CS 4742: Natural Language Processing

3 Credit Hours

Prerequisite: CS 3642

This course provides an introduction to the field of natural language processing (NLP). The topics include creating systems that can understand and produce language for applications such as information extraction, machine translation, automatic summarization, question-answering, and interactive dialogue systems. This course covers linguistic (knowledge-based) and statistical approaches to language processing in the areas of syntax (language structures), semantics (language meaning), and pragmatics/discourse (the interpretation of language in context). Students will design and develop programs for analyzing and extracting information from large online corpora.

CS 4850: Computer Science Senior Project

3 Credit Hours

Prerequisite: CS 3502 and SWE 3313

This course provides a capstone experience for CS majors to promote a successful transition into the work place or further academic study. Students will have the opportunity to practice essential project management skills and work with current software tools and technologies. Student teams will develop a project scope, project plan, document functional specifications, develop a design document, implement specified functions, provide weekly progress reports, give project presentations to the class, conduct final project presentation to the instructor and/or project sponsor, and provide a complete final report that includes documentation of all class activities. Each team will designate a team leader who is responsible for coordinating work tasks, team meetings, communications with the instructor and/or project sponsor, and team effort.

CSCI 1301: Computer Science I

4 Credit Hours

This course is an introduction to computer science with coverage of algorithmic foundations, hardware concepts, and introductory programming in Java. Specific topics include data storage, data manipulation, and data abstractions. Programming concepts covered are algorithm design, primitive data types, and expressions, loops, modular programming, conditional execution, program logic, and arrays. This course is managed through the cooperative academic agreement known as eCore.