



**Computer and Information Technologies – Programming Track**  
**Information Systems and Programming Software Development Sequences**  
**Associate in Applied Science degree**

**Program Coordinator: Robert Chirwa**

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**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.*

First Semester	Credit Hours	Term	Grade	Prerequisites	Notes
CIT 105 Introduction to Computers	3				Should be taken first semester
CIT 120 Computational Thinking	3			Coreq: MAT 126 or higher	Should be taken first semester
ENG 101 Writing I	3				
Heritage or Humanities course	3				Should be taken first semester
MAT 150 or higher level Quantitative Reasoning course recommended	3				MAT 126 Technical Algebra and Trigonometry required
<b>Total Semester Credit Hours</b>	<b>15</b>				

Second Semester	Cr. Hrs.	Term	Grade	Prerequisites	Notes
CIT 111 Computer Hardware and Software	4			CIT 105	
CIT 160 Introduction 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)	
Approved Level I Programming Language course	3				See list on back
Sequence Course	3				See list on back
<b>Total Semester Credit Hours</b>	<b>17</b>				

Third Semester	Credits	Term	Grade	Prerequisite	Notes
CIT 180 Security Fundamentals	3			CIT 160 or CIT 161	
Approved Level II Programming Language course	3				See list on back
Sequence Course	3				See list on back
Sequence Course	3				See list on back
Natural Sciences course	3				
<b>Total Semester Credit Hours</b>	<b>15</b>				

Fourth Semester	Credits	Term	Grade	Prerequisite	Notes
CIT 293 CIT Employability Skills	1				
Approved Level I, II, or III Programming Language course	3				See list on back
Approved CIT Technical Course	3				See list on back
Sequence Course	3				See list on back
Social and Behavioral Sciences course	3				
<b>Total Semester Credit Hours</b>	<b>13</b>				
<b>Total Degree Credit Hours</b>	<b>60</b>				

- 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.

**APPROVED LEVEL I PROGRAMMING LANGUAGE COURSES  
(must be different from courses taken to fulfill other requirements)**

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 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 LEVEL II PROGRAMMING LANGUAGE COURSES**

Course	Cr. Hrs.	Prerequisites	Notes
CIT 238 Android Programming	3	CIT 149 or INF 120	
CIT 249 Java II	3	CIT 149	
CIT 271 SQL II	3	CIT 171	
CS 215 Intro to Program Design, Abstraction, & Problem Solving	4	CS 115	
INF 260 – Object Oriented Programming I	3	INF 120	

**APPROVED LEVEL III PROGRAMMING LANGUAGE COURSES**

Course	Cr. Hrs.	Prerequisites	Notes
CS 216 – Intro to Software Engineering	3	CS 215	

**SEQUENCE COURSES**

Information Systems Sequence	Programming Software Development Sequence
Approved Business Course	CIT 150 Internet Technologies OR CIT 155 Web Page Development OR CIT 157 Web Site Design and Production
Approved Management or Business Course	Approved Level I Programming Language
CIT 171 SQL I	CIT 253 Data-Driven Web Pages
Approved CIT Technical Course	Approved Level II Programming Language

**APPROVED BUSINESS COURSES (Courses listed below or any business, informatics or management approved by CIT Program Coordinator)**

Course	Cr. Hrs.	Prerequisites	Notes
ACC 201 Financial Accounting	3	Sophomore standing	
ACT 101 Fundamentals of Accounting I	3		
BAS 160 Introduction to Business	3		

**APPROVED MANAGEMENT COURSES (Courses listed below or any management course approved by CIT Program Coordinator)**

Course	Cr. Hrs.	Prerequisites	Notes
MGT 200 Small Business Management	3	BAS 160	
MGT 274 Human Resource Management	3	MGT 283	
MGT 283 Principles of Management	3	BAS 160	
MGT 287 Supervisory Management	3	MGT 283	
OST 275 Office Management	3		

**Embedded Credentials**

Credential	Title	Requirements	Total Cr. Hrs.
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	Programming	CIT 120, Approved Level I Programming Language, Level II Programming Language, Level I or II or III Programming Language	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