coordinator: Robert Chirwa ([robert.chirwa@kctcs.edu](mailto: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 (All courses listed should be taken during the first semester)

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| --- | --- | --- | --- | --- | --- |
| Courses | Cr. Hrs. | Term | Grade | Prerequisites | Notes |
| CIT 105 Introduction to Computers | 3 |  |  |  |  |
| Social and Behavioral Sciences course | 3 |  |  |  |  |
| ENG 101 Writing I | 3 |  |  |  |  |
| Heritage or Humanities course | 3 |  |  |  |  |
| MAT 150 or higher-level Quantitative Reasoning course recommended | 3 |  |  |  | MAT 126 Technical Algebra and Trigonometry minimum |
| Total Semester Credit Hours | 15 |  |  |  |  |

Semester 2

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Courses | Cr. Hrs. | Term | Grade | Prerequisites | Notes |
| CIT 111 Computer Hardware and Software | 4 |  |  | CIT 105 and MAT 065 or higher |  |
| CIT 120 Computational Thinking | 3 |  |  | Coreq: MAT 126 or higher |  |
| CIT 160 Intro to Networking Concepts OR  CIT 161 Introduction to Networks | 4 |  |  | Coreq: CIT 111 |  |
| CIT 170 Database Design Fundamentals | 3 |  |  | CIT 105 and (MAT 126 or MAT 085 or higher) |  |
| Total Semester Credit Hours | 14 |  |  |  |  |

Summer Semester

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Courses | Cr. Hrs. | Term | Grade | Prerequisites | Notes |
| CIT 201 Information Storage Management | 3 |  |  | CIT 167 and CIT 217 | Summer only |
| CIT 262 MS Server Infrastructure | 3 |  |  | CIT 111 & CIT 160 or 161 |  |
| Total Semester Credit Hours | 6 |  |  |  |  |

Semester 3

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Courses | Cr. Hrs. | Term | Grade | Prerequisites | Notes |
| CIT 180 Security Fundamentals | 3 |  |  | CIT 160 or CIT 161 |  |
| Level I Programming Language course | 3 |  |  |  |  |
| Cloud Computing Sequence Course 1 | 3 |  |  |  |  |
| Cloud Computing Sequence Course 2 | 3 |  |  |  |  |
| Total Semester Credit Hours | 12 |  |  |  |  |

Semester 4

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Courses | Cr. Hrs. | Term | Grade | Prerequisites | Notes |
| CIT 217 Unix/Linux Administration | 3 |  |  | CIT 111 & CIT 160 or 161 | Spring only |
| CIT 293 CIT Employability Skills | 1 |  |  | Sophomore standing |  |
| Cloud Computing Sequence Course 3 | 3 |  |  |  |  |
| Cloud Computing Sequence Course 4 | 3 – 4 |  |  |  |  |
| Natural Sciences course | 3 |  |  |  |  |
| Total Semester Credit Hours | 13 – 14 |  |  |  |  |
| Total Degree Credit Hours | 60 – 61 |  |  |  |  |

**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**

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

The Cloud Computing Technologies Track requires attendance during the summer.

**Approved Level I Programming Language Courses**

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| --- | --- | --- | --- |
| Course | Cr. Hrs. | Prerequisites | Notes |
| INF 120 Elementary Programming | 3 |  |  |
| CIT 140 JavaScript I | 3 | CIT 120 and (CIT 150 or CIT 155) | Spring only |
| CIT 143 C# I | 3 | CIT 120 |  |
| CIT 144 Python I | 3 | CIT 120 |  |
| CIT 148 Visual Basic I | 3 | CIT 120 | Fall only |
| CIT 149 Java I | 3 | CIT 120 |  |
| CIT 171 SQL I | 3 | CIT 120 and CIT 170 | Fall only |
| CS 115 Introduction to Computer Programming | 3 |  |  |

**Approved Networking Elective Courses**

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| --- | --- | --- | --- |
| Course | Cr. Hrs. | Prerequisites | Notes |
| CIT 160 Introduction to Networking Concepts | 4 | CIT 111 |  |
| CIT 161 Introduction to Networks | 4 | CIT 111 |  |
| Other courses approved by the CIT Program Coordinator | 3 – 4 |  |  |

**Amazon Web Services Sequence Courses**

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| --- | --- |
| **Semester 1** | **Prerequisites** |
| CIT 206 Amazon Web Services Practitioner | CIT 170 and CIT 160 or CIT 161 |
| CIT 167 Routing and Switching Essentials | CIT 161 or consent of instructor |
| **Semester 2** | **Prerequisites** |
| CIT 207 Amazon Web Services Architecting | CIT 206 and CIT 167 |
| CIT Elective approved by CIT Program Coordinator |  |

**Data Center Technologies Sequence Courses**

|  |  |
| --- | --- |
| **Semester 1** | **Prerequisites** |
| CIT 203 Introduction to Virtualization | CIT 167 and CIT 217 |
| Approved Networking Elective (other than course taken | See list |
| **Semester 2** | **Prerequisites** |
| CIT 204 VMware Optimize and Scale | CIT 203 |
| CIT 205 Cloud Infrastructure and Services | CIT 201 and CIT 203 |

**Embedded Credentials**

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| --- | --- | --- | --- |
| Credential | Title | Requirements | Total Cr. Hours |
| Certificate | A+ Prep | CIT 111 | 4 |
| 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 | 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*