

SOFTWARE PROJECT MANAGEMENT

1. Thông tin về học phần (General Information)

Tên học phần (Course name): Software Project Management

Mã học phần (Course code): INT1450

Số tín chỉ (Number of credits): 3

Loại học phần (Course type): Compulsory

Học phần tiên quyết (Prerequisites):

Học phần song hành (Parallel courses):

Các yêu cầu đối với học phần (Course requirements):

- Lecture room: Projector, microphone and speaker, air conditioner.
- Laboratory:

Giờ tín chỉ đối với các hoạt động (Teaching and Learning hours):

- Lý thuyết (Lectures): 36h
- Bài tập (Exercises): 0h
- Bài tập lớn (Projects): 9h
- Thực hành (Labs): 0h
- Tự học (Individual reading): 0h

Địa chỉ Khoa/Bộ môn phụ trách học phần (Address of the Faculty/Department in charge of the course):

- Address: Faculty of Information Technology 1 - Posts and Telecommunications Institute of Technology, Km10, Nguyen Trai Street, Ha Dong District, Hanoi.
- Phone number: (024) 33510432

2. Mục tiêu học phần (Objectives)

Về kiến thức (Knowledge):

The aim of this course is to provide knowledge of software project management, including software development processes, roles of members and groups as well as responsibility in organizing, managing and developing a software project to learners.

Kỹ năng (Skills)

The aims of this course are to equip learners with skills in:

- Teamwork
- Problem solving
- Presentation
- Management

Thái độ, Chuyên cần (Attitude):

3. Tóm tắt nội dung học phần (Description)

The course provides learners the knowledge of software project management and applications that is an essential knowledge for software engineers. The course includes the first chapter of overview, followed by 9 chapters relating to knowledge areas of software management: role of project manager, planning and project integration management, project

scope management, project scheduling management, project cost management, project risk and change management, project resource management, project communication management and control, project quality management, and ends up with the final phase in the chapter 11st.

On completion of this course learners will be able to manage development processes of software as well as toward be able go further to get a project management professional (PMP) certification if the learners will have experienced more real projects after the course.

4. Nội dung chi tiết học phần (Outlines)

Chapter 1 Overview

- 1.1 Course Introduction
- 1.2 Project Management (PM) Fundamentals
- 1.3 The PM field and job market
- 1.4 People, process, product, technology
- 1.5 Classic mistakes
- 1.6 PMI processes
- 1.7 Software project phases
- 1.8 Organizational structures

Chapter 2 Role of the project manager

- 2.1. Overview of project manager
- 2.2. Role of project manager
- 2.3. Project manager's skill and influence

Chapter 3 Planning and project integration management

- 3.1. Development lifecycle to projects
- 3.2. Initiation and planning
- 3.3. Project integration management
- 3.4. Project charter and statement of work

Chapter 4 Project scope management

- 4.1. Overview of scope management
- 4.2. Work breakdown structure
- 4.3. Estimation

Chapter 5 Project scheduling management

- 5.1. Project scheduling fundamentals
- 5.2. Scheduling techniques including network diagram
- 5.3. Compression techniques

Chapter 6 Project cost management

- 6.1. Budgeting
- 6.2. Project selection
- 6.3. NPV, ROI, payback analysis models

Chapter 7 Project risk and change management

- 7.1. Risk management
- 7.2. Change control
- 7.3. Configuration management

Chapter 8 Project resource management

- 8.1. Roles in project team
- 8.2. Team models
- 8.3. Team development

8.4. Leadership

Chapter 9 Project communication management and control

9.1. Project stakeholder management

9.2. Status reporting

9.3. Project metrics

9.4. Earning value analysis

9.5. Communication Techniques

Chapter 10 Project quality management

10.1. Quality management by project testing

10.2. Quality management by quality assurance officers activities

Chapter 11 Final phases and other issues

11.1. Project success

11.2. Documentation

11.3. Migration to new systems

11.4. Post project reviews and closing

5. Học liệu (Textbooks)

5.1. Học liệu bắt buộc (Required Textbooks)

[1] A guide to the project management body of knowledge (PMBOK® Guide), Sixth Edition, Project Management Institute, 2017

[2] Lecture Note in software project management, version 1.2, Nguyen Quynh Chi, Posts and Telecommunications Institute of Technology, 2018

5.2. Học liệu tham khảo (Optional Textbooks)

[3] Mulcahy, Rita. PMP Exam Prep (9th Edition), RMC Publishing, 2019

6. Phương pháp, hình thức kiểm tra – đánh giá kết quả học tập học phần (Grading Policy)

Grading method	Percentage	Group/Individual
Attendance	10%	Individual
Projects	30%	Group
Final examination	60%	Individual

**Trưởng Bộ môn
(Head of Department)**

Phạm Văn Cường

**Giảng viên biên soạn
(Lecturer)**

Nguyễn Quỳnh Chi