CYBERSECURITY FUNDAMENTALS, MODULE 4 - S Y L A B U S

Code module		Name module	CSIRTs and CERTs
Department			
Field of study			
Form of study			
Level of study			
Profile			
Status of the module			
Person responsible for the module			
Module instructors			

Form of classes	Lectures	Workshop	
Number of hours/sem	6	14	
Semester(s)		ECTS credits	
Status		Language teaching	
Prerequisites		no	

Learning objectives
Security incidents, cyber-attacks and ICT-related crimes in the real and virtual worlds are becoming more serious and their consequences and effects are getting worse. There is a growing need to improve the defence against these attacks and, in particular, to improve the environment and means of tracking down the perpetrator, to standardise and formalise procedures and to educate users on how to identify, deal with and, ideally, prevent threats and risk situations. To this end, an infrastructure of security teams such as CERTs and CSIRTs is being built. The aim of the course is to familiarise students with these security teams, their functioning, hierarchy, accreditation process,

the possibility of sharing data and information, etc.

Learning outcome	The student who successfully completes the module will know/be able to competent in
KNOWLEDGE	
W1	The student will gain information on the historical development of security teams operating in the Internet environment. The student will be familiar with the roles of the different safety teams and the legal basis for their operation.
W2	The student will gain information on the historical development of security teams operating in the Internet environment. The student will be familiar with the roles of the different safety teams and the legal basis for their operation.
SKILLS	
U1	Understands the functioning of security teams such as CERT and CSIRTs, learn about their structure and the links between the teams.

U2	Understanding the issue of incident handling.		
COMPETENCES			
K1	He will be able to act as a member of the safety team.		

Methods of verifying learning outcomes									
Learning outcome	**Forms of activity**								
	Oral examination	Written examination	Partial written assignment	Final task written (essay)	Test	Design/presentation	Report	Classroom activities	Other ...
NEWS									
W1		x	x		x			x	
W2		x	x		x			x	
SKILLS									
U1						x		x	
U2						x		x	
COMPETENCES									
K1						x		x	

Criteria for assessing student competence
The minimum requirements for the three groups of learning outcomes that the Student must achieve in order to pass the subject are presented below in synthetic form. In order for the Student to pass the module, all learning outcomes described in the syllabus must be positively verified by the person(s) teaching the module.

W - KNOWLEDGE
Assessment:
Satisfactory - Student remembers and reproduces the knowledge to be mastered within the module Good - Student
additionally interprets phenomena / problems and is able to solve a typical problem
Very good -Student is able to solve even complex problems in a given field, is able to synthesise, carry out a comprehensive evaluation, create a work that is original and inspiring to others.

U - SKILLS
Assessment:
Satisfactory - The student knows the nature of the activities and is able, under the guidance of the academic teacher, to carry out activities / solve problems related to the content of the module
Good - Student is able to independently carry out activities / tasks / solve typical problems related to the content of the module
Very good - The student has fully mastered the ability / skill to perform the activities / tasks / problems provided for in the module content, also in more complex cases.

K - SOCIAL COMPETENCE
Assessment:
Satisfactory - Student passively assimilates module content, demonstrating ability to concentrate and listen
Good - Student actively participates in classes, makes value judgements according to criteria accepted in the given field, is able to cooperate actively in a group
Very good - The student integrates the attitude according to the proposed model, develops his/her own system of professional and social values, is able to take responsibility for the actions of the group, including leadership.

Content of the module (programme of lectures and other activities)	Reference to effects learning
LECTURES 1. Safety team (tasks, roles, processes, etc.) 2. CERTs and CSIRTs (structure, hierarchy) 3. Legal anchoring of CERTs and CSIRTs (rights and commitments) 4. Rights and responsibilities of safety teams 5. Incident handling (IH)	W1, W2 U1, U2, K1

6. IH open source analysis
  7. Data and information transfer capabilities
WORKSHOPS
  1. Analysis of the need for a safety team in the organisation
  2. Definition of individual assets and SWOT analysis in relation to them
  3. Creating and integrating the safety team into the organisation - adopting rules and policies
  4. Simulation of a cyber incident or event against an organisation
  5. Incident management
  6. Analysis of the measures taken
  7. Sharing information with others	

ECTS credit balance	
Form of the workload student	Number of hours
Number of hours with direct participation of academic teacher	

1.1	Participation in lectures	6
1.2	Participation in seminars	
1.3	Participation in workshops	14
1.4	Participation in laboratory activities	
1.5	Participation in projects	
1.6	Participation in consultations (2-3 times per semester)	
1.7	Participation in the project consultation	
1.8	Participation in examinations/tests	2
1.9	Other ...	
1.10	**Number of hours performed with direct participation academic teacher (sum of 1.1 - 1.9)**	22
1.11	**Number of ECTS credits obtained by the student in classes requiring direct participation of an academic teacher)**	1,5

Individual student work		
2.1	Individual studies (including e-learning lectures)	8
2.2	Individual preparation for workshops	12
2.3	Individual test preparation	
2.4	Individual preparation for laboratory classes	
2.5	Preparation of reports	
2.6	Implementation of self-performed tasks (projects, documentation)	
2.7	Preparation for the final examination/tests of the workshop	10
2.8	Preparation for final examination/testing of lectures	15
2.9	Other	
2.10	**Number of hours of individual work (sum of 2.1 - 2.9)**	45
2.11	**The number of ECTS credits obtained by the student from the individual teaching**	2,5

Total workload (h)	67
ECTS credits for the module	**4**