CPIS-357 Syllabus

Catalog Description

CPIS-357   Software Quality and Testing
Credit: 3 (Theory: 3, Lab: 1, Practical: 0)
Prerequisite: CPIS-334 , CPIS-250
Classification: Department Required

The objective of this course is to study the significance of quality during the process of developing software. Topics include the basic concepts of software quality assurance during all the stages of software development process and quality standard systems used in the field of software industry and Information Systems.

Class Schedule

Lab/Tutorial 90 minutes 1 times/week

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

Textbook

Roger S. Pressman, , "Software Engineering: A Practitioner's Approach", McGraw-Hill Science/Engineering/Math; 7 edition (2010)

ISBN-13 9780073375977   **ISBN-10** 0073375977

Grade Distribution

Week	Assessment	Grade %
1	Graded Lab Work 1	1
2	Graded Lab Work 2	1
3	Graded Lab Work 3	2
4	Quiz	5
5	Graded Lab Work 4	2
6	Graded Lab Work 5	1
6	Homework Assignments	5
7	Graded Lab Work 6	1
8	Exam 1	15
8	Graded Lab Work 7	2
9	Graded Lab Work 8	1
10	Graded Lab Work 9	2
11	Graded Lab Work 10	2
11	Exam 2	15
13	Project (Individual)	15
16	Comprehensive Final Exam	30

Last Articulated

February 11, 2018

Relationship to Student Outcomes

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

Course Learning Outcomes (CLO)

By completion of the course the students should be able to

1. Define software quality and software quality assurance (c)
2. Describe software quality and cost (c)
3. Apply software reviews (a)
4. Describe elements of software quality assurance (c)
5. **Use statistical software quality assurance (c)**
6. Describe software testing strategies (a)
7. **Classify verification and validation (i)**
8. Define software test case (a)
9. **Compare conventional application testing techniques (i)**
10. **Conclude object oriented application testing techniques (i)**
11. Define the concept of testing web applications (c)
12. **Express web applications testing techniques (i)**
13. Describe software configuration management (a)
14. Describe software configuration management process (a)

Coordinator(s)

Prof. Syed Haider, Professor

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Topics Coverage Durations

Topics	Weeks
Quality Concepts	2
Software Review Techniques	1
Software Quality Assurance	2
Software Testing Strategies	2
Testing Conventional Applications	2
Testing Object Oriented (OO) Applications	1
Testing Web Applications	2
Software Configuration Management	2
Discussion and Revisions	1