

CAUCASUS UNIVERSITY



Graduate Program in  
INFORMATION TECHNOLOGY MANAGEMENT



**Caucasus University**  
**Caucasus School of Technology**



<b>Program Name</b>	Information Technology Management		
<b>Program Name in Georgian</b>	ინფორმაციული ტექნოლოგიების მენეჯმენტი		
<b>Degree level</b>	Master's		
<b>Type of the educational program</b>	Academic		
<b>Language of Instruction</b>	Georgian		
<b>Expected Qualification</b>			
In English:	Master of Information Technology Management	0619	
In Georgian:	ინფორმაციული ტექნოლოგიების მენეჯმენტის მაგისტრი	0619	
<b>Date of Program Approval &amp; Update</b>	12 February 2014; 30 November 2022; Order N:01/01-31, 30.04.2025.		
<b>Academic head of the Program</b>	Prof. Maksim Iavich, PhD.		
<b>Program Volume in Credit Hours</b>	<p>In order to obtain the qualification determined by the program, the student must acquire 120 ECTS credits. The standard duration of teaching a master's program is two years, and the permissible duration is five years. 1 ECTS equals to 25 hours, which includes class hours and time spent on independent work (midterm and final examinations, as well as homework assignments).</p> <p>The program envisages learning courses of a narrow sphere and of free components:</p> <p><u>Learning courses of narrow sphere (102 ECTS credits):</u></p> <ul style="list-style-type: none"> <li>– Mandatory learning courses - 42 ECTS credits</li> <li>– Optional learning courses - 30 ECTS credits</li> <li>– Master Thesis - 30 ECTS credits</li> </ul> <p><u>Learning courses of free component (18 ECTS credits):</u></p> <ul style="list-style-type: none"> <li>– Mandatory learning course of university - 6 ECTS credits</li> <li>– Free credits - 12 ECTS credits</li> </ul>		

## Program Description

### Admission Requirements

The persons applying for the Information Technology Management master's program need:

- ✚ To have Bachelor's degree in relevant or related field (engineering, business administration, natural sciences).
- ✚ To pass the General Masters Examination held by the Legal Entity of Public Law - The National Assessment and Examinations Center.
  - Enrollment in the program without passing the general master's exam is carried out in accordance with the rules established by law.
  - Mobility to the program is allowed in accordance with procedures set by the relevant law.
- ✚ Successfully pass the entrance exam (includes components of English comprehension and writing according to B2 level and general logical and quantitative reasoning questions; A person may be exempted from this condition if there is a language proficiency document (IELTS-6.0, TOEFL-78, other relevant B2 level international certificate or other circumstances set by university regulation))
- ✚ Successfully pass the oral exam with the Caucasus School of Technology's Master's Admission Commission. The topics of the exams and evaluation criteria will be posted on the university's website.

### General Information

During the program development it was taken into the consideration the experience of foreign universities, having the degree programs in the similar filed; The recommendations of leading specialists and professors of the partner universities (Tallinn University of Technology; Upper Austria University of Applied Sciences (Hagenberg); Kaunas University Of Technology), obtained through the exchange visits of school administration and professors, invoved in the program development, in the partner universities and also from the consultation meetings with the representatives of those universities carried out at the Caucasus University.

The feature of the program is the in-depth examination of a number of issues that have been selected in light of current and growing demands on information technology managers both in the Georgian labor market and internationally as well.

The program curriculum has a technical focus and gives good understanding of business operations and strategy. Students will learn how IT must be aligned with the strategy of the organization, and how to make appropriate choices about architecture in relationship to overall organization goals.

The teaching process of the program is based on modern methodologies of practice-oriented teaching taking into account the elements of scientific research. It focuses on in-depth learning of the disciplines enriched with the latest scientific or practical information management technologies. Compatible with modern international standards, the program enables the student to acquire deep theoretical knowledge in the field and to master good practical skills. The thoughtful proportion of the theoretical and practical components of the program provides the basis for a graduate to pursue a career as a prospective IT Management specialist, both in Georgia and abroad.

### Program Objectives

The objectives of the program in Information Technology Management are to:

- Prepare highly qualified managers who will possess modern knowledge and skills in strategic and operational management within the field of information technology, enabling them to successfully plan, implement, and develop information technology-related projects and services in various types of organizations.
- Develop research, analytical, and innovative thinking skills for graduates that will enable them to develop new technological solutions, address complex challenges, and contribute to the sustainable development of the ICT sector.
- Educate professionals with high ethical standards, capable of effective communication in a multidisciplinary environment, possessing leadership skills, and ready for continuous professional improvement in the context of global technological changes.

## Learning Outcomes

Upon completion of the Master's degree program in Information Technology Management, the graduate will acquire the following competencies:

1. Comprehensively analyzes the latest theories and practices in the information technology field, evaluates their impact on organizational strategy formation, and critically comprehends global digital transformation trends.
2. Strategically plans, evaluates, and implements complex information systems and technological solutions, utilizing innovative approaches and in-depth analytical skills to achieve organizational goals.
3. Creates and implements research projects involving the development of new methodologies and technological solutions, applying modern research methods and scientific research ethics principles.
4. Independently assesses cybersecurity challenges, develops comprehensive strategies to protect organizational assets, considering legal, ethical, and technological aspects.
5. Ensures the functioning and optimization of corporate information systems, as well as the effective management of organizational resources through the use of information technologies.
6. Creates new or significantly improved products, services, processes, or business models by utilizing knowledge, ideas, and technologies in the field of information technology.
7. Independently plans personal professional development, continuously mastering new technologies and methodologies, possessing the ability and desire for lifelong learning, and actively participating in the field's development.

## Building a Career

The program gives students the chance to advance to IT Leadership positions through gaining strong set of technical and managerial skills which are necessary to succeed in the IT field today.

Program graduates will have an opportunity to work in a variety of environments such as academia, research, industry, media, government, private and business organizations. Examples of job titles of program graduates may include: Information Systems consulting officer, Chief Information Officer, Chief Technical Officer, Project Manager, Network Manager/Analyst, Business Analyst, Database Administrator, IT Infrastructure Manager etc.

On the Georgian labor market employers are the university's partner organizations, as well as other big or small business companies, banking sector, international companies, educational institutions, telecommunication organizations etc.

## Study Continuation Opportunities

The program graduates can continue their studies at any of Doctoral programs in Georgia or abroad, in accordance with the regulation required by the law.

## Program Curriculum

№	Course Code	Course Prerequisite	Course Name	Year				ECTS
				I	II			
				Semester				
				I	II	III		
<u>Learning Courses of Narrow Sphere</u>								
Mandatory Learning Courses - 42 ECTS								
1.	ITSM 5140		IT Service Management	×				6
2.	MIS 5141		Management Information Systems	×				6
3.	MNG 5140		Strategic Management	×				6
4.	ISM 5145		Database and Data Warehouse Management		×			6
5.	ISM 5241		Operating Systems in Corporation		×			6
6.	ISM 5244		ERP Systems		×			6
7.	ISM 5343		Information Systems Security			×		6
8.	MTH 5440	WRT 5340	Master’s Thesis				×	30
Optional Learning Courses - 30 ECTS								
9.	ISM 5143		Electronic Governance	×				6
10.	ISM 5146		Software Engineering	×				6
11.	DSC 5141		Foundations of Data Science	×				6
12.	CYW 5140		Cyber Warfare	×				6
13.	DPM 5140		Digital Product Management	×				6
14.	CYD 5140		Digital Governance and Cyber Diplomacy	×				6
15.	FIN 5240		Finances for IT Managers		×			6
16.	TMK 5240		Strategic Marketing for Technology and Innovation		×			6
17.	DEN 5240		Data Engineering		×			6
18.	ISM 5246		Cyber Security for Managers		×			6
19.	ISM 5341		Data Communications and Networking		×			6
20.	CLD 5240		Cloud Technologies		×			6
21.	ISM 5344		Project Management			×		6
22.	ISM 5345		Modern Cryptography			×		6
23.	AIEN 5340	ISM 5145	AI Engineering			×		6
24.	STAT 5340		Statistics for managers			×		6
25.	MNG 5340	MNG 5140	Decision Making Theory			×		6
26.	MNG 5441	MNG 5140	Innovation & Change Management			×		6
27.	MNG 5442		Human Resource Management			×		6
28.	PRW 5340		Professional Internship <sup>1</sup>			×		12
<u>Learning Courses of Free Component</u>								
Mandatory Learning Course of University - 6 ECTS								
29.	WRT 5340		Academic Writing & Research Methods			×		6
Free Credits - 12 ECTS								
30.			Free Course <sup>2</sup>	×				
ECTS Credits			Per Semester	30	30	30	30	
			Per Year	60		60		

<sup>1</sup> Professional Internship is mandatory for students who are not employed by the specialization

<sup>2</sup> Student can take courses in terms of "Free Course" from other Master's degree programs and/or from the Elective Courses within this program