

CS 4422: Information Retrieval

3 Credit Hours

Prerequisite: CS 3305 and (CS 3410 or CSE 3153)

This course covers the fundamentals of Internet search engines, including Web crawlers, inverted indices, hyperlink analysis, and relevance ranking. Also covered are advanced topics including information extraction for knowledge base construction, question answering, search marketing and ad targeting, and activity mining for relevance optimization and personalization.

CS 4491: Advanced Topics in Computer Science

3 Credit Hours

Prerequisite: A grade of "C" or better in any prerequisite course. Prerequisite course(s) vary depending upon the topic.

This course provides the current and relevant topics in an advanced Computer Science area of interest to faculty.

Notes: It may substitute for a CS major elective.

CS 4492: Undergraduate Research

3 Credit Hours

Prerequisite: Department Permission and (CS 4265 or CS 4267 or CS 4270 or CS 4322 or CS 4412 or CS 4504 or CS 4512 or CS 4514 or CS 4522 or CS 4523 or CS 4524 or CS 4612 or CS 4622 or CS 4632 or CS 4712 or CS 4720 or CS 4722 or CS 4732).

This course promotes undergraduate research in Computer Science. Students develop research ideas and conduct research work to investigate topics aligned with the department's research plan and with the guidance of Computer Science faculty members. Students document their findings in final reports, present their findings, and prepare research papers for publication in appropriate venues.

CS 4493: Research Seminar

1 Credit Hours

Prerequisite: Department Permission and GPA of 3.0 or higher.

Discussion of the latest developments and research areas in Computer Science. Students will share among each other research ideas related to current research areas with interactions with faculty or invited speakers. Students will compile, discuss, present, and report their research ideas.