

Course number and name: CS 04400: Computer Science Senior Project

Credits and contact hours: 3 credits / 3 contact hours

Course Coordinator: Ganesh Baliga

Instructional Materials: 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: CS 04315 Programming Languages
and
CS 07340 Design and Analysis of Algorithms

Type of Course: Required Elective Selected Elective

Educational objectives for the course

1. Students have worked in a team to specify, analyze, design, implement, test and document and complex software system.
 - ABET (1) Analyze a complex computing problem and to apply principles of computing and other relevant disciplines to identify solutions.
 - ABET (2) Design, implement, and evaluate a computing-based solution to meet a given set of computing requirements in the context of the program's discipline.
 - ABET (5) Function effectively as a member or leader of a team engaged in activities appropriate to the program's discipline.
 - ABET (6) Apply computer science theory and software development fundamentals to produce computing-based solutions.
2. Students have demonstrated and presented a software system to a technical audience.
 - ABET (3) Communicate effectively in a variety of professional contexts.

Required list of topics to be covered

1. None

Optional list of topics that could be covered

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