UNIVERSITY OF ŽILINA

Description of the study programme
Source: SAAVŠ

Name of the higher education institution: Faculty of Security Engineering
Address of the higher education institution: Univerzitna 8215/1, Žilina
Identification number of the higher education institution: 3.
Name of the faculty: Faculty of Security Engineering
Address of the faculty: Univerzitna 8215/1, Žilina

Institution body for approving the study programme: UNIZA Accreditation Board
Date of the study programme approval or the study programme modification: 31.8.2022
Date of the latest change[1] in the study programme description: -

1.	**Basic information about the study programme**			
a	**Name of the study program**	**Security Management EN**	**Number according to the register of study programmes**	**103706**
b	**Degree of higher education**	**3.**	**ISCED-F education degree code**	864
c	**Place(s) of delivery of the study programme**	**1.mája 32, 010 26 Žilina, Univerzitná 8215/1, Žilina**		
d	**Name of the field / Combination of two fields of study**	Safety and Security Sciences	**Number of the field of study**	**9205V00**
			ISCED-F codes of the field/fields	
e	**Type of the study programme**	academically oriented		
f	**Awarded academic degree**	philosophiae doctor		
g	**Form of study**	full-time		
h	**Cooperating institutions and the range of study obligations the student fulfils at each of the given institutions**	**We do not cooperate with another university in this study program.**		
i	**Language or languages in which the study programme is delivered**	**English**		
j	**Standard length of the study expressed in academic years**	*3 years*		
k	**Capacity of the study programme (planned number of students)**	1.grade: 3 2.grade: 3 3.grade: 3 4.grade:		
	Actual number of applicants	See "Evaluation report on the level of educational activities at FBI UNIZA".		

[1] *If the change is not a modification of the study programme according to § 30 of Act no. 269/2018 Coll.*

		https://www.uniza.sk/index.php/component/content/article/5133-hodnotenie-urovne-fakulty-vo-vzdelavacej-cinnosti-a-v-oblasti-vedy-a-techniky-na-fbi?catid=2:uncategorised&Itemid=101
	Actual number of applicants and students	See "Evaluation report on the level of educational activities at FBI UNIZA". https://www.uniza.sk/index.php/component/content/article/5133-hodnotenie-urovne-fakulty-vo-vzdelavacej-cinnosti-a-v-oblasti-vedy-a-techniky-na-fbi?catid=2:uncategorised&Itemid=101

2.	**Graduate profile and learning objectives**	
a	**Learning objectives of the study programme such as student's abilities at the time of completion of the programme and the main learning outcomes**	The profile of a graduate of the **doctoral degree studies** in the study programme Security Management (hereinafter referred to as the "graduate") is based on the Long-Term Plan of the University and the Faculty in the field of education and research aimed at **protecting people, property and information**. The graduate is able to formulate a scientific problem, scientific questions and a scientific hypothesis on the basis of knowledge of the highest level of development in a given area of ??security. He/she can apply methods of theoretical and empirical research with the subsequent use of exact methods, in order to increase knowledge of theoretical and applied research in **Safety and Security Sciences**. He/she extends the theoretical framework in the field of security by creating a general **theory of safety and security sciences** with a focus on security management and creating new approaches and **procedures within security management systems, risk management systems and new and innovative proposals for preventive measures** of managerial, technical and technological nature in the social, technical and natural environment. In order to increase the level of protection of persons, property and information, he/she is able to design new procedures for **designing and assessing the resilience, vulnerability and effectiveness of strategic object protection systems** from intentional anthropogenic threats. He/she can develop new ways to **increase the efficiency and effectiveness of crime prevention** in municipalities and cities. Using experimental methods, he/she is able to **increase the efficiency and reliability of the elements of alarm systems.** Using non-standard procedures to overcome **mechanical defence means** and subsequent static and dynamic **evaluation of their resilience**, he/she is able to design procedures to increase them. Using a combination of methods of exact assessment, investigation of the causes, courses and consequences of negative technical phenomena and the application of **forensic research**, he/she is able to design new ways to increase the protection of persons and property against anthropogenic threats. The graduate is able to present his/her own research results to the professional public at conferences and scientific events and in the form of publishing papers in professional journals. The results of creative experimental work not only contribute to the development of science and scientific knowledge, moreover their proper scientific value allows their application in various areas of security. **Knowledge** K.1 The graduate can formulate a scientific problem, scientific questions and a scientific hypothesis. He/she masters exact methods (stochastic and deterministic methods) and methods of theoretical and empirical research with a focus on security issues. K.2 The graduate masters the highest level of development in the world in the field of integrated management systems focused on security in an organization. K.3 The graduate masters the highest level of development in the world in the field of design and evaluation of resilience, efficiency, vulnerability and effectiveness of strategic object protection systems.

		K.4 The graduate masters the highest level of development of forensic sciences and forensic engineering and their application for the needs of forensic evidence and increasing security. K.5 The graduate knows the exact decision-making methods and procedures for evaluating the effectiveness, reliability and resilience of technical elements of personal and property protection systems. K.6 The graduate masters the methods of exact assessment and analysis of negative phenomena and the application of forensic research to increase the protection of persons and property. K.7 The graduate masters the specifics of academic language ranging from vocabulary, grammar through reading, listening to speaking and written expression. He/she masters the essence of basic language as well as soft skills. **Skills** S.1 The graduate formulates, elaborates and presents his/her own research results to the professional public at conferences and scientific events and in the form of publishing papers in professional journals. S.2 The graduate applies methods of theoretical research (induction, deduction, analysis, synthesis, comparison, etc.) and empirical research (e.g. measurement, experiment, interview, brainstorming, etc.) in the safety and security sciences in order to increase theoretical knowledge in the safety and security sciences. S.3 The graduate applies exact methods (stochastic and deterministic methods) in order to increase theoretical knowledge in the safety and security sciences. S.4 The graduate develops and designs new methodological procedures and tools within security management systems. S.5 The graduate develops and designs new methodological procedures and tools within the systems of protection of persons and property. S.6 The graduate proposes conceptual changes to the requirements of the international, national legal framework and the normative and institutional framework applicable to selected areas of security related to the protection of persons, property and information. S.7 The graduate tests the technical security elements of the system of protection of persons, property and information for the purpose of research, development and production of new security elements and technologies. S.8 The graduate applies software tools to support research and development. S.9 The graduate teaches at higher education institutions where study programmes in the field of study Safety and Security Sciences are provided. **Competences** K.1 Ability to make decisions and take responsibility as a security manager K.2 Organization and planning of work within security research K.3 Ability to present their opinions K.4 Analytical thinking in security research K.5 Creativity in security research K.6 Strategic and conceptual thinking in security research The Matrix of the learning objectives and learning outcomes *Learning objective* *Ability to pursue the profession of a university teacher, researcher or senior executive in one of the areas of protection of persons, property and information (security in an organization, physical and object security, information security).*

Learning outcomes		*LO1: Outcome Knowledge*	*LO2: Outcome Skill*	*LO3: Outcome Competence*
1st year	System and Operational Analysis	*K.1*	*S.3*	*C.1, C.3, C.4*
	Probability and Statistics	*K.1*	*S.3*	*C.1, C.3, C.4*
	Methodology of Scientific Work	*K.1*	*S.1*	*C.1, C.2, C.3, C.5*
	Academic English I.	*K.7*	*S.1, S.9*	*C.2, C.3, C.5*
	Academic English II.	*K.7*	*S.1, S.9*	*C.2, C.3, C.5*
	Dissertation Project I.	*K.1, K.2, K.3*	*S.2, S.3, S.4, S.5, S.6, S.7, S.8*	*C.1, C.2, C.4, C.6*
	Scientific and Publishing Activities I.	*K.1, K.2, K.3*	*S.1*	*C.1, C.3, C.5*
	Integrated Management System	*K.2, K.5*	*S.2, S.3, S.4*	*C.1, C.3, C.4*
	Modelling and Simulation of Object Protection Systems	*K.3, K.5*	*S.3, S.5, S.8*	*C.1, C.3, C.4*
	Critical Infrastructure Protection and Resilience Theory	*K.3, K.5*	*S.2, S.3, S.5*	*C.1, C.3, C.4*
	Reliability and Efficiency of Technical Systems for the Protection of Persons and Property	*K.3, K.5*	*S.2, S.3, S.5*	*C.1, C.3, C.4*
	Technical Safety of Buildings	*K.3, K.5*	*S.2, S.3, S.5*	*C.1, C.3, C.4*
	Valuation of Buildings	*K.4, K.6*	*S.2, S.3, S.5*	*C.1, C.3, C.4*
	Technical Diagnostics	*K.4, K.6*	*S.2, S.3, S.5*	*C.1, C.3, C.4*
	Determination of the Value and Amount of Damage to Technical Means	*K.4, K.6*	*S.2, S.3, S.5*	*C.1, C.3, C.4*
	Technical Analysis of Traffic Incidents	*K.4, K.6*	*S.2, S.3, S.5*	*C.1, C.3, C.4*
	Methodology of Expert Experiment	*K.4, K.6*	*S.2, S.3, S.5*	*C.1, C.3, C.4*
2nd year	Dissertation Examination	-	*S.4, S.5, S.6*	*C.3*
	Foreign Scientific-Research Internship	-	*S.2, S.3, S.4, S.5, S.6, S.7, S.8*	*C.1, C.2, C.3*
	Scientific and Publishing Activities II.	*K.1, K.2, K.3*	*S.1*	*C.1, C.3, C.5*
	Dissertation Project II.	*K.1, K.2, K.3*	*S.2, S.3, S.4, S.5, S.6, S.7, S.8*	*C.1, C.2, C.4, C.6*
3rd year	Scientific and Publishing Activities III.	*K.1, K.2, K.3*	*S.1*	*C.1, C.3, C.5*
	Dissertation Project III.	*K.1, K.2, K.3*	*S.2, S.3, S.4, S.5, S.6, S.7, S.8*	*C.1, C.2, C.4, C.6*
	Elaboration and Defence of the Dissertation Thesis	-	*S.4, S.5, S.6*	*C.3*

b	**Indicated professions for which the graduate is prepared at the time of completion and the potential of the study programme from the point of view of graduate's employability**	The third degree of study focuses on a narrower specialization and deepening of theoretical and scientific knowledge of professional training in the field of protection of persons, property and information. The graduates of the study programme find employment at all universities where study programmes in the field of Safety and Security Sciences are provided, either as university teachers or as researchers. Thanks to acquaintance with a wide range of knowledge and practical laboratory skills, the graduates find employment in various positions of organizational units, such as the Ministry of Interior of the Slovak Republic, the Ministry of Transport and Construction of the Slovak Republic, the Ministry of Investment, Regional Development and Informatization of the Slovak Republic, The Police Force, National Security Authority, Slovak Information Service, National Security Analytical Centre, Cybersecurity Competence and Certification Centre, in particular in streamlining the increase in the level of protection of persons, property and information. In the private sector, they work as researchers, developers and experts in organizations involved in calls for domestic and foreign grant schemes (e.g. Horizon Europe – Secure Societies, DG Migration and Home Affairs, DG for European Civil Protection and Humanitarian Aid Operations, Security Research of the Ministry of the Interior of the Czech Republic, Technology Agency of the Czech Republic). They can also be employed as research, development and professional staff in organizations focused on research, development and production of new security technologies or in organizations performing tests and certification of elements of protection systems. **Security specialist in research and development** The security specialist in research and development is responsible for activities related to research and development and their application in practice. It searches the current state of knowledge in the relevant security domain, applies research methods and techniques, performs mathematical modeling of analyzed problems using appropriately selected software tools, analyzes the results obtained and compares these with the results of experimental measurements. Designs and puts into practice experimental approaches to problem solving. The security specialist in research and development individually or in a group designs and leads research activities related to technological development in the security sciences. It comes up with new proposals for the solution of already functioning and standardized procedures, processes and technological equipment or technological units. It implements specific activities related to the identification of research objectives, its planning, implementation and evaluation for the purposes of technological development in the field of security sciences. An example of a specialist in research and development is: https://www.sustavapovolani.sk/register-zamestnani/pracovna-oblast/karta-zamestnania/10108-specialista-elektrotechnik-vo-vyskume-a-vyvoji/
c	**Relevant external stakeholders who have provided the statement or a favourable opinion on the compliance of the acquired qualification with the sector-**	Name of the Institution: Asociace technických bezpečnostních služeb Grémium Alarm z. s. Opinion of (date):5.1.2022 Statement: Ing. Václav Nepraš, The President of the Association Name of the Institution: G4S Technology Solutions (SK), s.r.o. Opinion of (date):10.1.2022 Statement: Patrik Muhar, manager

	specific requirements for the profession	Name of the Institution: TSS Group, a. s. Opinion of (date):13.1.2022 Statement: Ing. Ivan Žiak, authorized person Name of the Institution: Cluster kybernetickej bezpečnosti Opinion of (date):22.12.2021 Statement: Ing. Ján Lichvár, cluster chairman Name of the Institution: Coca-Cola HBC Česko a Slovensko, s.r.o. Opinion of (date):10.1.2022 Statement: Mgr. Marek Pour, Business Resilience Manager CZ/SK Name of the Institution: Kompetenčné a certifikačné centrum kybernetickej bezpečnosti Opinion of (date):17.1.2022 Statement: Ing. Bc. Ivan Makatura, CRISC, CDPSE

3.	**Employability**	
a	**Evaluation of the study programme graduates employability**	The graduates of the study programme find employment at higher education institutions/universities where they provide programmes in the field of study Safety and Security Sciences, either as university teachers or as researchers (e.g. Armed Forces Academy of General Milan Rastislav Štefánik, the University of Security Management in Košice, Academy of the Police Force in Bratislava, the University of Security Management in Košice, Technische Hochschule Ingolstadt, Hochschule München, Westsächsische Hochschule Zwickau). The graduates find employment in various positions of the armed security forces or organizational units of the state administration (e.g. The Police Force, National Security Authority, Prison and Court Guard Service) and local self-government (e.g. the Local Municipality of the town Rajec). They are also employed as researchers, developers and specialists in security research and development organizations (e.g. Siemens, ABBAS, p.l.c., VUJE, a.s., DEKRA Slovakia Ltd., Ingenierbüro Schimmelpfennig + Becke, Sachverständigenbüro Priester & Weyde, Berlin). They hold the positions of top security managers responsible for physical, object or information security (e.g. Václav Havel Airport Prague, Prima banka Slovensko, p.l.c., National Motorway Company, p.l.c., Asseco Central Europe, p.l.c., International Society of Automation, Witty s.r.o Prague, STV GROUP p.l.c., Prague). Last but not least, they are used in law firms, consulting and auditing companies. Due to the relatively low number of graduates, the applicability of doctoral graduates is not monitored through questionnaires and statistical surveys but it is implemented and recorded directly at the department through personal contacts with graduates. The profile department has information about the practical application of its graduates.
b	**Successful graduates of the**	Name and surname: Ing. Michaela Spankova, PhD.

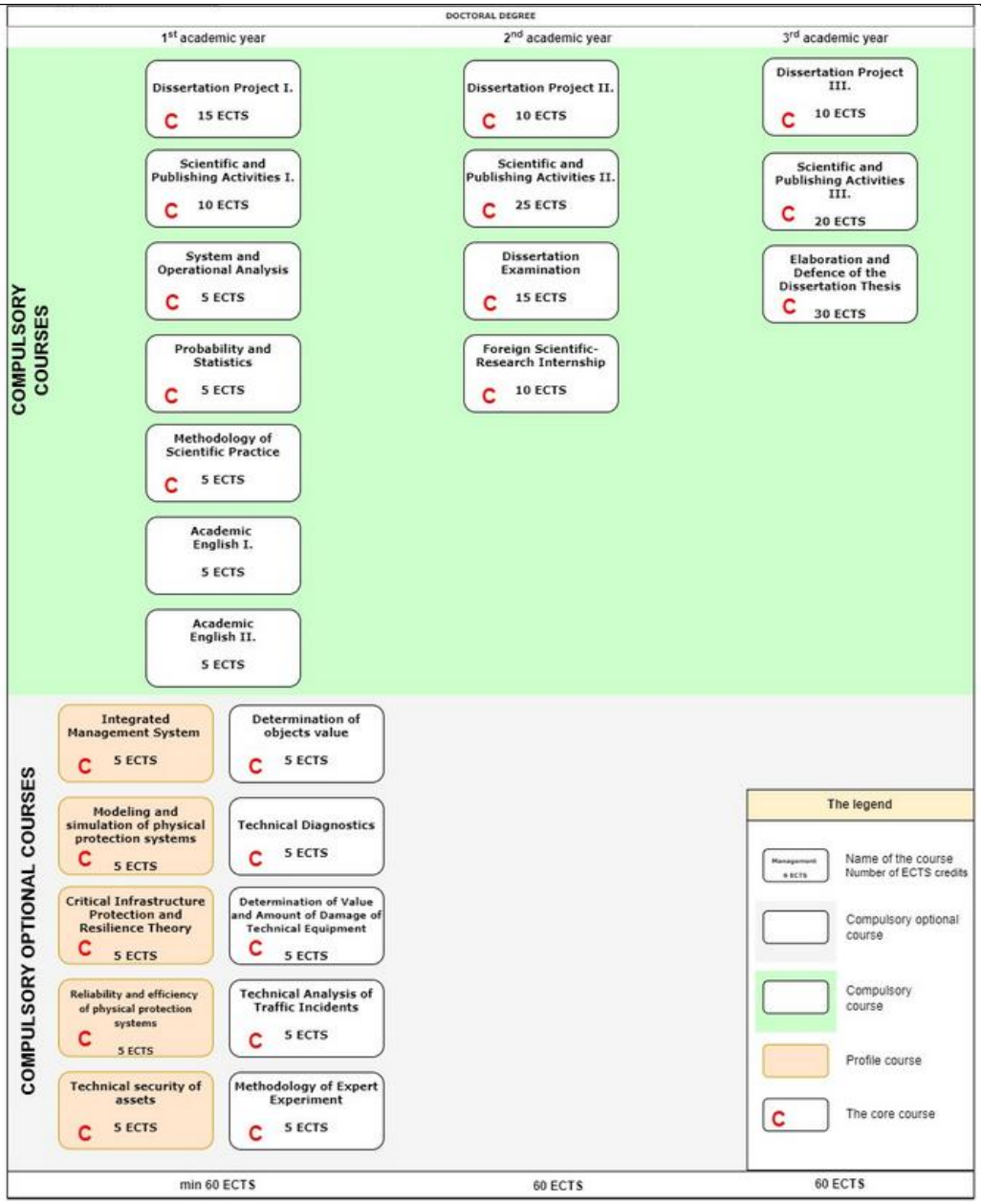
	study programme	Company name (job position): Criminalistics and Expertise Institute PZ Bratislava - expert of dactyloscopic identification of persons Name and surname: Ing. Nina Molovčáková, Ph.D. Company name (job position): Okresné riaditeľstvo Policajného zboru v Žiline / Oddelenie kriminálnej policie - investigator Name and surname: Ing. Matej Bernik, PhD. Company name (job position): Okresné riaditeľstvo Policajného zboru v Žiline / Oddelenie kriminálnej policie - investigator Name and surname: Ing. Ladislav Kittel, PhD. Company name (job position): Siemens s.r.o., Žilina, Reliability / Availability / Maintainability / Safety Manager Name and surname: Ing. Juraj Vaculík, Ph.D. Company name (job position): VUJE a.s., Trnava, Head of Security and Crisis Management Name and surname: Ing. Peter Janus, PhD. Company name (job position): STOPKRIMI, s.r.o., Žilina - manager Name and surname: Ing. Milan Kutaj, PhD. Company name (job position): WITTY, s.r.o., Praha - IT Specialist Name and surname: Ing. Martin Durovec, PhD. Company name (job position): Aligra, s. r. o., Žilina - Project manager Name and surname: Ing. Jan Jasenovec, Ph.D. Company name (job position): Mestský úrad Rajec - head of office Name and surname: Mgr. Marian Magdolen, PhD. Company name (job position): General Affairs, s.r.o., manager Name and surname: doc. Ing. Dagmar Vidriková, Ph.D. Company name (job position): National Highway Company, Bratislava - Head of the Safety Management Department Name and surname: Ing. Michal Peňaška PhD. Company name (job position): Prima banka, a.s., Žilina - administrator, Security Department Name and surname: Ing. Matus Ivanco, PhD. Company name (job position): Abbas, Brno Name and surname: Ing. Roman Kmet, PhD. Company name (job position): JUMA, s.r.o., Trenčín, bezpečnostný špecialista Name and surname: Ing. Peter Ďurech, PhD. Company name (job position): Ministry of Defense of the Slovak Republic Name and surname: Ing. Martin Halaj, PhD. Company name (job position): Václav Havel Airport, Prague

		Name and surname: Ing. Filip Lenko, PhD. Company name (job position): DOKAM s.r.o. - administrative worker Name and surname: Ing. Anton Šiser, Ph.D. Company name (job position): National Security Office, Bratislava Name and surname: Ing. Frantisek Kaluza, PhD. Company name (job position): Asseco Central Europe, a.s. Name and surname: Ing. Ľubomíra Sokolová, Ph.D. Company name (job position): University of Žilina in Žilina, person responsible for personal data protection Name and surname: dr Łukasz Kister, MBA Company name (job position): International Society of Automation, Poland
c	**Evaluation of the study programme quality by employers (feedback)**	During their studies, students complete a foreign research internship via the Erasmus+ programme or the National Scholarship Programme (e.g. SSS Europe (Germany), Coca-Cola HBC, the Czech Republic, Prague, BALJAK CZECH ltd., Prague, LeeLosch GmbH, Ebelsbach, Special Service International ltd., Prague, EUROSAT CS co., Brno, PROCUSYS j.s.c., Prague), where after its completion, the responsible employee of the organization prepares a written evaluation of the student, which also includes an evaluation of the acquired knowledge, skills and competencies resulting from the graduate profile. Employers' representatives take part in the final state examinations, either as a member of the examination commission or in the position of opponents of the final theses. Students, during or after the completion of their doctoral degree studies, participate in departmental research tasks (e.g. of the Ministry of the Interior of the Slovak Republic, the National Security Authority, the Office of the Government of the Slovak Republic), or research tasks of business entities or non-profit entities (e.g. Dopravní podnik hl. m. Prahy (Prague Public Transit Company), Continental Matador Rubber, Ltd., Stredoslovenská distribučná a.s., Národná diaľničná spoločnosť (National Motorway Company), F.S.C. Bezpecnostni poradenstvi, a.s. (F.S.C. Security consultancy, join stock company), TRANSMISSION LINES PROJECTS, ltd., Prague, VUJE, a.s., GLOBSEC).

4.	**Structure and content of the study programme [2]**
	Rules for the design of study plans within the study programme
a	When creating study plans in the study programme, the Faculty applies the policies, structures, and processes defined at the level of the University by the Directive No. 203 – Rules for the Creation of Recommended Study Plans for UNIZA Study Programmes, the Directive No. 204 – Rules for the Creation, Modification, Approval and Cancellation of Study Programmes at the University of Žilina in Žilina, the Directive No. 216 – Quality Assurance of the Doctoral Degree Studies at the University of Žilina in Žilina and the Directive No. 110 – Study Regulations for the Third Degree of the University Study at the University of Žilina in Žilina and Organizational Rules and Rules of Procedure of the Departmental Field Commission of the Field of Study Security Sciences. The study plan is elaborated within the specified rules and in accordance with the study regulations (the Directive No. 110) by the supervisor (tutor) in cooperation with the student. The study plan of the doctoral study is developed as an individual study plan. The content and structure of individual study plans reflect the activities, knowledge and skills formulated in the accreditation file of the respective study programme. In order to ensure

[2] *Selected characteristics of the content of the study programme can be stated directly in the Course information sheets or supplemented by the information of the Course information sheets.*

	their fulfilment, requirements and criteria are defined in the study plan, the fulfilment of which is subject to regular inspection. The study plan consists of a study part, which ends with a dissertation examination, a scientific part and the defence (viva) of the dissertation. The study part of the study plan consists mainly of participation in lectures, seminars and individual study of scientific literature in individual years of study according to the focus of the dissertation. The individual study plan states: • a list of courses, including a professional foreign language in the scope of two semesters, which the doctoral student is to complete; • a list of dissertation examination courses selected from a list approved by the departmental field commission; • a list of mandatory and recommended literature to be studied by the doctoral student in the individual preparation for the dissertation examination. The individual study plan of the doctoral student also contains the dates on which the doctoral student is to pass the individual courses and the dissertation examination. The scientific part of the study plan consists of individual or team scientific work of the doctoral student which is related to the topic of the dissertation. The scientific part of the doctoral student's study plan is professionally guaranteed by the supervisor. An integral part of the doctoral student's activities prescribed in the study plan is the active participation of the doctoral student in international conferences, especially those indexed in international databases (WOS, SCOPUS) and publication in scientific journals. The doctoral student's study plan also includes the obligation to publish the results obtained during the study, which are related to the topic of the dissertation, in at least one impact journal, which has an assigned quartile of at least Q3 in Web of Science or at least Q2 in the SCOPUS database. An inseparable part of the doctoral student's activities in the part-time form of study is the active participation of the doctoral student in a foreign stay of at least two months or one semester. The supervisor submits the individual study plan for approval to the chairman of the working group of the departmental field commission, who then submits it for approval to the members of the working group of the departmental field commission. The individual study plan must be elaborated in such a way that by completing it the doctoral student meets the conditions for the proper completion of study within the standard length of study of the given study programme.
b	**Recommended study plans for individual study paths**
	The recommended study plan is a schedule of the standard length of study. It is elaborated so that by completing it, the student meets the conditions for the proper completion of the studies in the standard length. **The student's recommended workload ranges from 1,500 to 1,800 hours per academic year, which means that one ECTS credit corresponds to 25 to 30 hours of work.** **The recommended study plan must enable the student to elaborate his/her study plan in such a way that during the study he/she completes all compulsory courses and the prescribed share of compulsory optional courses so that during the study he/she obtains at least 180 ECTS credits in the doctoral degree studies.** **The specific rules for the creation of recommended study plans are regulated by the Directive No. 203 "Rules for the Creation of Recommended Study Plans for UNIZA Study Programmes".** **<u>The study programme scheme:</u>**



c, e	**The study programme, in the structure of compulsory, compulsory optional and optional courses Profile courses of the relevant study path (specialization) within the study programme**
	-
d	**Number of credits, the achievement of which is a condition for proper completion of studies**
	180
	Other requirements that the student must meet within the study programme and for its proper completion, including the requirements for state examinations, rules for re-study and rules for the extension, interruption of study
	At the level of the University, the policies, structures, and processes are defined by the Directive No. 110 – Study Regulations for the Third Degree of the University Study at the University of Žilina in Žilina. Conditions during the study: The conditions during the study are tied to obtaining ECTS credits for the completion of specialized doctoral lectures and seminars based on the study plan, successful completion of the dissertation examination, pedagogical activities of up to 4 hours per week in the full-time form of study; in the part-time form of study

there is the obligation to give selected lectures and perform other professional activities; independent activity in the field of science and research as well as pedagogy – publishing with emphasis on outputs in impacted journals, included in international indexed databases (WoS, Scopus), active co-solution of scientific tasks, supervision of students´ scientific and professional activities (*in Slovak ŠVOČ*), bachelor's theses, acceptance of dissertation for the defence (viva).
The credit system of the Faculty determines the number of ECTS credits that the doctoral student is obliged to obtain for:

1. progression to the next year of study;
2. registration for the dissertation examination;
3. submission of an application for a dissertation defence (viva) permission;
4. recognition of other activities according to the individual study plan of the doctoral student.

A full-time doctoral student registers for the dissertation examination usually within 12 months, but no later than 18 months from the date of enrolment for the doctoral degree study; and a part-time doctoral student no later than 36 months from the date of enrolment for the doctoral degree study. The doctoral student is obliged to submit a written work prepared for the dissertation examination together with the application for the dissertation examination. The written work for the dissertation exam consists of the dissertation project, containing an overview of the current state of knowledge on the topic, an outline of the theoretical foundations of its future solution and an analysis of the methodological approach to solving the issue. The dissertation examination consists of a part consisting of a discussion of the written work for the dissertation examination and a part in which the doctoral student has to demonstrate theoretical knowledge in the specified courses of the dissertation examination. Examinations from individual courses can also be taken by the doctoral student during the study part of the doctoral degree study by a discussion of the written work for the dissertation examination. Completion of individual courses is assessed with a grade, while the evaluation is performed based on a classification scale consisting of six classification grades.
Conditions for proper completion of the study: The conditions are defined by the Directive No. 110. The study is completed by completing the defence (viva) of the dissertation thesis. 180 ECTS credits are required for the proper completion of studies in the doctoral degree study programme. It is the duty of the doctoral student to submit an internal defence (viva) at his/her workplace before submitting the application for a dissertation thesis defence (viva). In the standard length of study, the doctoral student must complete the defence (viva) no later than in the last month of the last academic year of his/her standard length of study. The defence (viva) of the dissertation takes place in the form of a scientific discussion before the evaluation commission. In order to successfully complete the dissertation thesis defence (viva), the doctoral student must obtain an absolute majority of the positive votes of the present members of the dissertation defence (viva) commission and opponents.

The rules for repeating the study / a part of the study are stipulated in the Study Regulations (the Directive No. 110). A student who has failed in the defence (viva) of the dissertation examination may repeat the examination only once, at the earliest three months after the date of the unsuccessful dissertation examination within the deadline set by the chairman of the examination commission. Repeated failure in the dissertation examination is a reason for exclusion from the doctoral degree study.
The dissertation thesis defence (viva) can only be repeated once, no later than two years after the end of the standard length of study.

The rules for the interruption of study are stipulated in the Study Regulations. A doctoral student may, in both standard as well as the above-standard lengths of study, request an interruption of the doctoral degree studies (even repeatedly) due to maternity leave, medical reasons, due to his/her study stay abroad, which is not part of his/her individual study plan or other serious reasons. The Dean allows the study to be interrupted. The total period of interruption of the doctoral degree studies generally does not exceed 18 months. In special, justified cases, e.g. during the next maternity leave, the doctoral study can be interrupted for a longer period, but not longer than 36 months.

e

For individual study plans, the institution states the requirements for completing the individual parts of the study programme and the student's progress within the study programme in the given structure

	Proper completion of studies	**Part of studies**			
		1Y	**2Y**	**3Y**	**4Y**

	number of credits for compulsory courses required for proper completion of studies/completion of a part of studies	*1st year: 50.0, 2nd year: 60.0, 3rd year: 60.0*				
	number of credits for compulsory optional courses required for the proper completion of studies/completion of a part of studies,	*10*	*10*	*0*	*0*	-
	number of credits for optional courses required for the proper completion of studies/completion of a part of studies	*0*	*0*	*0*	*0*	-
	number of credits required for the completion of studies/completion of a part of the studies for the common foundations and for the relevant specialization, in the case of a teaching combination study programme or a translation combination study programme	-	-	-	-	-
	number of credits for the final thesis and the defense of the final thesis required for the proper completion of studies	*30*	*0*	*0*	*30*	-
	number of credits for professional practice required for the proper completion of studies/completion of a part of studies	*10*	*0*	*10*	*0*	-
	number of credits required for the proper completion of studies/completion of a part of the studies for project work with the indication of relevant courses in engineering study programmes	-	-	-	-	-
	number of credits required for the proper completion of studies/completion of a part of the studies for artistic performances in addition to the final thesis in art study programmes	-	-	-	-	-
	Rules for the verification of learning outcomes, students' assessment and the possibilities of appealing against the assessment					
	At the level of the University, the policies, structures, and processes are defined by the Directive No. 110 – Study Regulations for the Third Degree of the University Study at the University of Žilina in Žilina and the Directive No. 216 – Quality Assurance of the Doctoral Degree Studies at the University of Žilina in Žilina. The overall learning outcomes at the level of the study programme are gradually fulfilled and verified through the learning outcomes of individual courses, which are clearly measurable. A weighted study average is used to evaluate the student's overall learning outcomes in a given period. Forms of verification of the acquired knowledge, skills and competencies in a course are determined by the study plan and course information sheet (conditions for passing the course). Verification is also performed by teachers during the study part of the doctoral degree study by a discussion of the written work for the dissertation examination. Completion of individual courses is assessed with a grade, while the evaluation is performed based on the classification scale consisting of six classification grades. The grade expresses the result of the evaluation in accordance with the objective and content of the course, as well as the learning outcomes stated in the course information sheet, as well as the student's ability to apply the acquired knowledge. Within the evaluation of the third degree of study, ECTS credits are awarded to the doctoral student for individual activities, while during the study it is necessary to obtain 180 ECTS credits for the successful completion of the doctoral degree study. The doctoral student obtains them for the courses of the dissertation examination, foreign language, dissertation examination and the defence (viva) of the dissertation thesis. In terms of scientific research activities, the doctoral student obtains points for dissertation projects, publications, patents, utility models, citations and active presentations at conferences and seminars. An overview of points for scientific research activities is given in Annex No. 2 to the Directive No. 216. The evaluation is performed					

	once a year at the end of the academic year by the supervisor and is approved by the guarantor of the relevant study programme and subsequently by the Dean. Rules for student access to remedies: The dissertation examination consists of a part comprising a discussion of the written work for the dissertation examination and a part in which the doctoral student shall demonstrate theoretical knowledge in the specified courses of the dissertation examination. Examinations from individual courses can also be taken by the doctoral student during the study part of the doctoral degree study before the discussion of the written work for the dissertation examination. The examination is held in front of the commission with the participation of the teacher providing the course, and two other members without the presence of the opponent. Completion of individual courses is assessed with a grade, while the evaluation is conducted based on the classification scale consisting of six classification grades. The presence of an absolute majority of the members of the examination commission is required for a valid decision on the result of the dissertation examination, while examiners of the courses that were not taken during the study must be present. The examination commission decides on the result of the examination in a closed session. In order to successfully complete the dissertation examination, the doctoral student must obtain an absolute majority of the positive votes of the present members of the examination commission. The examination commission evaluates the overall result of the dissertation examination comprehensively with the statement "passed" or "failed". If, for serious reasons, the doctoral student is unable to take part in the dissertation examination within the specified period and apologizes in writing to the chairman of the examination commission in advance, the chairman of the commission may set an alternative date. Withdrawal from the exam or the unjustified absence of a doctoral student at the exam is assessed by the statement "failed". A doctoral student who has failed the examination may repeat the examination only once, at the earliest three months after the date of the unsuccessful dissertation examination within the deadline stipulated by the chairman of the examination commission. Repeated failure in the dissertation exam is a reason for exclusion from the doctoral degree study. If, for serious reasons, the doctoral student is unable to participate in the defence (viva) within the specified time, he/she shall apologize in writing in advance to the Dean and also to the chairman of the defence (viva) commission. The Dean, in agreement with the chairman of the defence (viva) commission, will set an alternative date for the defence (viva). The commission evaluates the defence (viva) of the dissertation with a grade, while the classification is performed based on the classification scale, which consists of six classification grades A - FX. In the event that the commission decides not to award an academic degree, the evaluation of the defence (viva) is FX. For the doctoral student who, on the basis of the result of the dissertation defence (viva) or for his/her unjustified non-participation in the defence (viva), was proposed by the defence (viva) commission not to be awarded an academic degree, the Dean will determine in writing the alternative date of the dissertation defence (viva) in the same study programme. The dissertation defence (viva) can be repeated only once, no later than two years after the end of the standard length of study.
f	**Conditions for the recognition of studies or a part of studies**
	At the level of the University, the conditions for the recognition of the study or a part of the study are defined in the Directive No. 110 – The Study Regulations for the Third Degree of the University Study at the University of Žilina in Žilina. In the case of foreign mobility programmes and internships, the Directive No. 219 – Mobility Programmes of UNIZA Students and Staff Abroad defines the policies, structures, and processes of the conditions for the recognition of studies. According to the approved individual study plan, the full-time student is obliged to complete a part of the study at the partner workplace of the doctoral student's training workplace abroad (lasting at least one month or one semester). Completion of a part of the study at another higher education institution/university is conditioned by the application for exchange study and confirmation of acceptance by the partner institution (foreign mobility or internship), agreement between individual partner institutions on the study (in case of UNIZA cooperation with another partner institution that has an accredited study programme in the given field of study at a partner institution or a similar field of study at a foreign partner institution and which has a certified / accredited internal quality assurance system for higher education or in accordance with Standards and Guidelines for Quality Assurance in the European Higher Education Area ESG 2015), an agreement between individual partner institutions on a joint study programme which is also jointly accredited as a joint study programme in accordance with the internal quality assurance system of higher education at UNIZA, transcript of the study results. The ECTS credits obtained at this workplace are credited in full on the basis of the confirmation of the partner training workplace on the completion of the study stay.
g	**Topics of final theses of the study programme (or a link to the list)**

	The list of final theses in the study programme Security Management is available at: https://vzdelavanie.uniza.sk/vzdelavanie/index.php At the same time, the list of final theses is published in the Annual Reports of the Faculty of Security Engineering published at: https://fbi.uniza.sk/stranka/vyrocne-dokumenty
h ; 7.e-f	**Rules for the assignment, processing, opposition, defence and evaluation of final theses in the study programme; list of the supervisors of final theses with the assignment to topics (indicating the contact details)**
	At the level of the University, the policies, structures, and processes are defined by the Directive No. 103 – On the Final Theses and the Directive No. 110 – Study Regulation for the Third Degree of the University Study at the University of Žilina in Žilina. Each final thesis must be original, created by the author in compliance with the rules of working with information sources. The final thesis must not infringe the copyrights of other authors. The author of the final thesis is obliged to state the information sources used according to the relevant standard. The dissertation thesis is submitted for the defence (viva) in the Slovak language. With the written consent of the Dean, it may be submitted in another language. The doctoral student can also submit as a dissertation thesis his/her own published work or a set of his/her own published works, the content of which deals with the topic of the dissertation and corresponds to the theses (project) of the dissertation thesis. The dissertation thesis contains an introduction, characteristics of objectives, analysis of the current state of the issue at home and abroad, theoretical background, detailed description of procedures (methods, material), achieved results, their evaluation, discussion and conclusion stating what new knowledge for further development of science, technology and practice the work brings, a list of used literature and appendices. The UNIZA University Library archives an electronic or printed copy of the dissertation thesis, including the abstract and the license agreement, which stipulates the permitted level of its publication. Opponents of the dissertation thesis are appointed by the Dean. There can be one opponent from the Faculty at which the doctoral student is studying. The dissertation thesis is assessed by at least two opponents (with the academic degree professor or associate professor holding the position of a professor). Other opponents must have the scientific-pedagogical title of associate professor or perform the position of associate professor; they can be important experts in the position of a visiting professor; employees with the academic degree PhD. The opponent may not be a family member of the doctoral student, his/her immediate superior or subordinate in an employment relationship or similar employment relationship, nor a supervisor. The opponent's opinion contains an objective and critical analysis of the advantages and disadvantages of the submitted dissertation thesis, is brief and does not repeat the content. The reviewer comments on the topicality of the selected topic, on the fulfilment of the set objectives of the thesis, on the selected methods of processing, on the achieved results stating what new knowledge the dissertation thesis brings; he/she comments on the contribution to further development of science, technology or art and for practice. In the conclusion, it is clearly stated whether or not he/she proposes the award of an academic degree on the basis of the submitted dissertation thesis. The defence (viva) of the dissertation thesis is public; in exceptional cases the Dean may declare it non-public; if its public defence (viva) would jeopardize confidential information protected by a special law. The defence (viva) of the dissertation thesis takes place in the form of a scientific debate. The doctoral student will present the content of his/her dissertation thesis, results and benefits. The opponents will present their opinions, on which the doctoral student will give an opinion. The discussion verifies the accuracy, justification and scientific origin of the knowledge contained in the dissertation thesis. The defence (viva) may take place only in the presence of at least two thirds of the members of the defence (viva) commission entitled to vote, including at least two opponents, and at least one member of the commission must be from a workplace outside UNIZA. After the defence (viva), a non-public meeting of the commission is held, and the course and result of the defence (viva) and the possibility of using the results of the dissertation thesis in practice are evaluated. The members of the commission secretly vote on the award of an academic degree. Subsequently, the commission shall evaluate the defence (viva) of the dissertation thesis with a grade, while the classification is performed based on the classification scale which consists of six A – FX classification grades.
i	**Opportunities and procedures for participation in student mobility**

UNIZA supports mobility of its students and staff worldwide, in all available grant programmes and in all programmes and disciplines that are developed and provided at its Faculties and Institutes, as well as in similar study programmes. At the level of the University, the Directive No. 219 – Mobility Programmes of UNIZA Students and Staff Abroad defines the policies, structures, and processes (Link: smernica-UNIZA-c-219.pdf).

For the UNIZA employees, the completion of mobility is conditioned by: a) an application for mobility and a confirmation of acceptance by a partner institution; b) an agreement between individual partner institutions on mobility programmes, or in the case of UNIZA cooperation with another partner institution operating in UNIZA's areas of activity; c) a plan of the mobility with a content, time and financial definition of mobility. At the Faculty the Dean decides on sending an employee on mobility on the basis of an employee's request.

For the students, the completion of a part of their study at another university abroad is conditioned by: a) an application for exchange study and confirmation of acceptance by a partner institution; b) an agreement between individual partner institutions on study; c) an agreement between individual partner institutions on a joint study programme which is also jointly accredited as a joint study programme in accordance with the internal quality assurance system of higher education at UNIZA. The elaborated study plan is discussed by the student with the guarantor of the study programme. The study plan is elaborated primarily from the offer of study courses at a foreign university and contains the equivalents of compulsory and optional study programme courses that the student has prescribed in his/her study programme for the relevant academic year at UNIZA. The study plan is finally approved by the Vice-dean with competence for international cooperation. The Directive No. 219 defines the basic conditions for student mobility abroad, the requirements and rules for drawing up study plans, the student's obligations before and after the mobility. It also defines the procedures for recognition of the learning outcomes of the courses completed at a foreign university.

Rules for adherence to academic ethics and rules for drawing consequences

At the level of the University, the policies, structures, and processes are defined by the Directive No. 207 – The Code of Ethics of the University of Žilina in Žilina and the Directive No. 201 – Disciplinary Regulations for Students of the University of Žilina in Žilina and the Directive No. 226 On Copyright Ethics and the Elimination of Plagiarism in the Conditions of the University of Žilina in Žilina.
UNIZA is a modern educational and research institution that emphasizes the principle of equal treatment, which consists in prohibiting discrimination on the grounds of sex, religion or belief, race, nationality or ethnic group, disability, age, sexual orientation, marital status and family situation, colour, language, political or other opinion, national or social origin, property, gender or other status, or because of a report of crime or other anti-social activity. The Code of Ethics (the Directive No. 207) sets out a set of rules of conduct for university staff and students, thus preventing contentious situations. It defines general ethical principles for students and university staff, principles in pedagogical activities, in scientific research activities, principles in research practice and unacceptable research practices. A part of the UNIZA Code of Ethics is the definition of forms of violation of ethical rules. Complaints are handled by the UNIZA Ethics Commission.
UNIZA supports university teachers and researchers in demonstrating respect for students as well as other UNIZA staff by recognizing their authorship or co-authorship of publications and in publishing their research results. Any form of abuse of the position of university teachers and researchers from a position of superiority for the purpose of appropriating the outputs of students or other UNIZA staff is inadmissible. All UNIZA employees and students are obliged to respect the rules of legal protection of copyright, intellectual property and industrial property rights.
In order to eliminate plagiarism, the UNIZA proceeded to control the originality of not only final, rigorous and habilitation works in accordance with Article 10 of the Directive No. 215 on Final, Rigorous and Habilitation Theses in the Conditions of the University of Žilina in Žilina through the Central Register of Final Theses, but also to control the originality of all types of scientific and professional outputs (publications) of UNIZA employees and students, semester works (term papers) of UNIZA students or works of a similar nature. The result of the control of originality by the anti-plagiarism system applied in the Central Register of Final Theses or by the "Similarity Check" software in the UNIZA University Library, or other similar software, has an important informative value (the Directive No. 226).

Procedures applicable to students with special needs

In the University environment, the policies, structures, and processes are defined by **the Directive No. 198 – Support for Applicants for Study and Students with Specific Needs at the University of Žilina in Žilina** and the Directive No. 110 – Study Regulations for the Third Degree of the University Study at the University of Žilina in Žilina.
At UNIZA and at the UNIZA Faculties, the University as well as the Faculty coordinators for this area provide care for applicants and students with specific needs. The scope of providing appropriate adjustments and support

	services is regulated by the Decree of the Ministry of Education, Science, Research and Sport of the Slovak Republic No. 458/2012 on the minimum requirements of a student with specific needs. Appropriate adjustments transform changes in the forms of learning, changes in the performance of examinations and in the evaluation of results into the course of study without reducing the requirements for study performance and without changing the nature of the study programme. Adequate adaptation and support services serve to compensate for the consequences of disability and/or learning disabilities and to eliminate barriers to the academic environment and do not favour the position of students with specific needs over ordinary students. The scope of providing appropriate adjustments and support services depend on the specific needs of a particular student, current conditions and requirements for the study, availability and effectiveness of the use of compensatory aids and assistive technologies. Appropriate adjustments are provided so as not to lower the academic standards, requirements for the acquisition of knowledge, skills and competencies necessary for obtaining a qualification in a given study programme.
	Procedures for filing complaints and appeals by students
	The student freely expresses his/her professional opinions, respects freedom of speech and critical thinking, free exchange of opinions and information. In solving the problems of the educational process and the organization of life at UNIZA, he/she turns to his/her teachers, academic officials and members of the academic senate with confidence. At the Faculty, in addition to the above options, students can address their suggestions to the tutor of their study group, study advisor (the tutors and study advisors are appointed by the Dean's order at the beginning of the academic year), they can contact student support representatives (groups created for communication and counselling). Depending on the nature of the complaint, the complaint is dealt with by the person responsible for the relevant area (Dean, Vice-deans, guarantors, Heads of departments), or a relevant commission established (disciplinary, ethical). At the level of the University, the policies, structures, and processes are defined by the Directive No. 110 – Study Regulations for the Third Degree of the University Study at the University of Žilina in Žilina.

5.	**Course information sheets of the study programme (***In the structure according to Decree no. 614/2002 Coll)*
	They can be found after selecting the faculty, form of study and the study program itself under the subject name at: https://vzdelavanie.uniza.sk/vzdelavanie/plany.php

6.	**Current academic year plan and current schedule**	
	Current academic year plan	https://fbi.uniza.sk/stranka/prikazy-a-usmernenia-dekana
	Current schedule	https://vzdelavanie.uniza.sk/vzdelavanie/rozvrh2.php

7.	**Persons responsible for the study programme**		
A	**A person responsible for the delivery, development, and quality of the study programme (indicating the position and contact details**		
	Name, surname, titles: prof. Ing. Tomas Lovecek, PhD. Function: Vice-Dean for Science and Research contact (mail, tel.): tomas.lovecek@uniza.sk, +421 41 513 6604		
b – c	**List of persons responsible for the profile courses of the study programme**		
	Name, Surname, titles on the position of the associated professor or professor	Profile course name	Additional information
	doc. Ing. Zuzana Zvaková, PhD. doc. Ing. Lucia Figuli, PhD. doc. Ing. Katarína Kampová, PhD.	5D0D204 Critical infrastructure protection and resilience theory 5D0D206 Technical security of assets	

	prof. Ing. Tomáš Loveček, PhD. prof. Ing. Andrej Veľas, PhD.	5D0D202 Integrated management system 5D0D203 Modeling and simulation of physical protection systems 5D0D205 Reliability and efficiency of physical protection systems	

D **List of teachers of the study programme (including doctoral students) with the assignment to the course**

Name, Surname and titles	Profile course name	Organizational form provided by teacher	Additional information
Mgr. Jozef Bruk, PhD.	Seminar 5D0D001 Academic English I.		
Mgr. Jozef Bruk, PhD.	Seminar 5D0D002 Academic English II.		
prof. RNDr. Iveta Marková, PhD.	Lecture 5D0D201 Methodology of scientific practice		
doc. Ing. Zuzana Zvaková, PhD.	Lecture 5D0D204 Critical infrastructure protection and resilience theory		
doc. Ing. Lucia Figuli, PhD.	Lecture 5D0D206 Technical security of assets		
doc. Ing. Katarína Kampová, PhD.	Lecture 5D0D202 Integrated management system		
prof. Ing. Gustáv Kasanický, CSc.	Lecture 5D0D207 Determination of objetcs value		
prof. Ing. Gustáv Kasanický, CSc.	Lecture 5D0D210 Technical analysis of traffic incidents		
doc. Ing. Michal Titko, PhD.	Lecture 5D0D101 Probability and Statistics		
doc. Ing. Pavol Kohút, PhD.	Lecture 5D0D209 Determination of value and amount of damage of technical equipment		
doc. Ing. Bohuš Leitner, PhD.	Lecture 5D0D301 System and Operational Research		
prof. Ing. Tomáš Loveček, PhD.	Lecture 5D0D203 Modeling and simulation of physical protection systems		
PaedDr. Lenka Môcová, PhD.	Seminar 5D0D001 Academic English I.		
PaedDr. Lenka Môcová, PhD.	Seminar 5D0D002 Academic English II.		
doc. Ing. Ján Podhorský, PhD.	Lecture 5D0D208 Technical diagnostics		
doc. Ing. Ján Podhorský, PhD.	Lecture 5D0D211 Methodology of expert experiment		
prof. Ing. Andrej Veľas, PhD.	Lecture 5D0D205 Reliability and efficiency of physical protection systems		

G **Student representatives representing the interests of students of the study programme**

Name, Surname and titles	Contact details

	Ing. Lukáš Lencsés	https://fbi.uniza.sk/uploads/komisie/rada_studijneho_programu/rsp_bm.docx
H	**Study advisor of the study programme**	
	Name and surname: Jana Baláž Area of responsibility / Competencies: study agenda - communication with students Mail: Jana Baláž <balaz66@uniza.sk> Tel: 041/513 6710	
I	**Other supporting staff of the study programme – assigned study officer, career counsellor, administration, accommodation department, etc.**	
	https://fbi.uniza.sk/stranka/referat-pre-vzdelavanie	

8.	**Spatial, material, and technical provision of the study programme and support**
A	**List and characteristics of the study programme classrooms and their technical equipment with the assignment to learning outcomes and courses** (laboratories, design and art studios, studios, workshops, interpreting booths, clinics, priest seminaries, science and technology parks, technology incubators, school enterprises, practice centres, training schools, classroom-training facilities, sports halls, swimming pools, sports grounds).

At the level of the University, the policies, structures, and processes are defined by the Directive No. 217 – Resources to Support Educational, Creative and Other Related Activities of the University of Žilina in Žilina.
In addition to theoretical teaching in the form of lectures and seminars, the study programme also includes a practical form of laboratory exercises (labs). For this purpose, UNIZA has a completely built infrastructure. Computer science classrooms (MA 105 – 30 personal computers for students, MA 112 – 15 personal computers for students, MA 108 – 20 personal computers for students) are used for the purpose of processing of the assigned projects and for online knowledge testing and are equipped with modern computers with licensed software. The Faculty has established specialized classrooms for teaching courses focused on fire safety (MA 115) and in the field of civil protection and occupational health and safety (MA 104). The Faculty has another 18 standardly equipped teaching video projection technology available for teaching in its premises. It also uses a crisis simulation laboratory, a laboratory for fire and chemical research and a security management laboratory for the teaching and project activities.
The laboratory of modelling and simulation of crisis phenomena to increase the efficiency of decision-making is under the administration of the Department of Crisis Management and is located in the University Science Park at UNIZA.

Classroom designation	Classroom equipment	Provided courses
A106 The University Science Park at UNIZA Research Laboratory of Critical Infrastructure Protection Systems (abbreviated CIPS; in Slovak SOOKI)	The Research Laboratory of Critical Infrastructure Protection Systems is under the administration of the Department of Security Management and is located within the University Science Park at UNIZA. The laboratory enables the creation of polygons of protection systems, for experimental research of the resilience, efficiency and reliability of elements of alarm systems and mechanical means of restraint, in order to obtain input data from simulation tools. The laboratory allows measurement and evaluation of: - Probability of intruder detection by alarm systems (electrical security systems, camera security systems, access control systems, electrical fire alarm, alarm transmission systems). It allows measurement and evaluation of: - Breakthrough strengths of mechanical restraints (e.g. hole fillings, locking systems, storage facilities). - Reliability of control and alarm systems dependable on a change in operating conditions. The technical equipment includes: devices for changing and measuring the parameters of the environment in which the components of the technical means of protection are operated. Furthermore, measuring instruments for	Reliability and Efficiency of Technical Systems for the Protection of Persons and Property Technical Safety of Buildings

		measuring electrical quantities, basic mechanical instruments and specialized instruments for measuring and adjusting the components of alarm systems. It contains devices for measuring the structure and deficiencies of materials used for the construction of mechanical means of restraint and for detecting forensic traces created by intruders in overcoming elements of alarm systems and mechanical means of restraint. Link: http://ucebne.uniza.sk/fbi/index.html	
	MA022 Specialized Laboratory of Forensic Engineering	A specialized laboratory of the Institute of Forensic Research and Education equipped with 30 personal computers with specialized software for simulation and analysis of accidents PC Crash and VIRTUAL CRASH, programmes ADN, VIDEOANALÝZA, the autotax programme to calculate vehicle value and the amount of damage as well as the STROJTAX 2.0 calculation programme for estimation of the machines and equipment value. In addition, the Institute of Forensic Research and Education has a BOSCH diagnostic system, a measuring system for crash tests, a light barrier, radar and stretching equipment for motorcycles, a mounting ramp for dummies enabling transverse movement and also complete dummies for crash tests. These resources will be used in teaching and practical experiments to solve research and dissertation tasks.	

B **Characteristics of the study programme information management** (access to study literature according to Course information sheets, access to information databases and other information sources, information technologies, etc.)

At the level of the University, the policies, structures, and processes are defined by the Directive No. 217 – Resources to Support Educational, Creative and Other Related Activities of the University of Žilina in Žilina. (Link: https://www.uniza.sk/index.php/en/smernice-pre-vnutorny-system-kvality-uniza-en) and by the Directive No. 218 On the Collection, Processing, Analysis and Evaluation of Information to Support the Management of Study Programmes. (Link: https://www.uniza.sk/index.php/en/smernice-pre-vnutorny-system-kvality-uniza-en)

The information necessary for the effective management of study programmes at UNIZA can be found in the UNIZA Academic Information and Education System (AIES, in Slovak AIVS). The Department for Schedules, in cooperation with the relevant Study departments of the Faculties and the Centre for ICT, collects in information systems data on the passportization of available premises and on the inventory of technology utilized within the study programmes. Objects that are also accessible to students and employees with disabilities are specially marked in the system. Relevant sources of information for applicants and students are information on the Faculty study programmes as well as information on the whole-university study programmes. Essential information on the study, including study programmes, instructions for the admission procedure, graduation, etc. are part of UNIZA's internal regulations or parts thereof. Access to these documents is available on the UNIZA website at www.uniza.sk in the Applicants for study section.

The information on the currently provided full-time study programmes in the relevant academic year is always available on the Study Programmes website. The information on the currently provided study programmes in the part-time form of study in the relevant academic year is always placed in a document available on the Part-Time Study website. The information on creative and other related activities of UNIZA, its Faculties, Institutes and other workplaces is available on the Science and Research Information System portal (SRIS, in Slovak ISVV): https://vav.uniza.sk/vevysun.php

The University Library of the University of Žilina in Žilina (abbreviated UL UNIZA; in Slovak UK UNIZA) as a central workplace of the University provides comprehensive librarian and information activities within the profiling of UNIZA, its individual departments and study courses relevant according to current needs and changed requirements in the form of acquisition, professional processing and access to professional monographs, textbooks, scripts, standards, journals, legislative documents, periodicals, statistical reviews and yearbooks, language and professional dictionaries, encyclopaedias, electronic information media, electronic information sources, electronic books. The library makes available the information on acquired study and other professional literature through an electronic online catalogue. The UNIZA University Library has 4 study rooms available for users. The study rooms are fully equipped with computer technology with direct Internet access. The partial libraries of the Faculty of Security Engineering UNIZA departments have a total of more than three thousand

	titles – scientific monographs, scientific and professional publications as well as anthologies focused primarily on crisis management, fire protection, security management, protection of persons and property, protection of critical infrastructure and general education courses (Mathematics, Economics, Management, Statics, Chemistry, Transport Technology, Psychology, Sociology, etc.). These publications are used for scientific and professional growth of the teaching staff and for enriching the content of the educational process. They are available to full-time as well as part-time students who utilize them to supplement their knowledge of relevant courses as well as in the processing of final theses or competition papers of student scientific and professional activities. The University of Žilina in Žilina provides its employees and students with access to electronic information resources and databases available on the University Library website, which are linked to the university's IP addresses. Access to e-books, databases and other information sources for students and staff of the University of Žilina in Žilina is also available from devices that are not connected to the University network via remote access. In the portfolio of databases / collections made available through the University, it is possible to find full-text, bibliographic, citation and scientometric electronic information sources, e.g. Web of Knowledge – Web of Science, Scopus, Clarivite Analytics - Journal Citation Report, IEEE .... All e-resources in the portfolio come from trusted and world-renowned publishers. The list of databases is available at http://ukzu.uniza.sk/externe-databazy/.
C	**Characteristics and extent of distance education applied in the study programme with the assignment to courses. Access, manuals of e-learning portals. Procedures for the transition from contact teaching to distance learning.**
	The study programme in both full-time and part-time forms of study is performed by the full-time method. In the event of an emergency, situation or a state of emergency or due to serious technical obstacles, UNIZA will ensure, based on the Rector's order, that the full-time form of study takes place online or in a distance form, which will fully replace the full-time teaching method. For the form of distance learning, the education at UNIZA is supported in the MS TEAMS environment. Accesses and manuals for teachers and students are available on the website of the Centre for Information and Communication Technologies (CICT UNIZA) at https://ikt.uniza.sk/uniza-wiki/microsoft-teams-informacie/. The basic prerequisite for access to UNIZA information systems is a personal account in the University system, which is obtained by every student, doctoral student, UNIZA employee. The UNIZA account allows unified access to several UNIZA systems and consists of a login name and a password. The student account can be used to log in to the IS systems such as webmail, Wi-Fi network, IS education, Microsoft 365 (MS TEAMS), etc. Accesses and manuals for teachers and students are available on the website of the Centre for Information and Communication Technologies (CICT UNIZA) at https://ikt.uniza.sk/uniza-wiki/zoznam-it-sluzieb/. The basic information system for the process of education and teaching is the IS education, which is available to students from the University domain and from the Internet. The University Wi-Fi network supports EDUROAM. At UNIZA, e-learning is based on the LMS Moodle. The organization of the courses is based on guided study with the support of information and communication technologies in close connection with the academic information and education system (abbreviated AIES, in Slovak AIVS). The AIES is integrated with other information systems that are part of the University Intranet, such as The University Library (registration of final theses, verification of a final thesis for originality), accommodation (the waiting list, accommodation, registration of payments, etc.), issuance of the student ID card and the administration of the students' ID cards, access system, user administration (identity management), attendance system (doctoral students' attendance). The UniApps application allows its users to access AIES data and services from Android mobile devices, in accordance with the University's concept of the introduction of mobile technologies. The University supports students in using their own mobile devices. The UniApps allows access to information regardless of place and time using a mobile device. The available functionalities comprise time-tables, user profiles, exam dates, registration for exams, exam results, etc.
D	**Institution partners in providing educational activities for the study programme and the characteristics of their participation.**
	During their doctoral degree studies, the students participate in departmental research tasks (e.g. of the Ministry of the Interior of the Slovak Republic, the National Security Authority, the Office of the Government of the Slovak Republic) or research tasks of business entities or non-profit entities (e.g. Dopravní podnik hl. m. Prahy (Prague Public Transit Company), Continental Matador Rubber, Ltd., Stredoslovenská distribučná a.s., Národná diaľničná spoločnosť (National Motorway Company), F.S.C. Bezpecnostni poradenstvi, a.s. (F.S.C. Security consultancy, joint stock company), TRANSMISSION LINES PROJECTS, ltd., Prague, VUJE, a.s., GLOBSEC).

	During their studies, the students complete via the Erasmus+ programme or the National scholarship programme a foreign research internship (e.g. SSS Europe (Germany), Coca-Cola HBC, the Czech Republic, Prague, BALJAK CZECH s.r.o., Prague, LeeLosch GmbH, Ebelsbach, Special Service International spol. s r.o., Prague, EUROSAT CS spol., Brno, PROCUSYS a.s., Prague). During their scientific and research activities, the doctoral students consult their works with the partners or they utilize their infrastructure (e.g. ABBAS, a.s. (Brno), EUROSAT CS spol. (Brno), Certest, s.r.o. (Žilina), TSS Group (Dubnica nad Váhom), Signal Centrum (Banská Bystrica)).
E	**Characteristics of the possibilities for social, sports, cultural, spiritual and social activities**
	At the level of the University, the possibilities of social life, sports, cultural, spiritual and social activities are described in the Directive No. 217 – particularly in Articles 17, 18 and 19. (Link: https://www.uniza.sk/index.php/en/smernice-pre-vnutorny-system-kvality-uniza-en). UNIZA creates conditions and supports students' sports and cultural activities through various clubs and the University Pastoral Centre, while creating conditions and supporting other student activities, especially the activities of student organizations and student associations that operate at UNIZA and their activities are in the interest of students. The list of student organizations / clubs / associations operating on the UNIZA campus is as follows: GAMA club, Council of accommodated students at Veľký Diel, Council of accommodated students at Hliny, Internet club, Í-Tečko, Klub priateľov železníc (Railway Fun Club), Rapeš Radio, Radio X, Erasmus Student Network (ESN), UNIZA University Firefighting Club. At the same time, the Stavbár Folklore Ensemble and the University Pastoral Centre, a special purpose University Facility for the church and religious society, also operate at UNIZA. The mission of student organizations / clubs / associations operating at UNIZA is to bring together students with common interests and to try to develop their skills in the field, to provide their services to other students, to represent UNIZA at various competitions and events and to spread its reputation. The list of individual organizations is available at: https://www.uniza.sk/index.php/studenti/studentsky-zivot/studentske-organizacie. Sports activities for UNIZA students and employees are provided by the UNIZA Institute of Physical Education (hereinafter referred to as "IPE") as a whole-university workplace with the aim to develop a programme of physical activities for UNIZA students and employees. The link is: https://utv.uniza.sk/. The IPE operates mainly in the following areas: ensuring the teaching of the physical education course in all its forms, providing sports activities for students outside the teaching period (the exam period, holidays), organizing sports camps (winter and summer sports camps), organizing university competitions, providing sports enjoyment of UNIZA employees, care for sports-gifted students and support for their participation in domestic and international sports competitions. The IPE provides a programme of physical activities for UNIZA students in appropriate spatial conditions with quality material and technical resources and under the professional guidance of professional staff from university teachers or physical education instructors in the following sports: athletics, basketball, futsal, floorball, volleyball, badminton, squash, tennis and others. Every year, UNIZA organizes winter and summer sports camps for students and employees in Slovakia as well as abroad. For those interested in performance sports, there are sections of the ACADEMIC UNIZA sports club available at https://ac.uniza.sk/, Slávia Žilinská univerzita https://www.vza.sk/ and HC UNIZA http://www.hcuniza.sk/. The Institute regularly organizes one-day and multi-day rafting sports courses, cycling stays connected with tourism, as well as winter ski courses. The comprehensive counselling in basic psychological care for the UNIZA students and staff, social counselling as well as career counselling are provided to students by the Counselling and Career Centre (abbreviated CCC, in Slovak PKC). The CCC workplace is equipped with the necessary information and communication technologies, related software support and appropriate spatial, human, material and technical resources. There are also different types of compensatory aids and technologies available for the study purposes of the students with special needs. More detailed information is available at: https://www.uniza.sk/index.php/zamestnanci/rast-zamestnancov/centrum-psychologickej-podpory.
F	**Possibilities and conditions for participation of the study programme students in mobilities and internships, application instructions, rules for recognition of this education**
	University of Žilina in Žilina abroad. Current and future UNIZA students have the opportunity to study at approximately 260 higher education institutions in Europe, with which the university has concluded a cooperation agreement for up to a year, and also to complete a practical internship in enterprises and companies within the program countries.

	At the university level, the procedures, processes and structures are defined by Directive 219 – Mobility of students and employees of the University of Žilina in Žilina abroad. For students (interested in foreign mobility), the university publishes the "Information Guide for UNIZA Students" which defines the rules of Erasmus+ student mobility valid for the current academic year. It describes the individual processes and structures of mobility (study stays and internships), the strategy for selecting students and allocating grants, the procedure for processing the content of the study stay and documents for concluding a financial contract, documents required before mobility, and the procedure for completing the study stay. https://www.fbi.uniza.sk/uploads/files/1583408925-Binder1.pdf , The faculty, represented by the faculty Erasmus+ coordinator, publishes the faculty selection conditions, the strategy for approving nominations and the strategy for allocating grants for study stays and practical internships before the faculty selection procedure for student mobility. After the faculty selection of students for Erasmus+ mobility, a Selection Record and a list of selected students, substitutes and unsuccessful applicants are prepared. The faculty publishes detailed information about study stays and practical internships abroad on its website https://www.fbi.uniza.sk/stranka/erasmus-pre-studentov. Contact person at the faculty: Ing. Martin Boroš, PhD. , Vice-Dean for International Relations and Marketing, martin.boros@uniza.sk , tel: +421 41 513 6610 Erasmus+ coordinators for the study program Safety Management: Doc. Ing. Zuzana Zvaková, PhD., ŠP Safety Management, zuzana.zvakova@uniza.sk, tel: +421 41 513 6660

9.	**Required abilities and admission requirements for the study programme applicants**
A	**Required abilities and necessary admission requirements**
	At the university level, the possibilities for social, sporting, cultural, spiritual and community activities are described in Directive No. 217: https://uniza.sk/index.php?option=com_content&view=article&id=4131:smernice-pre-vnutorny-system-kvality-uniza-2&catid=2 Information on the possibilities for social, sporting, cultural and spiritual activities of UNIZA students: https://uniza.sk/index.php# mainly in the "students" tab
B	**Admission procedures**
	At the level of the University, the policies, structures, and processes are defined by the Directive No. 206 – Principles and Rules of the Admission Procedure for the Study at the University of Žilina in Žilina. At the level of the Faculty, the Methodological Guideline No. 1/2021 – On the Principles and Rules of the Admission Procedure for the Study programmes of the Faculty of Security Engineering of the University of Žilina in Žilina issued in accordance with Article 1, paragraph 2 of the UNIZA Directive No. 206 defines the policies, structures, and processes relevant for the academic year 2022/23. The methodological guideline defines the terms, methods and forms of submitting application forms, it provides information on the data that the applicant provides in the application form, as well as a list of mandatory enclosures to the application for the study. The methodological guideline further describes the form of the entrance examination, its dates, the method of evaluation and the principles of admission to study. Application forms for the doctoral degree studies are to be submitted for individual study programmes. Applicants fill in the application form for the university studies – 3rd degree (Prihláška na vysokoškolské štúdium – 3. stupeň) or they can use an electronic application form. The electronic application can be filled in via the UNIZA website: https://vzdelavanie.uniza.sk/prijimacky/index.php or on the Portal VŠ (University Portal) https://prihlaskavs.sk/sk/.

	Even in the case of an electronic application form, it is necessary to provide the required enclosures (attachments). The enclosures for the doctoral degree application form are as follows: • Curriculum Vitae, • proof of payment of the administrative fee for the admission procedure, • certified copies of the highest level of educational completed, • the intention of solving the selected topic of the dissertation thesis, • a list of published professional and scientific papers (in case the applicant has published so far). A graduate of the engineering/master's degree study can apply for the study. The selection of applicants will be conducted on the basis of the evaluation of the entrance examination. The entrance examination is performed in the form of an oral examination in front of the commission of the relevant field of study. The evaluation includes the assessment of the results of the previous study and the prerequisites for independent scientific work of an applicant. On the basis of the admission procedure, the following applicants are admitted to study: • Applicants who have passed the entrance examination and were added to the list of accepted candidates. Applicants are accepted on the basis of the capacity of the individual study programmes and the evaluation of applicants. The final decision on the result of the admission procedure is determined by the Dean on the basis of a proposal from the Faculty admission commission.
C	**Results of the admission process over the last period**
	Evaluation report on the level of educational activities at a given faculty: https://www.fbi.uniza.sk/stranka/vnutorny-system-kvality-fbi

10.	**Feedback on the quality of provided education**
A	**Procedures for monitoring and evaluating students' opinions on the study programme quality**
	Regulated by Directive No. 223 Monitoring and Periodic Evaluation of Study Programs: https://uniza.sk/index.php?option=com_content&view=article&id=4131:smernice-pre-vnutorny-system-kvality-uniza-2&catid=2 Every academic year, students have the right to express their opinion on the quality of teaching, through a questionnaire on the quality of the subject provided and the quality of the teacher (for subjects in the winter and summer semesters), through a questionnaire on the quality of the study program (at each level of study), through a questionnaire for students with specific needs, through a questionnaire on the quality of the admission procedure. All of the above surveys, as well as data collection, are carried out in the form of IS e-education.
B	**Results of student feedback and related measures to improve the study programme quality**
	The results of student feedback are evaluated through the indicators of the UNIZA Internal Quality Assurance System: Uscl10 - Student satisfaction rate with subject teaching - comprehensive Uscl11 - Student satisfaction rate with the quality of teaching (teaching methods and assessment methods) Uscl12 - Student satisfaction rate with the quality of teachers (approach, preparation) USCL13 - Student satisfaction rate with specific needs USCL16 - Availability of resources planned in subject information sheets Uvzdel 2 - Satisfaction rate with adaptation to higher education UVZDEL9 - Academic fraud prevention rate Uscl17 - Satisfaction rate with the preparation and course of internship/practicum Uscl20 - Satisfaction rate of final year students with the quality of the study program Uscl21 - Consistency and impact of education Uvýstup 2 - Graduate readiness rate for practice in terms of competencies (Indicator evaluated from a survey among graduates, which is held every 3 years) Output 1 - Rate of employability of graduates of the study program (Indicator evaluated by the Ministry of Education, Science and Culture for the calendar year in which the AR began) Output 3 - Rate of satisfaction of employers with the achieved educational outcomes of the study program (Indicator evaluated from a survey among employers every 3 years) The above indicators are evaluated in annual evaluation reports at the level of the study program, at the faculty level and at the university level. Individual evaluation reports are discussed and, in the case of significant shortcomings, consequences are drawn at the level of the

	Study Program Council, at the level of the Dean's College and at the level of the UNIZA Accreditation Board. https://www.uniza.sk/index.php/hodnotiace-spravy

11.	**References to other relevant internal regulations and information concerning the study or the study programme student** (e.g study guide, accommodation regulations, fee directive, guidelines for student loans, etc.).

Internal regulations and information	**Link**
Relevant internal regulations of UNIZA	https://www.uniza.sk/index.php/univerzita/vseobecne-informacie/uradna-tabula
Internal regulations of VSK UNIZA	https://uniza.sk/index.php?option=com_content&view=article&id=4131:smernice-pre-vnutorny-system-kvality-uniza-2&catid=2