CPIS-352 Syllabus

Catalog Description

CPIS-352 IS Applications Design and Development
Credit: 3 (Theory: 3, Lab: 2, Practical: 0)
Prerequisite: CPIS-351
Classification: Department Required

The objective of this course is to explore the design, selection, implementation, and management of enterprise IT solutions. The focus is on applications and infrastructure and their fit with the business. Topics include frameworks and strategies for infrastructure management, system administration, data/information architecture, content management, distributed computing, middleware, legacy system integration, system consolidation, software selection, total cost of ownership calculation, IT investment analysis, and emerging technologies. These topics are addressed both within and beyond the organization, with attention paid to managing risk and security within audit and compliance standards. Students also hone their ability to communicate technology architecture strategies concisely to a general business audience.

Class Schedule

Lab/Tutorial 90 minutes 1 times/week

Meet 50 minutes 3 times/week or 80 minutes 2 times/week

Textbook

Marc Lankhorst et al., "Enterprise Architecture at Work", Springer; 2nd Edition edition (2009)

ISBN-13 9783642013096   **ISBN-10** 3642296505

Grade Distribution

Week	Assessment	Grade %
3	Homework Assignments 1	2.5
4	Quiz 1	2.5
6	Exam 1	15
7	Homework Assignments 2	2.5
11	Exam 2	15
12	Quiz 2	2.5
14	Group Project	20
16	Exam	40

Last Articulated

April 4, 2018

Relationship to Student Outcomes

a	b	c	d	e	f	g	h	i	j
	x	x	x				x	x	x

Course Learning Outcomes (CLO)

By completion of the course the students should be able to

1. Utilize the core concepts and key terminologies of TOGAF (i)
2. **Compare contemporary Enterprise Architecture frameworks like TOGAF, ZIFA, E2AF, DoDAF and EAP (j)**
3. **Articulate the foundational elements of Enterprise Architectures i.e. Enterprise Continuum, Building Blocks, Artifacts, Deliverables (j)**
4. Utilize Enterprise Architecture concepts and practices (j)
5. Articulate how enterprise architecture supports the strategic objectives of businesses (h)
6. Demonstrate the use of Architecture Development Method cycle and the objectives of each phase, and how to adapt and scope the ADM (c)
7. **Apply the core concepts of data/information architecture and evaluate existing data/information architecture designs (j)**
8. Observe the use of Enterprise Continuum; its purpose, and its constituent parts (b)
9. Describe and discuss the benefits and risks of service oriented architecture (j)
10. **Identify views, viewpoints, stakeholders etc in Information systems and ADM and their role in communication (b)**
11. Represent how each phase of the ADM contributes to the success of enterprise architecture (i)
12. Describe a variety of frameworks for enterprise architecture analysis and decision making (h)
13. **Use architectural modelling tools and relate models with real business problems (c)**
14. Demonstrate how Architecture Governance contributes to the Architecture Development Method life cycle (j)
15. Determine the integration of emerging technologies for the architecting trends (h)
16. Define the role of audit and compliance in enterprise architecture (d)

Coordinator(s)

Dr. Muazzam Siddiqui, Associate Professor

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Topics Coverage Durations

Topics	Weeks
Introduction : Explanation of What is, Why do I need an Enterprise, Enterprise Architecture, Architecture Framework	1
EA and Other Governance Instruments, Trends in Enterprise Architecture and Data Center Environments adoptive to businesses	2
Methods and Frameworks, The Architecture Development Method cycle (ADM)	2
What are Deliverables, Artifacts, Building Blocks, Enterprise Continuum and Repository all about, Description Languages	1
Dimensions of Architectural Modeling	1
Viewpoints and Visualization	2
The Architecture Development Method (ADM)	2
Architecture Alignment	2
Information Systems Architectures, Architecture Governance, Architecture Process	2