

CIT 243—COBOL II (3)

Course Description

In this Level II Programming Language course, students code COBOL programs involving direct access data files, interactive screen design, table manipulation, multiple-level control breaks, top-down design, and modular construction. They create and execute a system of programs using structured COBOL techniques including proper documentation. Lecture: 3 hours. Prerequisites: CIT 143, and MA 109; or consent of instructor.

Course Competencies

Upon successful completion of this course, the student can:

1. Demonstrate a working knowledge of the advanced applications of the COBOL programming language.
2. Code COBOL programs involving the following:
 - a. creation, maintenance and use of direct access data files
 - b. interactive screens to input, edit and store data
 - c. extensive table manipulation
 - d. multiple-level control breaks
 - e. use of subroutines
3. Create and execute a system of programs using structured COBOL techniques including proper documentation.

Course Outline

- I. Multiple-level Control Breaks
 - A. The INITIALIZE statement
 - B. Multiple-level program with sub-totals
- II. Table Manipulations
 - A. Direct reference tables
 - B. SEARCH command
 - C. Subscripts vs. Indexing
 - D. SEARCH ALL command
 - E. The SORT verb
- III. Indexed Files
 - A. File Terminology
 - B. Creating an Indexed file
 - C. Updating an Indexed file
 - D. Dynamic Access of Data
 - E. Relative File Processing
- IV. Subprograms
 - A. Passing Data
 - B. Linking subprograms
- V. Interactive COBOL
 - A. Screen Design
 - B. Using the Screen Section