# IT SPECIALTY - BACK END DEVELOPER, SC

## **Program Description**

IT Specialty - Back End Developer allows students to develop an understanding of computer functions; master basic web design skills; and develop advanced programming and database development skills. This program provides the foundation for careers and/or further study in computer programming, software development, cybersecurity and other related technology fields.

This program is not eligible for financial aid. However, it may be eligible for scholarship funding if the student is awarded scholarships.

#### **Recommended Course Schedule**

1st semeste	r	Units
CIT 114	IT Essentials	4
CIT 134	Beginning C# Programming	3
CIT 151	Beginning Web Development	3
Or DATA 210	Database Concepts and SQL or Introduction to SQL for Data Science	3
CIT 234	Advanced C# Programming	3
CIT 198	Special Topics in CIT	1
	Semester Total	17
	Total Units	17

## **Program Requirements**

Skills Certificates can consist of a single course or a short set of courses that provide training for entry-level positions or career advancement. These short-term certificates may also prepare students to take state, national and/or industry-recognized certifications or licensing exams.

Skills certificates are awarded upon completion of coursework and marked on a student's transcripts at the end of the semester. Students cannot declare a skills certificate as one's major. Skills Certificates are not eligible for Financial Aid.

To earn a skills certificate, students must:

- 1. Maintain a minimum cumulative GPA of 2.0.
- 2. Have no financial or library obligation to the college.

Code	Title	Units	
Certificate Requirement			
CIT 114	IT Essentials	4	
CIT 134	Beginning C# Programming	3	
CIT 151	Beginning Web Development	3	
CIT 180	Database Concepts and SQL	3	
or DATA 210	Introduction to SQL for Data Science		
CIT 234	Advanced C# Programming	3	
CIT 198	Special Topics in CIT	1	
Total Units		17	

### **Program Outcomes**

Students completing the certificate will:

PSLO1: Students will be able to identify computer components, install and troubleshoot hardware components, and demonstrate knowledge of correct installation procedures for an operating system.

PSLO2: Students will demonstrate an understanding of software coding, including design and analysis of software.

PSLO3: Students will create a well-designed, accessible web site that conforms to web standards, feature interlinked pages, and uses interactive features.

PSLO4: Students will demonstrate an understanding of essential database design skills to include queries and table creation using SQL.

PSL05: Students will design and implement program problem solutions involving generic methods, sequential access file processing and using dynamic data structures.