

**CENTER FOR APPLIED INFORMATION TECHNOLOGY
TOWSON UNIVERSITY**

AIT 600: Information Technology Infrastructure

Credit Hours: 3

Prerequisite: Admission to CAIT certificate programs

Course Description: This course will include a discussion and survey of enterprise-information system architectures including software systems, hardware, operating systems, databases, component technologies, networking, architecture patterns, and Unified Modeling Language (UML). Discussions will include the review of case studies of Information Technology systems. An introduction to the Systems Development Process, including the analysis, design, development, implementation, and post-implementation phases will also be provided.

Learning Objectives:

1. describe and understand the significance of different kinds (viewpoints) and levels of enterprise systems and architectures
2. explain the components (software, hardware, and networks) that comprise an enterprise system
3. describe and understand IT Infrastructure, IT Infrastructure Maintenance and Management
4. use the UML to effectively describe enterprise architectures
5. explain software and architectural design patterns
6. identify the tradeoffs involved in the design, development, and maintenance of enterprise systems

Suggested Textbooks:

1. Britton, C., *IT Architectures and Middleware: Strategies for Building Large, Integrated Systems*, Addison-Wesley
2. Eriksson, H. et al., *UML2 Toolkit*, Wiley

Other references/journals:

Communication of the ACM
Information Systems Management
Decision Support Systems
Management Science
Management Information System Quarterly