CSE 1322L: Programming and Problem Solving II Laboratory

1 Credit Hours

Prerequisite: CSE 1321 and CSE 1321L with a grade of 'B' or better in both. Concurrent: CSE 1322

This course is the required and supervised lab course to accompany CSE 1322.

CSE 2300: Discrete Structures for Computing

3 Credit Hours

Prerequisite: ((CSE 1321 and CSE 1321L with a grade of "B" or higher) and (MATH 1113 or MATH 1190 or MATH 1179)

Coverage of discrete structures is crucial to any program in computing. This course covers propositional and predicate logic, proofs, set theory, relations and functions, algorithms and complexity theory, matrices, graphs and trees, and combinatorics. Throughout, the emphasis will be on applications of these concepts in computing.

CSE 3153: Database Systems

3 Credit Hours

Prerequisite: (CSE 1322 and CSE 1322L) or IT 1113 or (IT 1114 and IT 1114L)

The topics in this course span from a review of the traditional file processing systems to database management systems. Topics include files systems and file processing logic, planning, and major phases of database development: analysis, design and implementation. Labs use an SQL based database product such as Oracle.

CSE 3203: Overview of Mobile Systems

3 Credit Hours

Prerequisite: CSE 1322 and CSE 1322L

This course explores the use and issues of mobile applications in business including information security issues, connecting to cloud computing services, and mobile interface and programming. A significant design or development project will be created in the course.

CSE 3801: Professional Practices and Ethics

2 Credit Hours

Prerequisite: (CSE 1322 and CSE 1322L) or IT 3123 (may take concurrently)

This course covers the historical, social and economic consideration of the discipline. It includes studies of professional conduct, risks, and liabilities, and intellectual property relative to the software engineering and computing professions. Software engineering/computing case studies will be used.