

## **CIS 234 - Systems Design and Development**

### **5.0 Credits**

Provides hands-on experience in systems design and implementation using a prototype approach. The case study is designed and tested using application development software. User manuals are written. Prerequisite: [CIS 233](#) and [253](#) with minimum grades of 2.5 or equivalent experience.

### **Course Objectives**

Upon successful completion of this course, students will be able to:

1. Work in teams to define a project plan and perform systems lifecycle (SDLC) activities. [EXPLORE]
2. Prepare and deliver formal written and oral status reports. [COMMUNICATE]
3. Create a system design document, including database design, input and output design, process specifications, and user interface design standards. [COMMUNICATE]
4. Apply user-centered design principles to create a prototype of the user interface design that meets documented requirements; prepare a formal demonstrate of this prototype. [REASON]
5. Develop a database application (prototype) that meets documented data and process specifications. [REASON]
6. Write and implement a test plan for validating system functionality against requirements. [COMMUNICATE]
7. Write a user manual and training plan. [COMMUNICATE]
8. Prepare a roll-out and maintenance plan for project implementation. [REASON]
9. Perform a structured walk-through and demonstration of a complete working system. [COMMUNICATE]
10. Perform final project wrap-up activities and compile documentation for all aspects of the systems design, development, and implementation phases of the SDLC. [EXPLORE]