Common Syllabus AIST 3610

Course Description

Information system analysis and design activities and artifacts are explored from the perspective of a technical business analyst. Working within a standard development framework, the course includes coverage of the documentation and modeling of system requirements as well as the testing of a system's conformance with requirements. Database modeling is also explored from an analyst's perspective. Multiple modern software development frameworks are surveyed.

Principal Learning Outcomes

- Students understand the processes by which new information systems are created or existing systems are modified.
- Students grasp the distinctions among the variety of modern systems development (e.g., line of business applications, software as a product or service for sale, existing system maintenance or upgrade, custom development, software package implementation).
- Students develop an understanding of the variety of software development approaches (e.g., waterfall, agile, iterative) and related techniques including how and when they might be best applied.
- Students understand the role of a business analyst in the system development process.
- Students are able to create structured, high level business requirements from unstructured case study or interview documentation.
- Students can gather and analyze the information necessary to make decisions as to whether a software project is feasible and reasonable to pursue.
- Students are able to model business and system level requirements using a variety of standardized diagrams.
- Students are able to document user requirements using industry-standard techniques.
- Students are able to transform system and user requirements into simple user interface prototypes.
- Students are able to document system test plans using industry-standard techniques.
- Students can gather system data requirements and design high-level relational database models to fulfill these requirements.