

SOFTWARE ENGINEERING, SKILLS COMPETENCY AWARD (SCA)

Overview

The Software Engineering Skills Competency Award goes beyond programming to include engineering methodologies and hands-on project experience. The program introduces students to state-of-the-art methodologies, teamwork and project management skills.

Requirements

Skills Competency Award Requirements

Complete all department requirements with a "C" or higher or "P" in each course. Candidates for a Skills Competency Award are required to complete at least 20% of the department requirements through SBCC.

Code	Title	Units
Department Requirements		
CS 105	Theory and Practice I	3
CS 106	Theory and Practice II	3
CS 165	Software Design Patterns	1.5
CS 180	Software Engineering With UML	3
Complete one course from the following:		1.5-4
CS 107	Computer Architecture and Organization	
CS 108	Discrete Structures	
CS 111	HTML And Webmastering	
CS 115	Javascript Programming	
CS 116	Web Server Programming	
CS 123	Android Programming	
CS 140	Object-Oriented Programming Using C++	
CS 187	iOS Programming	
Total Units		12.00-14.50

Learning Outcomes

1. Design and implement programming solutions to complex problems.
2. Develop software that can perform standard operations on data stored in the standard data structures.
3. Develop software that implements designs that incorporate standard design patterns.
4. Employ analytical methods to estimate the duration and cost of a software development project.
5. Use code versioning systems to manage changes to a code base.
6. Work in a team environment to implement project goals.