

Computer Information Systems - Software Engineering Certificate (CIS.SWE.CT)

Certificate

Business, Management, Marketing and Technology

Orchard Ridge Campus

The Computer Information Systems (CIS) certificates are designed for students who need specialty skills in a particular area of information technology that will help satisfy current or future employment requirements. Unlike associate degrees, certificate programs assume that students already have obtained or do not require general education skills and are now looking for education in a specific area of computer technology. Therefore, all of the courses within a certificate program are chosen to develop these specific technical skills in a shorter amount of time than what would be required in an associate degree program. All CIS courses use current computer tools and place an emphasis on practical application to provide a relevant learning environment.

This certificate is awarded to students who successfully complete all core requirements plus the list of courses for at least one focus area.

A separate certificate is not awarded for each focus area. One certificate may be awarded from 1 to 4 types of focus areas.

Program Webpage - Click Here (<https://www.oaklandcc.edu/programs/cis/softwareeng.aspx>)

Program Outcomes and Part Time Plan Example - Game Design and Development Focus Area - Click Here (<https://www.oaklandcc.edu/program-plan/cis.swe.ct.game>)

Program Plan Example - General Software Development Focus Area - Not Available

Program Outcomes and Full Time Plan Example - Mobile Application Development Focus Area - Click Here (<https://www.oaklandcc.edu/program-plan/cis.swe.ct-mobile/>)

Program Outcomes and Full Time Plan Example - Web Application Development Focus Area - Click Here (<https://www.oaklandcc.edu/program-plan/cis.swe.ct-web/>)

Code	Title	Credit Hours
Core Requirements		18
CIS 1200	Introduction to Database Systems	4
CIS 1500	Introduction to Programming (Java)	4
CIS 1512	Principles of Software Engineering	3
CIS 2353	Data Structures	4
CIS 2991	Special Project in Software Engineering	3

Choose one or more of the following focus areas:

Game Design and Development Focus Area:			15
CAD 1101	Introduction to CAD	4	
CIS 2252	Object-Oriented Programming (C++)	4	
CIS 2859	Foundations of Game Software Development	4	
CIS 2862	Game Design	3	
Total Credit Hours - Game Design and Development			33
General Software Development Focus Area:			16
CIS 2151	Object-Oriented Programming (Java)	4	
CIS 2454	Web System Development (PHP, Java)	4	
CIS 2616	Database Application Design and Development with Oracle PL/SQL	4	
CIS 2818	Mobile Application Development (Android)	4	
Total Credit Hours - General Software Development			34
Mobile Application Development Focus Area:			15
CIS 1420	HTML5 Programming	3	
CIS 1440	JavaScript Programming for Websites	4	
CIS 2818	Mobile Application Development (Android)	4	
CIS 2819	Mobile Application Development (iOS)	4	
Total Credit hours - Mobile Application Development			33
Web Application Development Focus Area:			16
CIS 1400	Web Design I	4	
CIS 2151	Object-Oriented Programming (Java)	4	
CIS 2454	Web System Development (PHP, Java)	4	
CIS 2858	Web System Integration and Service Development	4	
Total Credit Hours - Web Application Development			34

A minimum cumulative 2.00 grade point average (GPA) overall is required for graduation.