

## **CIT 236—Advanced Database Applications (3)**

### Course Description

Advanced features of a current database software package will be covered, including creating and editing custom forms and reports, creating and using macros, and creating application systems and switchboard modules. Emphasis will also be given to integration among various software applications. Lecture: 3 hours. Prerequisites: none

### Course Competencies

Upon successful completion of this course, the student can:

- create and edit custom reports from database tables and queries
- use graphic objects, calculated fields, and labels in a report
- use grouping and summary fields in a report
- create reports with subreports
- create mailing labels
- create and edit custom forms from database tables and queries
- use list boxes, combo boxes and calculated controls in forms
- create forms with subforms
- add command buttons to forms
- modify the design of a table, including inserting and deleting fields, and changing field properties
- define and edit table relationships
- create and edit macros to automate repetitive tasks
- create application systems and switchboard modules in a database management program
- perform data integration by copying data and using object linking and embedding between applications

### Course Outline

Creating custom reports from tables and queries

Editing, sizing, and moving bound and unbound controls in reports

Using graphics objects in a report

Creating calculated fields in a report

Adding labels to a report

Using grouping and summary fields in a report

Creating mailing labels

Creating crosstab reports

Customizing a report using subreports

Creating custom forms from tables and queries

Editing, sizing, and moving bound and unbound controls in forms

Creating list boxes, combo boxes, and calculated controls in forms

Changing control properties

Adding form headers and labels

Creating forms with subforms

Adding command buttons to a form

Editing a table  
Modifying table design  
Changing field properties  
Adding memo, OLE, and hyperlink fields to a table  
Using lookup fields  
Filtering data using parameters and form filters  
Using parameters as criteria in a query  
Using parameters in calculations in a query  
Defining table relationships  
Creating table relationships  
Editing table relationships  
Creating Macros using Visual Basic for Applications  
Using macros to open database objects  
Setting arguments for macro actions  
Creating command buttons  
Creating Switchboards  
Creating and editing switchboard pages  
Using macros in switchboards  
Data Integration  
Copying data between applications  
Object Linking and Embedding (OLE) between applications  
Importing data from other applications  
Publishing database forms and reports on the Internet