CSC 300- Data Structures – 3 credits
A systematic study of data structures and the accompanying algorithms used in computing problems; structure and use of storage; methods of representing data; techniques for implementing data structures; linear lists; stacks; queue; trees and tree traversal; linked lists; and other structures. Prerequisite: CSC 250

CSC 410- Parallel Computing – 3 credits
The fundamental ideas and issues involved in programming and using parallel computers. This course will cover topics in the design, analysis, and implementation of parallel algorithms. Environments discussed and used may include a variety of shared-memory and message passing models, cluster computing, and GPU computing. Prerequisite: CSC 300

CSC 433- Computer Graphics – 3 credits
Graphical programming concepts. Display media and device characteristics. Point, line, and circle plotting. Coordinating systems and transformations. Polygon clipping and filling. Spline methods, hidden surface elimination, and shading. Prerequisites: CSC 300 and CSC 260

CSC 460- Scientific Visualization – 3 credits
Topics in the visualization of scientific concepts. The graphical capabilities of the computer will be used to visualize difficult and abstract constructions in mathematics and science. Prerequisite: CSC 300