COURSE SYLLABUS

SUBJECT: INTRODUCTION TO SOFTWARE ENGINEERING

1. General information

- Website: https://courses.ctda.hcmus.edu.vn, Nhập môn Công nghệ Phần mềm, giáo viên Nguyễn Minh Huy phụ trách.
- Lecturer:
    - M.S. Nguyễn Minh Huy, Department of Software Engineering, Faculty of Information Technology, University of Science, VNU-HCM.
    - Email: nmhuy@fit.hcmus.edu.vn, subject: [Id]-[Course name]-[Topic].
    - Office hour: room I82, Department of Software Engineering, 227 Nguyễn Văn Cừ.

2. Course description

This course is to introduce to students basic concepts, principles, and practices of software engineering. Students will learn different types of software process models, such as Water Fall, RUP, Agile, etc. Main phases and roles in software process will be discussed. Student will have chances to practice writing software specifications, architecture & design models, test plans, etc. Students will also use tools and technologies to build practical software project in team.

3. Course objectives

At the end of this course, students could:

- Explain basic concepts in software engineering: software, software process, software quality, software engineering as a career.
- Differentiate between software process models: Water Fall, Spiral, RUP, Agile, ...
- Describe phases and roles in software development process.
- Produce software project documents: SRS, Software Architecture & Design, Test Plan.
- Use tools and technologies in supporting to software development.
- Practice teamwork skills in practical software project.

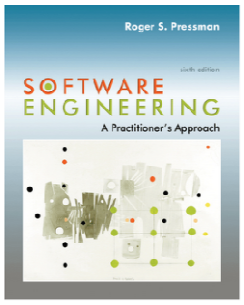
4. Assessments

Assessment	Percentage	Description
Quiz & Exercises • Quiz • Exercises	**20%** 10% 10%	 Before each class session (ZERO if miss > 2 submissions). After each class session (ZERO if miss > 2 submissions).
Development Project	**40%**	Follow software process to build a practical software. Teamwork (3-4 students), submission in stages: • Project Proposal. • SRS. • Architecture & Design. • Test Plan. • Executables, source code, updated documents. ZERO if miss >= 1 submission.
Final Exam	**40%**	Long writing test.
Bonus	**10%**	Add 2% for each active in class.

5. Policies

- Students are encouraged to walk-through slides and textbook chapter before classes.
- Students do development project in group of 3-4 students.
- Cheating in course receives FAIL grade.
- Late submission assignments or project artifacts receive HALF marks.
- Others: follow policies of the Faculty.

6. Textbook and references

No.	Cover	Book
1		Software Engineering, 9th Edition, Ian Sommervile, Addison Wesley, 2010.
2		Software Engineering, A Practitioner's Approach, 5th Edition, Pressman, McGraw-Hill, 2001.

7. Course Plan (11 weeks)

Week	Topic	Classroom Activities	Project Activities
1	Introduction to Software Engineering	- Exercise: Career Path.	
2	Software Process	- Quiz: Chapter 2. - Exercise: Roles & Process.	- Submit Project Registration.
3	Software Project Management	- Quiz: Chapter 22. - Exercise: Project Proposal.	
4	Software Requirements	- Quiz: Chapter 4. - Exercise: Requirements Analysis.	- Project Meeting 1.
5	Software Modeling	- Quiz: Chapter 5. - Exercise: Software Models.	- Submit Project Proposal.
6	Software Tools	- TA seminar.	
7	Software Architecture	- Quiz: Chapter 6. - Exercise: Architecture Model.	- Submit SRS. - Project Meeting 2.
8	Software Design	- Quiz: Chapter 7. - Exercise: Design Models.	
9	Software Development Technologies	- TA seminar.	- Submit Architecture & Design. - Project Meeting 3.
10	Software Testing	- Quiz: Chapter 8. - Demo Unit Test. - Exercise: Test Case.	
11	Final Review		- Submit Test Plan.