

CS 4308: Concepts of Programming Languages

3 Credit Hours

Prerequisite: CS 3305 and CS 3503

This course covers the fundamental concepts on which programming languages are based and the execution models supporting them. Topics include values, variables, bindings, type systems, control structures, exceptions, concurrency, and modularity. Languages representing different paradigms are introduced.

CS 4322: Mobile Software Development

3 Credit Hours

Prerequisite: CS 3305 and (CS 3410 or CSE 3153) and SWE 3313

This course primarily focuses on mobile sensor application development and security of smartphones and mobile telecommunication systems. The goals of the course is to provide students with real world relevant mobile sensor app development and improve their knowledge and skills on mobile application development and mobile security.

CS 4400: Directed Studies

1-3 Credit Hours

Prerequisite: Approval of the instructor, major area committee, and department chair.

This course covers special topics of an advanced nature that are not in the regular course offerings. Up to three hours may be applied to the major area.

CS 4412: Data Mining

3 Credit Hours

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

This course covers fundamental data mining concepts and techniques for discovering interesting patterns from data in various applications. Topics include data preprocessing, data warehousing and OLAP, mining frequent patterns, classification, clustering, and trend analysis.