Course Profile - Department of Information Technologies

Course Number : IT 322	Course Title : Information Systems Analysis and Design				
Required / Elective: Required	Pre / Co-requisites : -				
Catalog Description: System development life cycle, systems analysis, overview of architectures, systems design, system implementation, tools for analysis and design. Term project.	Textbook / Required Material : Systems Analysis and Design Kendall & Kendall, Prentice Hall, 7 th Ed. ISBN-13: 978013 157986-6				

Course Structure / Schedule: (3+0+2) 4 / 8 ECTS

Extended Description: The overall goal of this course is to provide students with foundational knowledge and skills about analysis and design of an information systems. The course is amied at knowing and applying concepts, approaches, methods, models and techniques for information systems development. Special emphasis will be on modeling activities in the lab by using object oriented modeling language (UML) and environment (MS Visio).

Design content : modeling different aspects of an information system	Computer	omputer usage: learning computer-based				
	modeling	envrionm	ient, of	fice	tools	for
of all information system	requirements analysis					

Course Outcomes::

- 1. Understand fundamental ideas and concepts for information systems analysis and design (ISAD) [2, 3]
- 2. Augment how to use appropriate methods, approaches to analysis and design [2, 3]
- 3. Understand and practice contemporary techniques for ISAD [2, 3, 5]
- 4. Exercise the use of analysis and design models for different aspects by using UML in the context of ISAD [2,5]
- 5. Capable to make sense of differences among SDLC and OO (Object oriented) approach and models [2, 3]
- 6. Aware of practical issues related to ISAD and contextualize them from underlying perspectives [2,8]

Program Outcomes for Management Information Systems Program:

- 1. A foundation in mathematics and basic sciences and ability to apply acquired knowledge as they relate to the study and practice of information systems management.
- 2. An ability to align information technology, organizational and strategic matters.
- 3. An ability to propose, analyze, design, develop, test and maintain an information technology system including software solutions, security model, computer and network infrastructure, etc. to solve information systems problems.
- 4. An ability to analyze local and global impact of computing on individuals, organizations and society; and the ability to apply information systems techniques, skills, and tools for regular computing practices as well as to improve effectiveness of current methodologies.
- 5. An ability to effectively communicate in oral and written media with all kinds of related audiences; and prepare documentation for this purpose as required.
- 6. An understanding of professional, ethical, legal, and social issues and responsibilities of information systems management profession.
- 7. A taste and breadth of knowledge across several social topics outside the immediate requirements of the information systems management profession, and the ability to work within heterogeneous teams to accomplish a common goal including people from the information systems area as well as other disciplines.
- 8. An ability to engage in life-long learning and professional development for personal improvement to follow contemporary information systems issues.

Teaching methods

Case work, Pre-readings, lectures, small projects, quizzes, individual assignments

Assessment methods

1 Midterm exam 20% 2 quizzes 14%

1 requirements analysis and design report 5%

Lab assignments 26% Final 35%.

Student workload:

Preparatory reading 48 hrs
Lectures, workshop, discussions 42 hrs
Lab and lab assign 26 hrs
Report Preparation 50 hrs
Quizzes 20 hrs
Midterm 5 hrs
Final Exam 9 hrs
AL 200 hrs

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