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**Computer and Information Technologies – Informatics Track Business, Data Science and Informatics Programming Sequences**

**Associate in Applied Science degree**

**Program Coordinator: Robert Chirwa E-mail:** **robert.chirwa@kctcs.edu** **Phone: 859-246-6298**

[**Program Website**](https://bluegrass.kctcs.edu/education-training/program-finder/computer-information-technology.aspx)

**Student Name: Student ID:**

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

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| **First Semester** | **Credit****Hours** | **Term** | **Grade** | **Prerequisites** | **Notes** |
| CIT 105 Introduction to Computers  | 3 |  |  |  | Should be taken first semester |
| 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 required  |
| **Total Semester Credit Hours** | **16** |  |  |  |  |

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| **Second Semester** | **Cr. Hrs.** | **Term** | **Grade** | **Prerequisites** | **Notes** |
| CIT 160 Introduction to Networking Concepts or CIT 161 Introduction to Networks  | 4 |  |  |  |  |
| CIT 149 Java I or INF 120 Elementary Programming | 3 |  |  |  | Level I Programming Language |
| CIT 150 Internet Technologies or CIT 155 Web Page Development or CIT 157 Web Site Design and Production | 3 |  |  | CIT 105 and CIT 120 |  |
| Sequence Course | 3 |  |  |  | See list on back |
| ENG 101 Writing I | 3 |  |  |  |  |
| **Total Semester Credit Hours** | **16** |  |  |  |  |

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

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

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| * **25% or more of Total Degree Credit Hours must be earned at BCTC**
* **Cumulative GPA must be 2.0 or higher**
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**Graduation Requirements:**

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

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

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

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| **Embedded Credentials** |
| **Credential** | **Title** | **Requirements** | **Total Credit 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 |

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