

Course number and name: **CS 04400: Computer Science Senior Project**
Credits and contact hours: 3 credits / 3 contact hours
Faculty Coordinator: Ganesh Baliga
Text book, title, author, and year: N/A

Specific course information

Catalog description: This is an advanced programming course in which students work on large-scale individual or team programming projects, and make a formal presentation on their work. The course discusses program development, methodologies and strategies.

Prerequisites: CS04315 Programming Languages
and
CS07340 Design and Analysis of Algorithms

Type of Course: Required Elective Selected Elective

Specific goals for the course

1. Students have worked in a team to specify, analyze, design, implement, test and document and complex software system.
 - ABET (b) An ability to analyze a problem, and identify and define the computing requirements appropriate to its solution
 - ABET (c) An ability to design, implement, and evaluate a computer-based system, process, component, or program to meet desired needs
 - ABET (d) An ability to function effectively on teams to accomplish a common goal
 - ABET (i) An ability to use current techniques, skills, and tools necessary for software system development
 - ABET (k) An ability to apply design and development principles in the construction of a complex software system

2. Students have demonstrated and presented a software system to a technical audience.
 - ABET (f) An ability to communicate effectively with a range of audiences

Required list of topics to be covered

1. None

Optional list of topics that could be covered

2. Mobile app development
3. RESTful APIs
4. Web-based applications