COURSE UNIT DESCRIPTION

Course unit title	Course unit code
Information Security Management	**ISAV7124**

Lecturer(s)	Department where the course unit is delivered
Coordinator: dr. Gintaras Skersys **Other lecturers:**	Department of Computer Science II Faculty of Mathematics and Informatics Vilnius University

Cycle	Type of the course unit
Second	Optional

Mode of delivery	Semester or period when the course unit is delivered	Language of instruction
Face-to-face	2nd semester	Lithuanian English

Prerequisites
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Number of ECTS credits allocated	Student's workload	Contact hours	Individual work
5	125	48	77

Purpose of the course unit: programme competences to be developed

Generic competences to be developed

- Ability for abstract thinking being critical and self-critical, ability to analyze, process, and evaluate information *(MB2)*,
- Ability to identify and resolve problems *(MB5)*.

Subject-specific competences to be developed

- Ability to design, build, and specify IT services/systems having chosen the suitable infrastructure *(MD2)*,
- Ability to apply technologies in practice and ability to evaluate technologies, their evolution, and trends *(MD3)*,
- Ability to evaluate architectures of information systems (technologies and applied methods) *(MD4)*,
- Ability to combine principles of information and data security *(MD7)*.

Learning outcomes of the course unit	Teaching and learning methods	Assessment methods
Ability to understand the importance of information security management, to define its goals and problems.	Lectures, reading of literature, analysis of examples during lectures and individually, project.	Examination. Project report and defence. Participation in discussions.
Ability to analyse the security risks of an information system, to assess them, and to propose measures to reduce them		
Ability to formulate the documents of organization's security policy, according to security standards.		
Ability to apply organizational incident management, business continuity measures.		
Ability to apply information system security monitoring and reliability assessment measures.		

Course content: breakdown of the topics	Contact hours						Individual work: time and assignments	
	Lectures	Tutorials	Seminars	Laboratory work	Internship/work placement	**Contact hours**	**Individual work**	**Assignments**
1. The basic notions of information security, security threats and attacks	4					**4**	**6**	Reading of literature or lecture slides, analysis of examples, and preparation of project.
2. Security risk analysis, assessment and management	2		1			**3**	**5**	
3. Organization's security policy, security standards, information security management system	10		5			**15**	**24**	
4. Access control	4		2			**6**	**10**	
5. Organizational security measures, incident management, business continuity planning	6		4			**10**	**16**	
6. Information system security monitoring and reliability assessment	6		4			**10**	**16**	
Total	**32**		**16**			**48**	**77**	

Assessment strategy	Weight %	Deadline	Assessment criteria
Written examination	60	Exam session	The clear expression of ideas in written, the quality of answers, well-grounded and correct solution of exercises, could be evaluated up to 6 points
Project	30	During the semester	The logical justification of the solution, the fulfilment of the technical requirements, the level of eloquence and presentation, could be evaluated up to 3 points
Participation in discussions	10	During the semester	Active evaluation, criticism, additions to presentations of projects prepared by other students, up to 1 point

Author	Publishing year	Title	Issue No or volume	Publishing house or Internet site
Required reading				
M. Bishop	2005	Introduction to Computer Security		Addison-Wesley
C. P. Pfleeger and S. L. Pfleeger	2007	Security in Computing, 4th Edition		Prentice Hall
S. Purser	2004	A Practical Guide to Managing Information Security		Artech House
A. Mikalauskienė, Z. Brazaitis	2010	Security of Information Systems (Informacinių sistemų sauga, n Lithuanian)		VU leidykla
G. Skersys	2011	Information Security (Informacijos sauga, in Lithuanian)		TEV
Optional reading				
H. F. Tipton, M. Krause (Editors)	2010	Information Security Management Handbook, 2010 CD-ROM Edition		CRC Press
D. Gollmann	2006	Computer Security, Second Edition		John Wiley and Sons
O. Vasilecas, A. Čenys, S. Sosunovas, N. Goranin	2008	Security of Informatio Systems (in Lithuanian)		Technika