

## Course Syllabus

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| <b>1. Program of Study<br/>Faculty/Institute/College</b> | Bachelor of Business Administration Program<br>Mahidol University International College  |
| <b>2. Course Code<br/>Course Title</b>                   | ICIS 483<br>Software Engineering   |
| <b>3. Number of Credits</b>                              | 4 (Lecture/Lab) (4-0-8)  |
| <b>4. Prerequisite(s)</b>                                | ICIS 210, ICIS 382, ICIS 388, ICIS 482   |
| <b>5. Type of Course</b>                                 | Required Course  |
| <b>6. Trimester / Academic Year</b>                      | First, Third Trimester/2007-2008   |
| <b>7. Course Conditions</b>                              | 20-40 students   |
| <b>8. Course Description</b>                             | <p>A study of software engineering methodologies and technologies useful for developing quality and cost-effective software. Focuses on the engineering of programming systems products. Topics include current problems in software development, time management, cost estimation models, growth dynamics, software reliability models and models of program testing.</p>             |
| <b>9. Course Objective(s)</b>                            | <p>After successful completion of this course, students will be able to</p> <ul style="list-style-type: none"><li>9.1 To understand the role of software engineering processes in managing complexity for large scale software development projects.</li><li>9.2 To be able to effectively plan and organize a project in term of its size, phases and technical approaches.</li></ul> |

## 10. Course Outline

Week	Course Outline				Instructor
	Topics	Lecture	Lab	Self-Study	
1	Software Engineering General	4	0	8	SAP
2	Managing software projects	4	0	8	SAP
3	Managing software projects	4	0	8	SAP
4	CMM	4	0	8	SAP
5	Software Requirement	4	0	8	SAP
6	System Engineering	4	0	8	SAP
7	Software Analysis	4	0	8	SAP
8	Software Design	4	0	8	SAP
9	Software Testing	4	0	8	SAP
10	Software Maintenance	4	0	8	SAP
11	Software Engineering Review	4	0	8	SAP
	<b>Total</b>	<b>44</b>	<b>0</b>	<b>88</b>	

## 11. Teaching Method(s)

Lecture and discussion with lab exercises

## 12. Teaching Media

Handouts

Computer software (hands on learning)

## 13. Measurement and Evaluation of Student Achievement

Students achievement is measured and evaluated by

- 13.1 The ability to understand the role of software engineering processes in managing complexity for large scale software development projects.
- 13.2 The ability to effectively plan and organize a project in term of its size, phases and technical approaches.

Student's achievement will be graded according to the faculty and university standard using the symbols: A, B+, B, C+, C, D+, D, and F.

Student must have attended at least 80% of the total class hours of this course.

Ratio of mark

1. Midterm 20%
2. Final 30%

3. Project	20%
4. Quizzes	10%
5. Assignments	10%
6. Attendance	5%

**14. Course Evaluation**

- 14.1 Students' achievement as indicated in number 13 above.
- 14.2 Students' satisfaction towards teaching and learning of the course using questionnaires.

**15. Reference(s)**

Pressman, R.S. **Software Engineering: A Practitioner's Approach**, 5th Edition, McGraw-Hill.

**16. Instructor(s)**

Sattar Puangpathanachai

**17. Course Coordinator**

Program Director of Information Systems Major