

**FACULTY OF SOCIETY AND SCIENCE
STUDY COURSE DESCRIPTION**

Course Title:	Smart Technologies and Data Security				
Course code (LAIS):	DatZ5012				
Study programme:	Business Environment Administration				
Level of Study programme:	<input type="checkbox"/>	1st level professional higher education			
	<input type="checkbox"/>	Professional Bachelor			
	<input checked="" type="checkbox"/>	Professional Master			
	<input type="checkbox"/>	Academic Master			
	<input type="checkbox"/>	PhD level			
Type of Study programme:	<input type="checkbox"/>	Compulsory course (Part A)			
	<input type="checkbox"/>	Professional specialization courses (Part B, compulsory)			
	<input checked="" type="checkbox"/>	Professional specialization optional courses (Part B, optional)			
	<input type="checkbox"/>	Elective courses (Part C)			
Course Workload:	Credits	ECTS	Academic hours	Contact hours	Independent work hours
	2	3	80	24	56
Course Author/ Tutor:	Agris Krusts				
	Sociālo zinātņu maģistrs vadībzinātnē				
	e-mail: agris@krusts.ch				
	Consultation: according to the schedule for each semester				
Study Form:	Full time studies				
Study year, semester:	Year 1., Semester 2				
Language:	Latvian				
Prerequisites for the Course:	General computer user skills				
Course Summary:	The aim of the course is to teach basics of data security including smart devices and Internet of things.				
Assessment:	Examination				
Requirements for Credits:	Practical work and exam:				
	<ul style="list-style-type: none"> - Practical work will make up 30% of the assessment - The exam will be evaluated in a 10-point system. (makes up 70% of the assessment). Student 's individual and auditorium work will be evaluated in 10 grades system regarding the following specific criteria: Outstanding (10) – 96-100% have been acquired, knowledge, skills and competence exceeds requirements stated for individual work in auditorium and at home and participation in study course seminars; Excellent (9) – 85-95% have been acquired, knowledge, skills and competence fully corresponds to requirements stated for individual work in auditorium and at home and participation in study course seminars; Very good (8) – 75-84% have been acquired, there are completed all requirements for individual work in auditorium and at home and participation in study course seminars but level of knowledge, skills and competence does not fully corresponds to required level; Good (7) – 65-74% have been acquired, there are completed all basic requirements for individual work in auditorium and at home and participation in study course seminars but individual skills of practical use of acquired knowledge must be improved; Almost good (6) – 55-64 % have been acquired, there are completed basic requirements for individual work in auditorium and at home and participation in study course seminars but student has no broader understanding of subject and his/her ability to use theory in practice is sometimes insufficient for complex cases; Satisfactory (5) – 45-54 % have been acquired, there are completed minimal level of requirements for individual work in auditorium and at home and participation in study course seminars but student has no complete understanding of core subject and his/her ability to use theory in practice is insufficient in specific cases; Almost satisfactory (4) – 35-44 % have been acquired, there are completed minimal level of requirements for individual work in auditorium and at home and participation in study course seminars but student has difficulties with understanding of core subject and his/her ability to use theory in practice is insufficient in many cases; Bad (3) – 25-34 % have been acquired, the proven knowledge of student is under the minimal level of requirements for individual work in auditorium and at home and				

	<p>participation in study course seminars, student has difficulties with understanding of subject and his/her ability to use theory in practice is insufficient in the most cases; Very bad (2) – 15-24 % have been acquired, student understand just some separate parts and concepts from subject, the proven knowledge of student is under the critical level of requirements for individual work in auditorium and at home and participation in study course seminars, student has completed just some parts from study course topics; Very, very bad (1) –0-14 % have been acquired, student does not understand any basic concepts of subject, the proven knowledge of student is under the critical level of requirements for individual work in auditorium and at home and participation in study course seminars, student has completed almost none from study course topics; Not graded (0) – student registered for this course but formally did not attend it.</p>	
Abiding by the Academic Ethics	<p>Students must abide by the academic and research ethics, Vidzeme University of Applied Sciences Ethics Regulations, incl.:</p> <ul style="list-style-type: none"> – study papers must be independently developed; – the study work should reference all statements, ideas and data used that have been authored by someone else; – appropriate data acquisition methods should be used in the acquisition of data, the research ethics must be respected, empirical data must be collected independently and cannot be distorted or falsified; – the examination must be carried out by the student independently, without the use of supporting materials and/or consultations with other students, unless the lecturer states otherwise. <p>In the event of non-compliance with the academic and research ethics, punishment is imposed in accordance with the ViA Ethics Regulations and the study course must be re-taken, unless the punishment is exmatriculation.</p>	
Learning Outcomes; the evaluation methods and criteria	Learning Outcomes	The evaluation methods and criteria
	Knowledge Data security and cyber security in organizations; Data security and legislation; What is social engineering; What is risk assessment and why it is needed; Data security in everyday life; Privacy ; What are the smartphone and case internet? What benefits can smart devices use; Risks related to using the Internet of smart devices and gadgets	Exam
	Skills Risk assessment for daily work; How to protect information and communication everyday; Ability to choose the right tools for data protection; Use of public sources of information and freely available tools for privacy and data protection assessment	Practical work
	Competency Ability to use information technologies, including smart devices and the Internet, safely in everyday life; Risk evaluation for information technologies	Practical work
Course Compulsory literature:	1.Schneier on Security, Bruce Schneier, Hardcover: 336 pages, Publisher: Wiley; 1 edition (September 29, 2008), Language: English, ISBN-10: 0470395354, ISBN-13: 978-0470395356	
Course additional literature:	1. The Art of Invisibility: The World's Most Famous Hacker Teaches You How to Be Safe in the Age of Big Brother and Big Data, Kevin Mitnick, 320 pages, Publisher: Little, Brown US (27 April 2017), Language: English, ISBN-10: 0316380504, ISBN-13: 978-0316380508 2. The Art of Deception. Controlling the Human Element of Security, Kevin Mitnick,	

	<p>368 pages, Publisher: Wiley; 1 edition (October 17, 2003), Language: English, ISBN-10: 076454280X, ISBN-13: 978-0764542800</p> <p>3. Social Engineering: The Art of Human Hacking, Christopher Hadnagy, ISBN: 978-0-470-63953-5, Dec 2010, 416 pages</p> <p>4. Schneier on Security, Bruce Schneier, Hardcover: 336 pages, Publisher: Wiley; 1 edition (September 29, 2008), Language: English, ISBN-10: 0470395354, ISBN-13: 978-0470395356</p> <p>5. Data and Goliath. The Hidden Battles to Capture Your Data and Control Your World, Bruce Schneier, 448 pages, Publisher: W. W. Norton & Company; 1 edition (February 8, 2016), Language: English, ISBN-10: 039335217X, ISBN-13: 978-0393352177</p> <p>6. Red Team. How to Succeed by Thinking Like the Enemy, Micah Zenko, 336 pages, Publisher: Basic Books; 1 edition (November 3, 2015), Language: English, ISBN-10: 0465048943, ISBN-13: 978-0465048946</p> <p>7. Cyberspies. The Secret History of Surveillance, Hacking, and Digital Espionage, Gordon Corera, 448 pages, Publisher: Pegasus Books; 1 edition (August 15, 2017), Language: English, ISBN-10: 1681774593, ISBN-13: 978-1681774596</p> <p>8. The Perfect Weapon. War, Sabotage, and Fear in the Cyber Age, 384 pages, Publisher: Crown (June 19, 2018), Language: English, ISBN-10: 0451497899, ISBN-13: 978-0451497895</p>
Course confirmation date:	06.01.2020.
Date of course description update:	02.06.2021.

Study Course Plan:

Date	Theme	Academic hours		Study Form/ Organization of independent work of students and task description
		Contact hours	Independent work hours	
<i>The date is specified before the implementation of the course</i>	What is data security and cybersecurity, goals of data security	1		Lecture
	Organization of data security in organizations and privately	1	4	Lecture, workshop
	Legislation and data security, General data protection regulation, risk assessments	2	4	Independent work
	Practical work on risk assessment		4	Independent work
	Workshop on risk assessment	2		Workshop
	Smart devices and Internet of things	1	4	Lecture
	Privacy	1		Lecture
	Independent work on searching the information on the Internet		8	Independent work
	Seminar on searching the information on the Internet	2		Workshop
	Data security and data availability	1	4	
	Introduction to data networks and security	1		Lecture
	The impact of the computers and smart devices on privacy	1	4	Lecture, workshop
	Privacy of information: authentication, password management, encryption	3	4	Lecture, workshop

Independent work on data encryption, privacy on computers and authentication		8	Independent work
Workshop on data encryption, privacy protection on the Internet and authentication	2	4	Lecture, workshop
Privacy risks and methods of protection, the importance of metainformation	2	4	Lecture, workshop
Social engineering	2	4	Lecture, workshop
Exam	2		
Hours total:	24	56	