

## CSCI 5180 - INDEPENDENT STUDIES PROJECT

**CREDIT HOURS:** 1 - 6

**PREREQUISITES:** Approval of the project director and of the department chair.

### CATALOG DESCRIPTION

Design and development of a selected project. May be repeated for a total of six credit hours.

### PURPOSE OF COURSE

To research, specify, design, implement, test, and demonstrate a system of interest to the student under the supervision of the student's project director.

### EDUCATIONAL OBJECTIVES

The goal of this course is to provide the student experience in developing the concepts and skills required to implement a complete system. Student evaluation will be based on successful development, and presentation of a project system.

Upon successful completion of the course, students should be able to:

1. Demonstrate knowledge of the issues and problems in requirements analysis and specification of a system.
2. Demonstrate skills in the design of a system.
3. Demonstrate implementation and testing skills.
4. Relate design, analysis, and implementation to application performance requirements.
5. Develop and extend system and user interface documentation techniques.
6. Analyze example systems, noting advantages and disadvantages, and potential for improvement.

### COURSE CALENDAR

This course meets for a minimum of 12.5 contact hours during the semester. During that period, a student meets multiple times with a faculty research mentor to develop a significant project in the field of computer science. Course work will vary depending on the specific subject. Students have significant reading assignments and reading from the primary literature. Students are expected to complete a significant project, make a presentation, and complete a written summary of accomplishments that is presented to the faculty mentor. Successful completion of these activities requires at a minimum two additional hours of outside of contact hours each week.

### CONTENT

### Hours

Project Selection and Resource Search ..... Variable

Requirements Analysis and Specification ..... Variable

System Design .....	Variable
System Implementation and Testing .....	Variable
System Interface and Documentation .....	Variable
System Demonstration and Report .....	Variable