Database Design and Development   2023-2024 Catalog

[ARCHIVED CATALOG]

DBMS 210 - Database Design and Development

PREREQUISITES: DBMS 110 - Introduction to Data Analytics
PROGRAM: Data Analytics
CREDIT HOURS MIN: 3
LECTURE HOURS MIN: 2
LAB HOURS MIN: 2
DATE OF LAST REVISION: Fall, 2020

Emphasizes the development of advanced applications in database management. Students will learn methods of data import and export; advanced table properties; advanced queries; form and report design; scripts for automating database tasks; and building menu-driven applications. Students will produce a cumulative final database application project.

MAJOR COURSE LEARNING OBJECTIVES: Upon successful completion of this course the student will be expected to:

1. Construct database solutions for practical business problems.
2. Design, code, test, document, and implement solutions using database management system software.
3. Create complex reports and queries.
4. Design customized switchboards and complex data entry forms.
5. Create and apply a customized user interface.
6. Create customized menus and toolbars.
7. Apply object models that include database security.
8. Develop a web based database application.
9. Demonstrate management of multiple database files.
10. Apply advanced SQL joins.
11. Create a database solution with an application generator.

COURSE CONTENT: Topical areas of study include -

- Database design
- User interface design
- Database documentation
- Application generators
- Error trapping
- Menu-driven applications
- SQL
- Object models
- Form design
- Database and User security
- Reports and queries
- Client/Server data connection
- Input masks and Validation rules

- Custom Formatted Forms and Reports
- Advanced SQL
- Controls/Objects/Add-ons
- Conditional formatting
- Data validation
- Database automation

[Course Addendum - Syllabus (Click to expand)](#)