AIT 641: Software Requirements Engineering
Credit Hours: 3
Prerequisite: AIT 624

Course Description: This course introduces the basic concepts and principles of software requirements engineering. The course is designed to expose students to common tools and techniques, established methods for modeling software systems and various approaches to requirements engineering (structured, object oriented and formal). In essence, the course intends to cover in its entirety the process of requirements engineering.

Learning Objectives:

1. Understand and describe the role of requirements engineering within the software development life cycle
2. Describe, compare, and evaluate the different approaches to requirements modeling
3. Develop a plan and conduct a requirements definition activities for a software system
4. Apply analysis techniques such as needs analysis, goal analysis, and use case analysis
5. Review, inspect and validate requirements according to criteria such as feasibility, clarity, freedom from ambiguity, etc.
6. Negotiate among different stakeholders in order to agree on a set of requirements

Bibliography:

1. Robertson, Mastering the Requirements Process, 3rd edition, Pearson