

CAUCASUS UNIVERSITY



Graduate Program in
INFORMATION TECHNOLOGY MANAGEMENT



Program Name	Information Technology Management		
Program Name in Georgian	ინფორმაციული ტექნოლოგიების მენეჯმენტი		
Degree level	Master's		
Type of the educational program	Academic		
Language of Instruction	Georgian		
Expected Qualification			
The First Part			
In English:	Master of Information Technology Management	0619	
In Georgian:	ინფორმაციული ტექნოლოგიების მენეჯმენტის მაგისტრი	0619	
The Second Part			
In English:	Research Master of Information Technology Management		
In Georgian:	ინფორმაციული ტექნოლოგიების მენეჯმენტის კვლევის მაგისტრი		
Date of Program Approval & Update	12 February 2014		
Academic head of the Program	Prof. Maksim Iavich, PhD.		
Program Volume in Credit Hours	In order to obtain the qualification determined by the first part of the program, the student must acquire 60 ECTS¹ credits. The standard duration of study is one year, and the permissible duration is two years. The the first part of the program envisages learning courses of a narrow sphere and of free components: <u>Learning courses of narrow sphere (54 ECTS credits):</u> – Mandatory learning courses - 42 ECTS credits – Optional learning courses - 12 ECTS credits <u>Learning courses of free component (6 ECTS credits):</u> – Free credits - 12 ECTS credits In order to obtain the qualification determined by the second part of the program, the student must acquire 60 ECTS credits. The standard duration of study is one year, and the permissible duration is two years. The the first part of the program envisages learning courses of a narrow sphere and of free components: <u>Learning courses of narrow sphere (48 ECTS credits):</u> – Optional learning courses - 18 ECTS credits – Master Thesis - 30 ECTS credits <u>Learning courses of free component (12 ECTS credits):</u> – Mandatory learning course of university - 6 ECTS credits – Free credits - 6 ECTS credits		

¹ 1 ECTS equals 25 hours, which includes contact hours and independent work (midterm and final examinations, as well as homework assignments).

Program Description

Admission Requirements

The persons applying for the first part of the master's program need:

- ✚ To have a 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.

The persons applying for the second part of the master's program need:

- ✚ To have a Master's degree in ICT field
- ✚ 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.
- ✚ Mobility to the program is allowed in accordance with procedures set by the relevant law.

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 first part of the program 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.
- ✚ Foster the development of professionals with high ethical standards who are capable of effective communication in multidisciplinary environments, possess leadership skills, and are committed to continuous professional development in the face of global technological changes

The objectives of the first part of the program are to:

- ✚ 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 first part of the master's degree program, 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. Independently assesses cybersecurity challenges, develops comprehensive strategies to protect organizational assets, considering legal, ethical, and technological aspects.
4. Ensures the functioning and optimization of corporate information systems, as well as the effective management of organizational resources through the use of information technologies.
5. Creates new or significantly improved products, services, processes, or business models by utilizing knowledge, ideas, and technologies in the field of information technology.
6. 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.

Upon completion of the second part of the master's degree program, the graduate will acquire the following competencies:

1. Creates and implements research projects involving the development of new methodologies and technological solutions, applying modern research methods and scientific research ethics principles.
2. Creates new or significantly improved products, services, processes, or business models by utilizing knowledge, ideas, and technologies in the field of information technology.
3. 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

- ✚ Graduates of the first part of the program can continue their studies toward 120 ECTS Master's programs in the ICT field, in accordance with applicable legal regulations.
- ✚ Graduates of the second part of the program are eligible to pursue doctoral studies both in Georgia or abroad, in accordance with applicable legal regulations.

Program Curriculum (The First Part)

№	Course Code	Course Prerequisite	Course Name	Year		
				I		ECTS
				Semester		
				I	II	
Learning Courses of Narrow Sphere						
Mandatory Learning Courses - 42 ECTS						
1.	ITSM 5141.11		IT Service Management	×		6
2.	MIS 5141.11		Management Information Systems	×		6
3.	MNG 5141.11		Strategic Management	×		6
4.	DBM 5141.11		Database and Data Warehouse Management	×		6
5.	OSM 5241.11		Operating Systems in Corporation		×	6
6.	ERP 5241.11		ERP Systems		×	6
7.	ISSC 5241.11		Information Systems Security		×	6
Optional Learning Courses - 12 ECTS						
8.	EGOV 5141.11		Electronic Governance	×		6
9.	DPM 5141.11		Digital Product Management	×		6
10.	CYD 5141.11		Digital Governance and Cyber Diplomacy	×		6
11.	FIN 5141.11		Finances for IT Managers	×		6
12.	TMK 5141.11		Strategic Marketing for Technology and Innovation	×		6
13.	CSEC 5141.11		Cyber Security for Managers	×		6
14.	DCN 5241.11		Data Communications and Networking		×	6
15.	CLD 5241.11		Cloud Technologies		×	6
16.	PM 5241.11		Project Management		×	6
17.	AIEN 5241.11	DBM 5141.11	AI Engineering		×	6
18.	DMT 5241.11	MNG 5141.11	Decision Making Theory		×	6
19.	ICHM 5241.11	MNG 5141.11	Innovation & Change Management		×	6
20.	HRM 5241.11		Human Resource Management		×	6
21.	PRW 5241.11		Professional Internship ²		×	12
Learning Courses of Free Component						
Free Credits - 6 ECTS						
22.			Free Course ³	×		
ECTS Credits			Per Semester	30	30	
			Per Year	60		

² Professional Internship is compulsory for students who do not hold employment relevant to their specialization.

³ Students can take courses as 'Free Courses' from other Master's degree programs and/or from the elective courses within this program.

Program Curriculum (The Second Part)

№	Course Code	Course Prerequisite	Course Name	Year			ECTS
				I			
				Semester			
				I	II		
Learning Courses of Narrow Sphere							
Mandatory Learning Courses – 30 ECTS							
1.	MTH 5141.21	WRT 5141.21	Master’s Thesis		×	30	
Optional Learning Courses - 18 ECTS							
2.	SENG 5141.21		Software Engineering	×		6	
3.	DSC 5141.21		Foundations of Data Science	×		6	
4.	CYW 5141.21		Cyber Warfare	×		6	
5.	DEN 5141.21		Data Engineering	×		6	
6.	MCPT 5141.21		Modern Cryptography	×		6	
7.	STAT 5141.21		Statistics for Managers	×		6	
Learning Courses of Free Component							
Mandatory Learning Course of University - 6 ECTS							
8.	WRT 5141.21		Academic Writing & Research Methods	×		6	
Free Credits - 6 ECTS							
9.			Free Course ⁴	×			
ECTS Credits			Per Semester	30	30		
			Per Year	60			

⁴ Students can take courses as 'Free Courses' from other Master's degree programs and/or from the elective courses within this program.