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

Business, Data Science, and Informatics Programming 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 120 Computational Thinking | 3 |  |  | Coreq: MAT 126 or higher | Should be taken first semester |
| CIT 170 Database Design Fundamentals | 3 |  |  | CIT 105 and (MAT 126 or MAT 085 or higher) |  |
| MAT 150 or higher-level Quantitative Reasoning course recommended  | 3 |  |  |  | MAT 126 Technical Algebra and Trigonometry minimum  |
| Total Semester Credit Hours | 16 |  |  |  |  |

Semester 2

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Courses | Cr. Hrs. | Term | Grade | Prerequisites | Notes |
| CIT 160 Intro to Networking Concepts ORCIT 161 Introduction to Networks  | 4 |  |  |  |  |
| CS 115 - Introduction to Computer Programming | 3 |  |  |  | Level I Programming  |
| CIT 150 Internet Technologies ORCIT 155 Web Page Development ORCIT 157 Web Site Design and Production | 3 |  |  | CIT 105 and CIT 120 |  |
| Sequence Course | 3 |  |  |  | See list |
| ENG 101 Writing I | 3 |  |  |  |  |
| Total Semester Credit Hours | 16 |  |  |  |  |

Semester 3

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Courses | Cr. Hrs. | Term | Grade | Prerequisites | Notes |
| CIT 180 Security Fundamentals | 3 |  |  | CIT 160 or CIT 161 |  |
| CIT 249 Java II ORINF 260 Object-Oriented Programming I | 3 |  |  | CIT 149 |  |
| Sequence Course | 3 |  |  |  | See list |
| Heritage or Humanities course | 3 |  |  |  |  |
| Oral Communications | 3 |  |  |  |  |
| Total Semester Credit Hours | 15 |  |  |  |  |

Semester 4

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Courses | Cr. Hrs. | Term | Grade | Prerequisites | Notes |
| CIT 293 CIT Employability Skills | 1 |  |  | Sophomore Standing |  |
| Sequence Course | 3 |  |  |  | See list |
| ENG 102 Writing II | 3 |  |  | ENG 101 |  |
| Natural Sciences course – INF 120 is a NS | 3 |  |  |  | Must take INF 120 |
| Social and Behavioral Sciences course | 3 |  |  |  |  |
| Total Semester Credit Hours | 13 |  |  |  |  |
| Total Degree Credit Hours | 60 |  |  |  |  |

**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.

**Sequence Courses**

|  |  |  |  |
| --- | --- | --- | --- |
| Sequence | Semester 2 | Semester 3 | Semester 4 |
| Business | IFM 111 Client-Side Informatics Software | IFM/INF 128 Principles of Informatics | ACC 201 Financial Accounting OR ACC 202 Managerial Accounting OR ECO 201 Principles of Microeconomics OR ECO 202 Principles of Macroeconomics |
| Data Sciences | MAT 155 Trigonometry (Prereq: MAT 126 or higher-level Quantitative Literacy course) | MAT 174 or MA 113 Calculus I (Prereq: MAT 150 and MAT 155 or equivalent) | CS 275 Discrete Math ORSTA 210 Making Sense of Uncertainty OR STA 296 Statistical Methods and Motivations (Prereq: MAT 174 or MA 113) |
| Informatics Programming | CIT 253 Data-Driven Web Pages | CS 215 Introduction to Program Design, Abstraction, and Problem Solving (Prereq: CS 115) | CS 216 Introduction to Software Engineering (Prereq: CS 215) OR STA 210 Making Sense of Uncertainty |

**Embedded Credentials**

|  |  |  |  |
| --- | --- | --- | --- |
| 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*