

General Information:

Name of Course:

INFORMATION SECURITY 2.

Course Code:

IVB166ANMI

Semester:

6th

Number of Credits:

4

Allotment of Hours per Week:

2 Lab classes /Week

Evaluation:

Semester grade

Prerequisites:

Information Security 1.

Instructor:

Gábor GYURÁK, assistant lecturer

Office: H-7624 Pécs, Boszorkány u. 2. Office N° B-213B

Office hours: Tuesday 08:00-09:00

E-mail: gyurak@mik.pte.hu

Introduction, General Course Description:

In this project-oriented subject, students will be given the opportunity to deepen their knowledge of IT security while developing their soft skills.

Learning Objectives:

Students who successfully complete this course will have a comprehensive overview of Information Security.

This course has 4 pillars:

- (1) (**ONLINE**) Students acquire IT security related topics via online courses provided by the instructor. This part covers the following topics: Management plane security, Control Plane Security, Data Plane Security, Firewalls, Intrusion Detection Systems, Authentication, Authorization, Audit, VPN technologies (access, site-to-site).
- (2) (**PROJECT**) The second pillar covers teamwork when students form groups and solve problems together. The documentation of their work is essential.
- (3) (**HOMEWORK**) At the beginning of the course the student choose an IT security related project. The instructor will be the supervisor of this work. The project work must be an independent work and must show some engineering product or scientific result. The format of the documentation is fixed and equals to the diploma work format.
- (4) (**EXPERIENCE**) Students have to take part in programs outside of the University. This programs are organized by industrial partners and coordinated by the instructor. *In a pandemic situation this pillar is suspended!*

Methodology:

- **Practical class:** will give an introduction of planning, building, programming, operating and troubleshooting secure IT systems.

Schedule:

Week	Topic	OUT	IN	IN2
1	CMS registration			
2	Management Plane Security	P1		
3	Certificates		P1	
4	Secure Socket Layer	P2		P1
5	Data plane security (Firewall)		P2	
6	L2 security	P3		P2
7	Access Virtual Private Network		P3	
8	Site-to-site Virtual Private Network	P4		P3
9	Intrusion Detection Systems		P4	
10	<i>Break, no classes</i>			
11	Homework defence			P4
12	Homework defence			
13	Homework defence			
14	TEST			
15	RETAKE TEST			

Attendance:

Unexcused absences will adversely affect the grade, and in case of absence from more than 30% of the total number of lesson will be grounds for failing the class. To be in class at the beginning time and stay until the scheduled end of the lesson is required, tardiness of more than 20 minutes will be counted as an absence. In the case of an illness or family emergency, the student must notify the lecturer as soon as possible and must present a valid excuse, such as a doctor's note.

Evaluation + Grading:

The course grade is determined as a combination of study-period performance.

Student must complete these parts:

- work with online materials and complete a test based on these materials
- solve and present the four projects (P1, P2, P3, P4)
- solve and defend the homework (HW)

Final grade is calculated:

- P1 5 points (minimum 2 points)
 - P2 5 points (minimum 2 points)
 - P3 5 points (minimum 2 points)
 - P4 5 points (minimum 2 points)
 - HF 30 points (minimum 10 points)
 - ZH 50 points (minimum 20 points)
- 100 points

All exams and tests are closed-book and closed-notes. Any students who do not take the examination at the scheduled time will receive a zero score.

Grade:	5	4	3	2	1
Evaluation in percent:	85%-100%	75%-84%	65%-74%	51%-64%	0-50%

PTE Grading Policy:

Information on PTE's grading policy can be found at the following location:

www.pte.hu

Students with Special Needs:

Students with a disability and needs to request special accommodations, please, notify the Deans Office. Proper documentation of disability will be required. All attempts to provide an equal learning environment for all will be made.

Readings and Reference Materials:

1. William Stallings, Lawrie Brown - Computer Security Principles And Practices (2nd edition), Pearson, 2011.
2. Randy Weaver - Guide to Tactical Perimeter Defense: Becoming a Security Network Specialist, Cengage Learning, 2007.