

**CENTER FOR APPLIED INFORMATION TECHNOLOGY
TOWSON UNIVERSITY**

AIT 610: Systems Development Process

Credit Hours: 3

Prerequisite: Admission to CAIT certificate programs

Course Description: The topics in this course include: the principles of the Systems Development Life Cycle (SDLC) including analysis, design and implementation of information systems. Students will receive practical instruction on project planning, requirements gathering, systems design principles, security, data modeling, application development and deployment techniques. Discussions of modeling tools, quality assurance, and development environments will also be included.

Learning Objectives:

1. Perform full analysis of information systems in the context of the system lifecycle various approaches
2. Acquire skills in gathering, analysis, and synthesis of information leading to the functional and performance requirements for an information system
3. Gain familiarity with tools and methodologies and their application throughout the information systems life cycle
4. Develop logical and physical designs for large-scale information systems
5. Plan the implementation, testing, evaluation, and maintenance of new information systems
6. Understand and integrate quality assurance into system development process
7. Acquire skills in evaluating, summarizing, and presenting recommendations to management or clients

Suggested Textbooks:

1. Dennis, A., Wixom, B. H., and Roth, R. M., *System Analysis & Design*, Third edition, John Wiley & Sons

Other References/Journals:

IEEE Software
IEEE Transactions on Software Engineering
Communications of the ACM
Information Systems Management
Decision support Systems
Management Science
Management Information System Quarterly