

MANAGEMENT OF INFORMATION SECURITY

1. Thông tin về học phần (General Information):

Tên học phần (Course name): Management of information security

Mã học phần (Course code): INT14106

Loại học phần (Course type): Tự chọn (Elective)

Học phần tiên quyết (Prerequisites):

Học phần trước (Previous courses):

Học phần song hành (Parallel courses):

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

- Lecture room: Projector

- Laboratory: LAN computers with Virtual machine running Linux/Windows Server

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

- Lý thuyết (Lectures): 32h

- Bài tập (Exercises): 0h

- Bài tập lớn (Projects): 8h

- Thực hành (Labs): 5h

- 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: Khoa Công nghệ Thông tin 1 - Học viện Công nghệ Bưu chính Viễn thông, Km10, Nguyễn Trãi, Hà Đông, Hà Nội
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 students with basic knowledge of information security management, including basic principles for building and managing information security solutions; common security standards as well as Vietnamese and international information security laws and policies; common methods for identifying, assessing and minimizing safety risks; methods to perform security operations and handle security incidents.

Kỹ năng (Skills):

After completing the course, students master the comprehensive knowledge of information security management. Students are capable of planning and developing information security programs for specific systems. Also, the students can identify and assess risks and apply risk control strategies; are able to develop procedures to operate and maintain systems securely and to respond appropriately to security incidents.

Thái độ, Chuyên cần (Attitude):

Students are required to attend at least 80% of lectures during the course and actively participated in discussions on given topics. Also, students must fulfill lab exercises and project at the end of the course.

3. Tóm tắt nội dung học phần (Abstract) (5- 6 dòng)

The course of information security management provides basic knowledge and presents practical issues in developing and managing information security solutions to meet security requirements of given organizations. In particular, the course presents common security standards including domestic and international information security legislation under which security measures should be followed or adapted. In addition, the course also introduces methods to identify and assess risks to minimize the impact of information security gaps. Finally, the course outlines the principles and measures that make it possible to operate the system securely, as well as to maintain continuous operation and how to respond to security incidents.

4. Nội dung chi tiết học phần (Outlines)

Chapter 10. Overview of information security management

- 10.1. Introduction
- 10.2. Security policies and laws
- 10.3. Principles of information security management
- 10.4. Organizations of information security management

Chapter 11. Legal system of information security in Vietnam and other countries

- 11.1. Legal and policy requirements
- 11.2. Vietnamese laws on security of information
- 11.3. Legal information security systems of other countries
 - 11.3.1. US Laws
 - 11.3.2. European Laws
 - 11.3.3. Laws in the region

Chapter 12. Information security standards

- 12.1. International standards on information security
 - 12.1.1. ISO / IEC
 - 12.1.2. NIST
- 12.2. Vietnamese information security standards

Chapter 13. Information security management system

- 13.1. Security framework
- 13.2. Risk management
- 13.3. Risk identification, analysis and assessment
- 13.4. Strategies for risk control
- 13.5. Risk control practices

Chapter 14. Management of security operation

- 14.1. Principles of security operation
- 14.2. Configuration management
- 14.3. Control of equipment and data
- 14.4. Management responsibilities

Chapter 15. Business continuity and incident response

- 15.1. Principle of business continuity and incident response
- 15.2. Develop business continuity plans

15.3. Incident recovery strategy

15.4. Test and update the plan

Project and assignment. Students are assigned a small project and work with a group of 4 persons

- Project requirements and guidelines is presented at the beginning of the course
- Project outcomes are revised in the middle of the course
- Project results are presented and graded at the end of the course

Lab exercise.

Students are required to complete Lab exercises under the provision and guidance of the lecturer

5. Học liệu (Textbooks)

5.1. Học liệu bắt buộc (Required Textbooks)

[1] Michael E. Whitman, Herbert J. Mattord, *Roadmap to Information Security: For IT and Infosec Managers*, Delmar Publishers Inc., 2011.

5.2. Học liệu tham khảo (Reference Textbooks)

[2] Quốc hội Việt Nam, Luật Công nghệ thông tin (67/2006/QH11), 12/07/2006.

[3] Quốc hội Việt Nam, Luật An toàn thông tin mạng (86/2015/QH13), 19/11/2015

[4] Quốc hội Việt Nam, Luật An ninh mạng (24/2018/QH14), 12/6/2018

[5] Michael E. Whitman and Herbert J. Mattord, *Management of Information Security*, Course Technology, Cengage Learning, 2010.

[6] Michael E. Whitman, Herbert J. Mattord, *Principles of information security, 4th edition*, Course Technology, Cengage Learning, 2012.

[7] Sari Greene, *Security Policies and Procedures Principles and Practices*, Prentice Hall, 2005.

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

Hình thức kiểm tra (Grading method)	Tỷ lệ đánh giá (Percentage)	Đặc điểm đánh giá (Group/Individual)
- Attendance	10%	Individual
- Mid-term exams	10%	Individual
- Project and Assignment	20%	Group or Individual
- Final examination	60%	Individual

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

**Giảng viên biên soạn
(Lecturer)**

Hoàng Xuân Dậu

Phạm Hoàng Duy