## INTERNET TECHNOLOGIES (IT) CONCENTRATION FOR COMPUTER SCIENCE MAJORS

The internet technologies (iT) concentration supplements the Computer Science (CS) curriculum by focusing on the concepts and technologies needed to implement modern web applications. The concentration is designed to supplement the CS core curriculum by introducing the programming aspects as well as the theoretical concepts needed to build the infrastructure for web systems such as search engines, social networking sites, etc. The iT concentration provides extensive hands-on, project-based experience for students.

## Requirements

**Total Credits** 

| Code                          | Title                                  | Credits |
|-------------------------------|--|---------|
| Required Courses              |  |         |
| CSCI 2850                     | PROGRAMMING ON THE INTERNET            | 3       |
| CSCI 3830                     | ADVANCED JAVA PROGRAMMING              | 3       |
| CSCI 3850                     | FOUNDATIONS OF WEB SEARCH TECHNOLOGIES | 3       |
| Elective Courses <sup>1</sup> |  |         |
| Select 9 hours from th        | e following:                           | 9       |
| CSCI/CYBR 3450                | NATURAL LANGUAGE PROCESSING            |         |
| CSCI/MATH 4150                | GRAPH THEORY & APPLICATIONS            |         |
| CSCI 4250                     | HUMAN COMPUTER INTERACTION             |         |
| CYBR 4460                     | NETWORK-BASED VULNERABILITY DISCOVERY  |         |
| CSCI 4900                     | INTERNET SYSTEMS DEVELOPMENT           |         |
| CSCI 4470                     | PATTERN RECOGNITION                    |         |
| CSCI 4850                     | DATABASE MANAGEMENT SYSTEMS            |         |
| CSCI 4890                     | DATA WAREHOUSING AND DATA<br>MINING    |         |

The list of electives is not exhaustive. Students can take other relevant courses as electives under the approval of the computer science undergraduate program committee.

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