



Software Development Certificate

The Software Development Certificate is intended for students who will develop software in their career. Additionally, students will be provided with a comprehensive understanding of software development principles, practices, tools, and coding applications. The curriculum is structured to introduce various aspects of the software development life cycle, including requirements analysis, design, coding, testing, and maintenance. Earning this certificate will help students to develop quality software that people can use in their everyday lives.

Code	Title	Credits
Required Courses		
Programming and Data Structures Competency		6
CSCI 160	Introduction to Structured Programming I	
CSCI 161	Introduction to Structured Programming II	
Software Engineering Fundamentals Competency		6
Choose two of the following:		
SE 201	Introduction to Software Engineering	
SE 211	Software Construction	
SE 311	Software Design and Architecture	
SE 380	Systems Analysis and Design	
Specialized and Advanced Topics in Software Development Competency		3
Choose one of the following:		
SE 212	Software Engineering Approach to Human Computer Interaction	
SE 370	Computer Organization & Systems	
SE 376	Embedded Systems	
SE 385	Database Theory/Design	
Industry-related Experience Competency		1-3
Choose one of the following:		
CIS 297	Internship	
SE 480	Capstone	
SE 497	Internship	
Total Credits		16-18