

Computer Information Systems-Software Developer Certificate

The Computer Information Systems - Software Developer Certificate provides a foundation in skills needed to analyze business problems and develop software solutions using current industry standard development tools. The certificate provides an academic credential reflecting enhanced job skills for those seeking advancement in their information services career or for individuals with a prior degree in another discipline seeking a career change.

(Major Code 5180; CIP Code 11.0201)

Software Development Program web page (<http://www.jccc.edu/academics/credit/software-development/>)

Program Learning Outcomes

Johnson County Community College (JCCC) is committed to offering high-quality affordable programs that focus on developing knowledge and skills conducive to life-long learning. Both the General Education Student Learning Outcomes (<https://www.jccc.edu/about/leadership-governance/administration/institutional-effectiveness-branch/outcomes-assessment/learning-outcomes.html>) and Institutional Learning Outcomes (<https://www.jccc.edu/about/leadership-governance/administration/institutional-effectiveness-branch/outcomes-assessment/institutional-learning-outcomes.html>) convey JCCC's approach to programmatic outcomes. Additionally, students who successfully complete the Computer Information Systems - Software Developer Certificate from JCCC will be able to:

- Work proficiently as a software developer in a full-stack Software Development Life Cycle (SDLC) environment.
- Understand and apply key database concepts.
- Analyze complex, real-world problems and develop effective solutions.
- Demonstrate computational thinking and logic skills.

Certificate Requirements

First Semester

Code	Title	Hours
CS 134	Programming Fundamentals	4
MATH 171	College Algebra* (or any Precalculus/Calculus course) (SGE 030) (SGE 070)	3
WEB 110	HTML and CSS	3
Total Hours		10

Second Semester

Code	Title	Hours
CIS 204	UNIX Scripting and Utilities*	3
CS 200	Concepts of Programming Algorithms Using C++*	4
or CS 201	Concepts of Programming Algorithms using C#*	
or CS 205	Concepts of Programming Algorithms using Java*	
<p>Note: Transfer students should take the language that transfers to their chosen school. KU transfer students should contact the JCCC CSIS department chair about potentially taking CS 202 as an alternative. Java or C# is recommended for most career students. C++ is recommended for embedded systems and Java for mobile development.</p>		
WEB 114	Web Scripting: JavaScript I*	2
Total Hours		9

Third Semester

Code	Title	Hours
CIS 242	Introduction to System Design and Analysis*	3
CIS 260	Database Management*	4
CIS 275	Web-Enabled Database Programming*	4
CS 235	Object-Oriented Programming Using C++*	4



or CS 236	Object-Oriented Programming Using C#*
or CIS 240	Advanced Topics in Java*
Total Hours	15

Total Program Hours: 34

* This course has registration requirements.

Kansas Systemwide General Education (SGE) Key

- English SGE ⁰¹⁰
- Communications SGE ⁰²⁰
- Mathematics and Statistics SGE ⁰³⁰
- Natural and Physical Sciences SGE ⁰⁴⁰
- Social and Behavioral Sciences SGE ⁰⁵⁰
- Arts and Humanities SGE ⁰⁶⁰
- Cavalier Credits SGE ⁰⁷⁰