

CSI 2440: Computer Systems

Credits Hours: 4 credits, 3.57 contact hours/week.

Instructor: Debatosh Debnath, Ph.D.

Text book: Englander, The Architecture of Computer Hardware, Systems Software, and Networking: An Information Technology Approach, Fifth Edition, Wiley, 2014.
Pearsonhighered.com.

Specific course information

Introduction to computer systems. Topics cover computer system components including hardware components, storage devices, memory, graphics accelerators, device and communications interfaces, and, CISC and RISC processors, operating systems and network operating systems. Issues in cost, performance, security, and compatibility are also considered.

Prerequisites: CSI 2300

Required course for IT major

Course Objectives: Upon successful completion of this course, students should be able to

- Describe the key working principles of modern computer systems [ABET IT: (a, b, i, j)]
- Determine the sub-systems necessary in a computer system [ABET IT: (a, b, i, j)]
- Describe the role of different components of system software [ABET IT: (a, b, i, j)]
- Appreciate the important issues in reliable and high-performance computing [ABET IT: (a, b, i, j)]
- Select computer systems for specific tasks [ABET IT: (a, b, i, j)]

List of Topics:

- Computer system
- Hardware components
- Storage devices
- Memory
- Graphics accelerators
- Device and communications interfaces
- CISC processors
- RISC processors
- Operating systems
- Network operating systems