

## DESCRIPTION OF DEGREE PROGRAMME (admission year: 2021-2022)

1.

Title of the degree programme	National Code
Cybersecurity management Master`s Degree Programme (in English)	6211LX066

2.

Official name of the awarding institution(s)	Language of instruction
Mykolas Romeris University	English

3.

Kind of study	Cycle of studies	Level of qualification
University studies	II cycle	VII level

4.

Mode of study and length of programme in years	Length of the degree programme in ECTS credits	Student's workload	Contact work hours	Independent work hours
Full-time study 2 years	90	2430	398	2032

5.

Group of Study Fields	Field of the programme
Business and Public Administration	Management

6.

Degree and/or qualification awarded
Master of Business Management

7.

Programme Director	Contact information
Prof. dr. Darius Štītis	Faculty of Public Governance and Business, Mykolas Romeris university, Ateities st. 20, Vilnius, stītis@mrni.eu, +370 618 80495

8.

Accreditation organization	Period of reference
Centre for Quality Assessment in Higher Education	2022.12.31

9.

Purpose of the programme
To prepare highly qualified management professionals capable of integrally understand, develop and manage modern IT environments and human resources to address the complex challenges of ensuring a modern cybersecurity, critical information infrastructure protection, as well as from an organizational, communication, legal, securities, and innovative cyber security.

## 10.

Profile of the programme		
Study content: discipline(s)/subject area(s)	Orientation of the programme	Distinctive features
<p>Part of the program (1:15) covers topics on cybersecurity scientific research.</p> <p>Other part (13:15) - management, economics disciplines and interdisciplinary subjects analyzing key aspects of cybersecurity, among them – the legal environment of cybersecurity, security economics, etc.</p> <p>The study program is completed by master's work (1:15), wherein theoretical and practical cybersecurity management and securing issues are analyzed.</p>	<p>Interdisciplinary extending studies programme, combining social science (management, economics, law, etc.) and technological aspects of cybersecurity.</p>	<p>Study program has no analogues in Lithuania and the region (Latvia, Estonia, Poland). Cybersecurity management master program is designed to prepare highly qualified specialists who will understand, realize, assure, manage and coordinate the cybersecurity.</p>

#### Qualification requirements and regulations

According to the Description of the Lithuanian Qualifications Framework, level VII qualifications are acquired through graduate university (II cycle) studies.

The qualification provides for complex activities consisting of different interrelated tasks which may cover several related areas of professional activities. That is the reason why the performance requires expert evaluation of the most recent knowledge in the close and more distanced areas of activities; discovery of new facts in applied research of the professional activity area, creative theoretical knowledge and application of the results of scientific research.

The activities are performed independently, by way of setting prerogatives of an activity area, making independent decisions, which are oriented towards improvement and perfection of the activities. The activities imply managing the activities of other employees, thus qualifications of this level include abilities to independently carry out applied research, to provide consultations in an area of activities, to coordinate projects related to the upgrading of other individuals' qualifications and implementation of innovations, to analyse and present activity results.

As the technological, management and organizational progress is witnessed in all areas of activities, the activities and their environment are subject to constant change, the changes are difficult to anticipate, the activities consist of volatile combinations of tasks. The activity change requires the ability to make innovative decisions based on research results, to assess alternative solutions and possible social and ethic consequences of the activities.

You can be acquainted with the project description of the Management study field on the SKVC page: [https://www.skvc.lt/default/lt/teisine-informacija/ta\\_projektai/studiju-krypciu-aprasu-projektai-](https://www.skvc.lt/default/lt/teisine-informacija/ta_projektai/studiju-krypciu-aprasu-projektai-)

## 11.

Admission requirements	Specific arrangements for recognition of prior learning	Specific requirements for graduation
<p>Minimal education: first cycle university studies, bachelor of management degree. In case of bachelor degree is not from management field, students have to select additional subjects. Students (from colleges) that haven't taken</p>	<p>Procedure for Recognition of Academic Credits at Mykolas Romeris University  <a href="https://intranet.mruni.eu/mru_lt_dokumentai/centrai/akademiniu_reikalu_centras/teises_aktai/Studiju%20kreditu%20prip.tv._ENG%20porfolio.pdf">"https://intranet.mruni.eu/mru_lt_dokumentai/centrai/akademiniu_reikalu_centras/teises_aktai/Studiju%20kreditu%20prip.tv._ENG%20porfolio.pdf"</a></p>	<p>Students must collect (after appropriate evaluation) 60 studies direction subjects ETCS credits and 30 master thesis ECTS credits.</p>

<p>university studies, must take additional studies.</p> <p>In case when a student has completed bachelor's studies in another field, the following additional study subjects ("Management", "Economic Basics") are required in order to get the necessary bases for the study program field. Additional subjects will be required if the student has not studied them in his/her bachelor studies.</p>	<p>establishes the principles and procedure for the recognition of learning outcomes achieved by a person in other Lithuanian and foreign higher education institutions and in the non-formal and informal learning competencies, related to higher education, and the recognition of study credits at Mykolas Romeris University.</p>
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12.

<b>Access to further studies</b>
<p>Acquisition of a master's degree in management entitles to continue studies in the management area and other fields of research (social science) in the third cycle of studies (PhD) and to acquire a PhD in social sciences.</p>

13.

<b>Occupational profiles of graduates with examples</b>
<p>Cyber security management is a specific activity that requires a highly skilled and interdisciplinary knowledge. The lack of professionals in the field of cyber security management presupposes the jobs corresponding to the statements of the strategic plan of the European Union "The Europe 2020" regarding the innovative economic, but also is linked to an innovative and the complex work in the field of cyber security management. Cyber security management is the field with many stakeholders, including cyber security issues in both the public and private sectors. Having appropriate competences (decision making, cybersecurity Project management, etc.), the graduate students will be able to work in the institutions of the public sector and/or businesses.</p> <p>The potential employers of the graduate students are State bodies and/or businesses, managing important electronic data (departments of public institutions security and IT, business units, and units of the management of risks, the IT departments, etc.).</p>

14.

<b>Teaching and learning methods</b>	<b>Assessment methods</b>
<p>The following study methods are applied: case (situation, problem, etc.) analysis, experiment, discussions, problematic teaching, visual and / or verbal reports, execution of tasks in working groups and other active learning methods, individual student counseling, self-learning (reviews projects, communications, etc.).</p>	<p>Assessment system of students' achievements is 10 points. Undifferentiated form of accountability (certified / uncertified). Students will be subject to the following assessment methods: cumulative assessment, tests, midterm and final exams (written and oral), reports, written papers, reports, and master thesis.</p>

15.

<b>Generic competences</b>		<b>Programme learning outcomes</b>	
<b>1.</b>	Research competences	<b>1.1</b>	Will be able to organize evaluation of research and work of a modern cyber security, analyze their adaptation to meet the needs of the State and society, and to the development of economic and social values, to create a interaction of modern scientific and efficient managerial environments, to plan their strategies, the use the holistic approach in making managerial decisions.
		<b>1.2</b>	Will be able to understand how cyber security management creates safe, competitive environment for the public and business services, and how is creating added value for business and in all levels of knowledge-based economy.

2.	Abilities to obtain information from various sources and analyze it	2.1	Capacity to deal with the realities of cyber security, taking into account the increasing dynamics, the potential threats, strategic opportunities arising from tendencies of global electronic business electronic public services, the environment of e-business and the global trends.
		2.2	Learning outcomes to work in the environment of electronic public services and e-business, in the context of heterogeneous changes, using the holistic management paradigms, methodologies and the latest social and information technologies in the field of cyber security.
		2.3	Knowledge to evaluate the strategic trends of cyber security, align technological trends with global, public, social, economic needs, through the interdisciplinary knowledge and scientific research methodologies.
		2.4	Knowledge to use a holistic approach in dealing with a wide variety of cyber security threats.
<b>Subject specific competences</b>		<b>Programme learning outcomes</b>	
3.	Management skills.	3.1	Will be able to organize and manage human resources, technological platforms in cyber security field, and make the decisions in changing environments, to develop and manage cyber security development projects.
		3.2	Will be able to scientifically analyze creative solutions in the cyber security field, and evaluate development opportunities, to argue and create innovative ideas and creative solutions for their implementation in electronic and information security (cyber security) field, to the security of electronic information (cyber security) innovative projects, to integrate a new knowledge in new and unknown environments and in global multicultural context.
4.	Of legislation analysis assessment and application competencies.	4.1	Will be able to organize and manage human resources, technological platforms in cyber security field, and make the decisions in changing environments, to develop and manage cyber security development projects, to the legal environment.
		4.2	Will be able apply in a socially responsible manner the managerial decisions, analytical tools in the field of security of cyber security and to organize research in this direction, creatively use modern methods of decision-making with regard to the legal environment.

<b>5.</b>	Technologically protect the environment as well as the formation of competence.	<b>5.1</b>	Mastering the cyber security model making, innovation management, cost-effectiveness, the methods of development and implementation of projects and their dissemination, the combination of forms in their adaptation to the micro and macro, as well as the ability to strategically plan the security of electronic information (cyber security) processes in the global safe cyber space and in knowledge-based economy.
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<b>3 SEMESTER</b>		<b>24</b>	<b>648</b>	<b>112</b>	<b>536</b>										
<b>Compulsory course units</b>		<b>24</b>	<b>648</b>	<b>112</b>	<b>536</b>										
	Intellectual Property	6	162	40	122									x	
	Master Thesis	6	162	0	162						x	x			x
	Modeling of Electronic Information Security	6	162	40	122							x			
	Management of IT Projects	6	162	32	130							x			
<b>4 SEMESTER</b>		<b>21</b>	<b>567</b>	<b>0</b>	<b>567</b>										
<b>Compulsory course units</b>		<b>21</b>	<b>567</b>	<b>0</b>	<b>567</b>										
	Master Thesis	21	567	0	567			x							

\* - Course units are compulsory for students who have not studied it during their bachelor's studies.

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