

COMPUTER SCIENCE (COMP)

COMP 1200 - Database Design & Management (3 Credits)

This course is an introduction to database theory and database design. Emphasis on database terminology and the roots of database theory will prepare students to utilize data modeling techniques including Entity Relationship Design and Normalization to create a database environment. Structured Query Language (SQL) is used to illustrate techniques for maintaining and working with a database. Finally, the concept of Concurrency Control will be introduced to discuss the management of a database in a distributed/multi-user environment.

Lecture: 2 hours, Lab: 2 hours

COMP 1230 - Systems Analysis and Design^ (4 Credits)

This course serves as a capstone course and offers an introduction to concepts, methodology, and techniques used in business-systems analysis and the design of computerized business systems. A project-team approach is used to solve a case study with an end user.

Lecture: 3 hours, Lab: 2 hours

COMP 2430 - Operating Systems (4 Credits)

This course covers the structure and components of operating systems. Topics include controlling system resources, interface concepts, multiprogramming, networks and command language techniques of current operating systems. Laboratory assignments provide application of these principles. (Fall only)

Lecture: 3 hours, Lab: 2 hours

COMP 2500 - Cybersecurity Practicum/Capstone Course^ (3 Credits)

The Cybersecurity Practicum/Capstone course provides "hands on" experience to promote development of important skills. Weekly meetings with the course instructor will review key program topics. To complete the course, the student is required to spend an average of 10 hours per week of field work under the guidance of industry professionals in order to apply the accumulation of program knowledge in a real world setting. The student will be required to produce a report relating to the work experience and how it is connected to the content of this program. This class also has an on-campus meeting requirement which will be used to develop a portfolio identifying the experiences the student has been exposed to in the field. Students will keep a working journal during the semester to help assess the progress of their experience.

Lecture: 1 hour, Other: 9 hours

Prerequisite(s): CNVT 1830 (may be taken concurrently) and COMI 2037