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**Computer & Information Technologies – Geospatial Information Systems Track (110101718)**

**Credential (AAS)**

**Program Coordinator: Don Halcomb E-mail: don.halcomb@kctcs.edu Phone: 859-246-6289**

**Mike Hardin E-mail: mike.hardin@kctcs.edu Phone: 859-246-6619**

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

**Student Name: Student ID:**

***Students need to be at KCTCS placement levels for all courses***

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| **First Semester** | **Credits** | **Term** | **Grade** | **Prereqs/Notes** |
| CIT 105 – Introduction to Computers | 3 |  |  | Should be taken first semester |
| CIT 120 – Computational Thinking | 3 |  |  | Pre-requisite or co-requisite:  MAT 085 OR (MAT 126 OR higher) |
| ENG 101 – Writing I | 3 |  |  |  |
| Heritage OR Humanities Course | 3 |  |  |  |
| MAT 126 – Algebra and Trigonometry OR higher | 3 |  |  | MAT 150 – College Algebra is recommended |
| **Total Semester Credit Hours** | **15** |  |  |  |

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| **Second Semester** | **Credits** | **Term** | **Grade** | **Prereqs/Notes** |
| CIT 111 – Computer Hardware and Software | 4 |  |  | Pre-requisite: CIT 105 AND MAT 065 |
| CIT 125 – Introduction to Digital Maps | 3 |  |  | Pre-requisite: CIT 105 |
| CIT 160 – Introduction to Networking Concepts OR CIT 161 – Introduction to Networks | 4 |  |  | Pre-requisite: MAT 065  Pre-requisite OR Co-requisite: CIT 111 |
| GIS 145 – Remote Sensing | 3 |  |  | Pre-requisite Co-requisite: CIT 125 |
| Approved Level I Programming Lang. – See list | 3 |  |  | Pre-requisite: CIT 120 |
| **Total Semester Credit Hours** | **17** |  |  |  |

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| **Third Semester** | **Credits** | **Term** | **Grade** | **Prereqs/Notes** |
| CIT 170 – Database Design Fundamentals | 3 |  |  | Pre-req: CIT 105 AND (MAT 85 OR MAT 126) |
| CIT 180 -- Security Fundamentals | 3 |  |  | Pre-requisite: CIT 160 OR CIT 161 |
| CIT 225 – GIS Data Analysis | 3 |  |  | Pre-requisite: CIT 125 |
| GIS 255 – Geospatial Programming | 3 |  |  | Pre-requisite: CIT 125 |
| GIS 260 – GIS Web Mapping | 3 |  |  | Pre-requisite: CIT 125 |
| **Total Semester Credit Hours** | **15** |  |  |  |

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| **Fourth Semester** | **Credits** | **Term** | **Grade** | **Prereqs/Notes** |
| CIT 229 – Selected Topics in GIS | 3 |  |  | Pre-requisite: CIT 125 |
| CIT 290 – Internship | 3 |  |  | Instructor permission required |
| CIT 293 -- CIT Employability Studies | 3 |  |  |  |
| Natural Sciences Course | 3 |  |  |  |
| Social and Behavioral Sciences Course | 3 |  |  |  |
| **Total Semester Credit Hours** | **15** |  |  |  |

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| **Total Credential Hours** | **62** |  |  |  |

***Note: 25% of Total Program Credit Hours must be earned at Bluegrass Community and Technical College.***

**Advisor Name: Advisor Signature: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Student Name: Student Signature: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

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| **Approved Electives (if applicable)** | |
| **Level I Programming Language Courses: See list below** | |
| CIT 140 | JavaScript I (3) |
| CIT 141 | PHP I (3) |
| CIT 142 | C++ I (3) |
| CIT 143 | C# I (3) |
| CIT 144 | Python I (3) |
| CIT 145 | Perl I (3) |
| CIT 146 | Swift I (3) |
| CIT 147 | Programming I: Language (3) |
| CIT 148 | Visual Basic I (3) |
| CIT 149 | Java I (3) |
| CIT 171 | SQL I (3) |
| CS 115 | Intro to Computer Programming (3) |
| INF 120 | Elementary Programming (3) |
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