

CAUCASUS UNIVERSITY



**Undergraduate Program in
Information Technologies**



Caucasus University
Caucasus School of Technology

Program Name			
	Information Technologies		
Degree level			
	Bachelor's		
Type of the educational program			
	Academic		
Instruction Language			
	Georgian		
Expected Qualification			
	Bachelor of Engineering in Informatics	0401	
Date of Program Approval			
		10 May 2007	
Academic head of the Program			
	Maksim Iavich PhD. Porfessor at Caucasus University		
Program Volume in Credit Hours			
<p>The program consists of 240 ECTS credits. Caucasus University uses European Credit Transfer and Accumulation System (ECTS) to describe volume of expected work from the students. A credit is a unit for volume of work that is required from the students in terms of time spent. 1 ECTS credit is worth of 25 hours of student's academic workload.</p> <p>Courses in the program are allocated based on their logical structure and sequence. Courses build up on the previously studied material and, therefore, enable students to acquire necessary knowledge. Courses in the program are divided into:</p> <ul style="list-style-type: none"> • General Educational Courses - 40 ECTS Credits (Including Manadatory General English – Minimal Competence Level B2) <ul style="list-style-type: none"> ○ Required Courses - 20 ECTS Credits ○ Elective Courses - 20 ECTS Credits • Specialization Courses - 182 ECTS Credits: <ul style="list-style-type: none"> ○ Required Courses - 92 ECTS Credits ○ Elective Courses - 78 ECTS Credits ○ Bachelor's Thesis - 12 ECTS Credits • Free Courses - 18 ECTS Credits <p>Some of the Courses are taught in English.</p>			
Admission Requirements			
<p>Any person having a secondary education is entitled to enrol on the Undergraduate Program in Information Technology.</p> <p>The precondition for the admission to the program is to pass the United National Examination held by the Legal Entity of Public Law - The National Assessment and Examinations Center.</p> <p>An exception to the general rule of admission to the higher education institutions is made only in the cases stipulated by the law.</p>			

Program Description

<p>Program Objectives</p>	<p>The objectives of the Program in Information Technologies are to:</p> <ul style="list-style-type: none"> • Provide the student with an in-depth knowledge of the theoretical aspects of higher education disciplines, which prepares the person for further study at the Master's degree or work with a qualification. • Give student an interdisciplinary education in information technology, based on fundamental theories and principles of mathematics and informatics, which will enable him / her to develop professionally and contribute to the development of the field. • Prepare high-level, competitive specialists with the broad theoretical knowledge and practice-oriented, transferable skills necessary for professional development in modern IT field in Georgia and abroad as well.
<p>Learning Outcomes</p>	<p>Upon completion of the Bachelor's degree program in Information Technologies, the graduate will acquire the following competencies:</p> <ol style="list-style-type: none"> 1. A solid knowledge of the basic concepts of information technology. Ability to understand the theoretical and practical aspects of the field, the main features of the field and modern trends based on knowledge of mathematical and computer technology principles. 2. Ability to select, create, evaluate, and develop computer-based system, process, component or program design. 3. Ability to effectively integrate ICT-based solutions with the consumer environment, identify and analyze customer needs. 4. Ability to use the principles of programming, computer systems, the latest approaches and technological tools. 5. Ability to select the best approaches and standards when developing a technology solution or application, make a situational analysis and reasoned conclusion. 6. Understanding the value of the learning process and its importance, the need of constantly updating professional knowledge and ability to acquire it, communicate orally and in the written manner as well. 7. Ability to appreciate technology-related values and share them with others, understand ethical and social responsibility and put them into practice.
<p>Building a Career</p>	<p>Internships and Job Placements</p> <p>The program structure allows students to be “job ready” early in the program and offers opportunities for career advancement. Students will be offered to be part of the coordinated internship programs or get a job placement through the support of the CU Career Center.</p> <p>Career Opportunities</p> <p>Program graduates will have an opportunity to work in a variety of environments such as industry, media, government, private and business organizations. As a rule, the work of graduates involves the following types of activities: analyzing problems for solutions, formulating and testing, using advanced communications or multimedia equipment, or working in teams for product development. Examples of job titles of program graduates may include: Software Developer, Computer Communications Specialist, System and Security Administrator, Network Systems and Data Communications Analyst, IT Business Management Consultant, Product Line Manager, Telecommunications Manager, Multimedia Developer, Animator etc.</p>
<p>Study Continuation Opportunities</p>	<p>The program graduates can continue their studies at any of Master's Degree programs in Georgia or abroad, in accordance with the regulation required by the law.</p>
<p>Student Evaluation and Grading System</p>	

The aim of the evaluation is to assess to what extent the learning outcomes prescribed by the syllabus are reached. The student's evaluation consists of multiple components and evaluates the course goals and learning outcomes by applying measurable criteria and appropriate rubrics. The student's evaluation is based on four major principles: objectivity, trustworthiness, validity and transparency.

The students are evaluated according to two sets of evaluation: summative and formative. The aim of the summative assessment is to accurately evaluate the student's performance. It monitors quality of learning and the level of the student's achievement in relation to the goals set by the course. The formative assessment is oriented on the student's development. It gives students appropriate feedback on their achievements.

The evaluation system includes 100 points and envisages:

a) Five types of positive grades:

a.a) (A) Excellent – 91-100 points of assessment;

a.b) (B) Very good – 81-90 points of maximal assessment;

a.c) (C) Good – 71-80 points of maximal assessment;

a.d) (D) Satisfactory – 61-70 points of maximal assessment;

a.e) (E) Sufficient – 51-60 points of maximal assessment;

b) two negative grades:

b.a) (FX) Did not pass – 41-50 points of maximal assessment, which means the student needs to work harder and is allowed to retake the exam one more time after working independently;

b.b) (F) Fail – 40 points or less of maximal assessment, which means the student's work is insufficient and he/she has to retake the course.

Students are awarded credits on the basis of the final evaluation comprising the scores of the interim and final exam assessments.

The attainment of student's learning outcomes considers the interim and final evaluations, for which relative proportions out of the total score (100 points) and a minimum competence level are allocated. Namely, out of 100 points, the interim results are allocated 70 points, while the final exam results are 30 points. In both of the components (interim and final) the minimum competency barrier to be reached is 51%. The interim evaluation includes assessment components, the total of which is 70 points. For each assessment component, the evaluation is based on the pre-determined learning goals, task-oriented clear criteria and the learning rubrics drawn on their basis. In the interim results Freshmen student (except B2 level English groups) has to accumulate at least 51% of the 70 points to be allowed to take the final exam. The student's final examination is passed, if he/she gets at least 51% of the total 30 points, For All the rest the student has to accumulate at least 59% of the 70 points to be allowed to take the final exam. The student's final examination is passed, if he/she gets at least 60% of the total 30 points.

In case the student fails to overcome the minimum competency barrier of the final exam, he/she is allowed to retake the final examination. The student shall retake the final examination within the period prescribed by the academic calendar no later than 5 days after announcement of the results of the final exam.

In case the student totally scores 0-50 points or fails to overcome the minimum competency barrier set for any form of the evaluation (Interim/Final exam), he/she shall be given a grade of "F-0".

Teaching and Learning Methods

Different teaching methods are employed during the teaching process depending on the topics covered. Those include: **Discussions/debates** – one of the most common methods of interactive teaching. Quality of Students' involvement is higher; classes are more dynamic and students are more active. Any discussion can turn into a debate. The method allows professors to give questions and get answers and enables students to develop skills of discussion and debates and prepares them for justifying their opinions and points.

Team (Collaborative) work - the method implies dividing students into teams and assigning different tasks to them. Each team member works on the task individually and shares his/her ideas with the rest. Depending on the type of task, team members can change tasks and roles. The strategy ensures students' maximum involvement in the learning process.

Problem Based Learning (PBL) – a problem is given and analyzed in order to acquire knowledge.

Cooperative Learning – where the whole class is responsible not only for his/her own learning and understanding of the subject matter but also for aiding and assisting others in better understanding it. Each student works on a problem until he/she fully understands everything.

Heuristic method – is largely incremental. Students are to discover facts on their own and make links between them.

Case Studies – Professors and students discuss a particular case and fully comprehend an issue at hand. In Medicine it can be discussion of the medical record of a particular patient, in Political Science it can be analysis of a conflict between any two countries (e.g., Armenia-Azerbaijan), etc.

Brain storming – the method facilitates to generating as many ideas about a particular topic as possible. The method encourages creativity; it is particularly efficient with a large group of students and consists of a few stages:

- Creative approach to a problem/issue
- Listing the ideas generated, without any criticism, on the board.
- Identifying the ideas most closely linked with the problem/issue;
- Identifying criteria for finding which idea is more relevant to the issue/problem at hand;
- Evaluating selected ideas according to pre-selected criteria;
- Selecting the best idea – the one having the best evaluation or meeting most of the criteria;

Role play – students are assigned different roles, which allows them to look at a problem from different perspectives. Like debates, role play also helps students develop skills needed for giving their opinion and justifying their judgments.

Method of Demonstration – displaying visual materials. In majority of cases it is better to give students both audio and visual material simultaneously; the material can be given by both - professors and students; the method implies giving visual information on the whiteboard or carrying out a complex laboratory experiment.

Induction, Deduction, Analysis, Synthesis.

A deductive approach means that the teacher gives students a new concept, explains it and then has the students practice using the concept.

In contrast with the deductive method, inductive instruction makes use of student “noticing”. Instead of explaining a given concept and following this explanation with examples, the teacher presents students with many examples showing how the concept is used. The intent is for students to “notice”, by way of the examples, how the concept works and fits together.

With the method of analysis a problem is disintegrated into components. This method facilitates to comprehensive analysis of each of the constituent elements of a more complex problem.

Method of synthesis is opposite of the process of analysis. One whole is made by grouping its constituent elements, which allows students to look at a problem as one whole.

Explanatory method – discussing a particular issue, i.e., professor provides examples and discusses all sides and details.

Action-oriented teaching – requires active participation of both professor and students where major emphasis is put on practical interpretation of theoretical knowledge.

E-learning - The method combines three ways of instruction

Teaching methods complement each other during the teaching process. Course syllabus provides detailed information about teaching methods used.

Human Resources

The Program is implemented by the Academic and Invited Personnel: Thirteen Professors, Three Associate Professors, one Assistant-Professor, Three Assistants and Twenty Six Invited Lecturers, who, according to their qualification are ready to help students in developing the competencies, defined by the program.

Partnership

Caucasus University’s and Caucasus School of Technology’s Partner organizations: foreign and Georgian higher educational institutions, as well as governmental and non-governmental organizations are also involved into the program implementation, within the framework of a Memorandum of Cooperation.

Partner Governmental and non-governmental organizations:

HR Recruitment Agency; Aliance Group Holding; Omedia; GITA; EY; Immobiliare; Silknet; UGT; Orient Logic; MyGPS; ZETEN; Scientific Research Institute Optica; Guramex; Georgian National Communications Commission; Ministry of Defence of Georgia; Ministry of Justice of Georgia; Ministry of Finance of Goergia; National Bank of Georgia; Tbilisi City Hall

Foreign higher educational institutions:

Tallinn University of Technology; Riga Technical University; Upper Austria University of Applied Sciences (Hagenberg); University of Southern Denmark; Fairleigh Dickinson University; Kaunas University Of Technology;

Ming Chuan University of Taiwan; Universidad Autonoma de Gvadalajara, Mexico; IESB, Brasilia Higher Education Institute, Brazil.

Material and Technical Resources

For reaching the outcomes envisaged by the Program, the University infrastructure and material and technical resources unrestrictedly accessible for the students and the academic personnel, namely: Auditoria equipped with appropriate equipment and conference hall; Computer classes/labs, computers connected to the internet and intranet and specially tailored software guaranteeing smooth operation of learning/teaching process;

The material resources of the Universty ensure the goals set by the Program are reached and the planned, outcomes are realized:

Premises: the Program is conducted on the University premises where sanitary-hygiene and safety rules are adhered to. The University building fully complies with technical requirements established for Universities; the University has auditoria designed for lectures and practical classes fully equipped with appropriate equipment and devices (projectors, desks and chairs, whiteboards, etc.).

Library: - The University library has printed and electronic fund necessary for implementation of the Program accessible for the students and academic personnel. The library has an electronic catalogue. The library has a Reading Room equipped with appropriate property (chairs, desks, computers). The Reading Room allows students to use internet and international electronic resources.

Information-Communication Technologies – laboratories and computer equipment appropriate to Program meeting modern requirements, connected to the internet and accessible for the students, academic, invited and administrative personnel are available at the University. The computers are equipped with appropriate instruments/applications. The auditoria and computer classes are equiped with local net and internet.

The University operates an electronic system for organizing the educational process, which fosters academic process and makes monitoring of the students' academic performance possible at all times. The University makes the catalogue of the educational programs and the information on implementation of the educational programs and conducting the educational process public and accessible at all times.

The mentioned resources are accessible for the University students, academic, invited and administrative personnel. All the interested persons are informed on the possibility of using these resources and are familiar with the rules and procedures of their utilization.

Financial Resources

The budget for financial Support of the Program is developed and included in the whole budget of the University.

Program Curriculum

№	Course Code	Prerequisite	Course	Year								ECTS
				I		II		III		IV		
				ECTS								
I Semester	II Semester	I Semester	II Semester	I Semester	II Semester	I Semester	II Semester					
Required General Educational Courses												
1.	CIS 1140		Computer Skills and Office Applications	x								5
2.	WRT 1140		Academic Writing	x								5
3.	ENGL 0007	ENGL 0006	B2.0 General English Language	x								5
4.	ENGL 0008	ENGL 0007	B2 General English Language		x							5
Elective General Education Courses												
5.	ENGL 0009	ENGL 0008	C1.0 General English Language			x						5
6.	ENGL 0010	ENGL 0009	C1 General English Language				x					5
7.	CIS 1241	CIS 1140	Data Analysis		x							5
8.	HIST 0001		Introduction to World History & Civilization	x								5
9.	POLS 0002		Political Science									5
10.	HIST 0003		History of Georgia									5
11.	SOCI 0004		Sociology									5
12.	PHIL 0005		Philosophy									5
13.	PSYC 0006		Psychology									5
Required Specialization Courses												
14.	MATH 0003		Calculus I	x								5
15.	MATH 0004	MATH 0003	Calculus II		x							5
16.	MATH 1240		Discrete Mathematics		x							5
17.	MATH 2240	MATH 0004	Scientific Computing			x						5
18.	PHYS 2140	MATH 0003	Principles of Physics			x						5
19.	ELC 2240	PHYS 2140	Electronics				x					5
20.	CTC 1141		Principles of Computer Programming I	x								5

№	Course Code	Prerequisite	Course	Year								ECTS	
				I		II		III		IV			
				ECTS									
				I Semester	II Semester	I Semester	II Semester	I Semester	II Semester	I Semester	II Semester		
21.	CTC 1242		Computer Architecture		x								5
22.	CTC 1243	CTC 1141	Principles of Computer Programming II		x								5
23.	CTC 2141	CTC 1141	Web Technologies I			x							5
24.	CTC 2143	CTC 1242	Operating Systems			x							5
25.	CTC 2144		Principles of Networking			x							5
26.	CTC 2241	CTC 2141	Web Technologies II				x						5
27.	CTC 2243		Introduction to Database Systems				x						5
28.	CTC 2244		Computer Security				x						5
29.	CTC 2245	CTC 1243	Algorithms & Data Structures I					x					5
30.	PST 3240	MATH 0004	Probability & Statistics						x				6
31.	ITPM 4140		IT Project Management								x		6
Elective Specialization Courses													
32.	CTC 3142	CTC 1243	Object Oriented Programming					x					6
33.	CTC 3143	CTC 2241	Web Technologies III					x					6
34.	CTC 3145		System Administration I					x					6
35.	CTC 3149	CTC 1243	Programming Paradigms					x					6
36.	SEC 3140		Usable Security					x					6
37.	CTC 3249	CTC 2245	Algorithms & Data Structures II					x					6
38.	CTC 4145	CTC 2243	Database Administration					x					6
39.	CTC 4247	CTC 1243	Python Programming Language					x					6
40.	MK 3140		Digital Marketing					x					6
41.	CTC 3241	CTC 1243	User Interfaces						x				6
42.	CTC 3242		Software Security							x			6

№	Course Code	Prerequisite	Course	Year								ECTS	
				I		II		III		IV			
				ECTS									
I Semester	II Semester	I Semester	II Semester	I Semester	II Semester	I Semester	II Semester	I Semester	II Semester				
43.	CTC 3243	CTC 1243	Java Programming Language I						x			6	
44.	CTC 3244	CTC 1243	.NET Technologies I						x			6	
45.	CTC 3245		System Administration II						x			6	
46.	CTC 3246		Network Security						x			6	
47.	CTC 4141	CTC 1243	Software Engineering I							x		6	
48.	CTC 4142	CTC 3243	Java Programming Language II							x		6	
49.	CTC 4143	CTC 3244	.NET Technologies II							x		6	
50.	CTC 4147	CTC 2245	Artificial Inteligence							x		6	
51.	CTC 4148	MATH 2140	Cryptography							x		6	
52.	CTC 4241	CTC 4141	Software Engineering II								x	6	
53.	CTC 4243	CTC 1243	Mobile Programming								x	6	
54.	CTC 4249	PST 3240	Machine Learning								x	6	
55.			Free Course ¹								x		
Bachelor's Thesis													
56.	BPR 4240		Bachelor's Thesis									x	12
ECTS				Per Semester		30	30	30	30	30	30	30	30
				Per Year		60		60		60		60	
				Courses Per Year		12		12		10		9	

¹ Student can take courses in terms of “Free Course” (18 ECTS) from other Bachelor’s degree programs and/or form the Elective Specialization Courses in this program.

Distribution of Total Hours

№	Course Name	ECTS Credits\ Hours	Lecture / Practical Work Hours	Seminar Hours	Midterm and Final Exam Hours	Presentation Hours	Out of class preparation Hours
1.	Computer Skills and Office Applications	5/125	21	3	4	2	95
2.	Data Analysis	5/125	19	5	4	2	95
3.	Academic Writing	5/125	19	5	4	2	95
4.	B2.0 General English Language	5/125	58	3	4	3	57
5.	B2 General English Language	5/125	57	3	5	3	57
6.	C1.0 General English Language	5/125	58	3	4	3	57
7.	C1 General English Language	5/125	58	3	4	3	57
8.	Introduction to World History & Civilization	5/125	14	10	4	2	95
9.	Political Science	5/125	22	2	4	2	95
10.	History of Georgia	5/125	21	3	4	2	95
11.	Sociology	5/125	24		4	2	95
12.	Philosophy	5/125	24		4	2	95
13.	Psychology	5/125	18	4	4	4	95
14.	Calculus I	5/125	22	4	4		95
15.	Calculus II	5/125	22	4	4		95
16.	Discrete Mathematics	5/125	22	4	4		95
17.	Scientific Computing	5/125	24	6	4	2	89
18.	Principles of Physics	5/125	18	6	4	2	95
19.	Electronics	5/125	21	3	4	2	95
20.	Principles of Computer Programming I	5/125	26	6	4		89
21.	Computer Architecture	5/125	19	5	4	2	95
22.	Principles of Computer Programming II	5/125	30	2	4		89
23.	Web Technologies I	5/125	19	5	4	2	95
24.	Operating Systems	5/125	22	4	4		95
25.	Principles of Networking	5/125	19	5	4	2	95
26.	Web Technologies II	5/125	21	3	4	2	95
27.	Introduction to Database Systems	5/125	21	3	4	2	95
28.	Computer Security	5/125	23	3	4		95
29.	Algorithms & Data Structures I	5/125	32		4		89
30.	IT Project Management	6/150	19	3	4	4	120
31.	Object Oriented Programming	6/150	21	5	4		120
32.	Web Technologies III	6/150	18	6	4	2	120
33.	Database Administration	6/150	21	5	4		120
34.	System Administration I	6/150	21	5	4		120
35.	Digital Marketing	6/150	19	5	4	2	120

Nº	Course Name	ECTS Credits\ Hours	Lecture / Practical Work Hours	Seminar Hours	Midterm and Final Exam Hours	Presentation Hours	Out of class preparation Hours
36	Programming Paradigms	6/150	23	3	4		120
37	Probability & Statistics	6/150	19	5	4	2	120
38	User Interfaces	6/150	22	4	4		120
39	Software Security	6/150	21	5	4		120
40	Java Programming Language I	6/150	20	4	4	2	120
41	Artificial Inteligence	6/150	22	4	4		120
42	System Administration II	6/150	20	4	4	2	120
43	Network Security	6/150	19	5	4	2	120
44	Algorithms & Data Structures II	6/150	28	4	4		114
45	Software Engineering I	6/150	21	5	4		120
46	Java Programming Language II	6/150	19	5	4	2	120
47	.NET Technologies I	6/150	24	2	4		120
48	Python Programming Language	6/150	23	3	4		120
49	Usable Security	6/150	21	5	4		120
50	Cryptography	6/150	21	5	4		120
51	Machine Learning	6/150	21	5	4		120
52	Software Engineering II	6/150	21	5	4		120
53	.NET Technologies II	6/150	24	2	4		120
54	Mobile Programming	6/150	21	5	4		120
55	Bachelol's Thesis	12/300	14				286

Map of Learning Outcomes

№	Semester	Course code	Course Name	Learning Outcomes						
				A solid knowledge of the basic concepts of information technology. Ability to understand the theoretical and practical aspects of the field, the main features of the field and modern trends based on knowledge of mathematical and computer technology principles.	Ability to select, create, evaluate, and develop computer-based system, process, component or program design.	Ability to effectively integrate ICT-based solutions with the consumer environment, identify and analyze customer needs.	Ability to use the principles of programming, computer systems, the latest approaches and technological tools.	Ability to select the best approaches and standards when developing a technology solution or application, make a situational analysis and reasoned conclusion.	Understanding the value of the learning process and its importance, the need of constantly updating professional knowledge and ability to acquire it, communicate orally and in the written manner as well.	Ability to appreciate technology-related values and share them with others, understand ethical and social responsibility and put them into practice.
1.	I	CIS 1140	Computer Skills and Office Applications			X			X	
2.	I	WRT 1140	Academic Writing						X	X
3.	I	ENGL 0007	B2.0 General English Language						X	X
4.	II	ENGL 0008	B2 General English Language						X	X
5.	I	MATH 0003	Calculus I	X	X					X
6.	II	MATH 0004	Calculus II	X	X					X
7.	II	MATH 1240	Discrete Mathematics		X	X				
8.	III	MATH 2140	Scientific Computing	X	X	X				
9.	III	PHYS 2140	Principles of Physics			X		X		
10.	IV	ELC 2240	Electronics			X			X	
11.	I	CTC 1141	Principles of Computer Programming I	X	X	X	X			
12.	II	CTC 1242	Computer Architecture	X			X			

№	Semester	Course code	Course Name	Learning Outcomes						
				A solid knowledge of the basic concepts of information technology. Ability to understand the theoretical and practical aspects of the field, the main features of the field and modern trends based on knowledge of mathematical and computer technology principles.	. Ability to select, create, evaluate, and develop computer-based system, process, component or program design.	Ability to effectively integrate ICT-based solutions with the consumer environment, identify and analyze customer needs.	Ability to use the principles of programming, computer systems, the latest approaches and technological tools.	Ability to select the best approaches and standards when developing a technology solution or application, make a situational analysis and reasoned conclusion.	Understanding the value of the learning process and its importance, the need of constantly updating professional knowledge and a ability to acquire it, communicate orally and in the written manner as well.	Ability to appreciate technology-related values and share them with others, understand ethical and social responsibility and put them into practice.
13.	II	CTC 1243	Principles of Computer Programming II	X	X	X	X			
14.	III	CTC 2141	Web Technologies I	X			X			
15.	III	CTC 2143	Operating Systems	X				X		
16.	III	CTC 2144	Principles of Networking	X	X					
17.	IV	CTC 2241	Web Technologies II			X	X			
18.	IV	CTC 2243	Introduction to Database Systems	X		X				
19.	IV	CTC 2244	Computer Security				X	X		X
20.	IV	CTC 2245	Algorithms & Data Structures I	X	X	X				
21.	V	PST 3240	Probability & Statistics	X						X
22.	VII	ITPM 4140	IT Project Management					X	X	X
23.	VIII	BPR 4242	Bachelor's Thesis	X	X	X	X	X	X	X

Map of Program Objectives and Learning Outcomes

Program Objectives Learning Outcomes	Provide the student with an in-depth knowledge of the theoretical aspects of higher education disciplines, which prepares the person for further study at the Master's degree or work with a qualification.	Give student an interdisciplinary education in information technology, based on fundamental theories and principles of mathematics and informatics, which will enable him / her to develop professionally and contribute to the development of the field.	Prepare high-level, competitive specialists with the broad theoretical knowledge and practice-oriented, transferable skills necessary for professional development in modern IT field in Georgia and abroad as well.
A solid knowledge of the basic concepts of information technology. Ability to understand the theoretical and practical aspects of the field, the main features of the field and modern trends based on knowledge of mathematical and computer technology principles.	X	X	
Ability to select, create, evaluate, and develop computer-based system, process, component or program design.		X	X
Ability to effectively integrate ICT-based solutions with the consumer environment, identify and analyze customer needs.	X		X
Ability to use the principles of programming, computer systems, the latest approaches and technological tools.		X	X
Ability to select the best approaches and standards when developing a technology solution or application, make a situational analysis and reasoned conclusion.		X	X
Understanding the value of the learning process and its importance, the need of constantly updating professional knowledge and ability to acquire it, communicate orally and in the written manner as well.	X	X	
Ability to appreciate technology-related values and share them with others, understand ethical and social responsibility and put them into practice.	X	X	

Academic and Invited Personnel

#	Personnel Name	Status	Course
1.	Abesalom Iashvili	Invited Lecturer	Electronics
2.	Avtandil Kavrelishvili	Professor	Introduction to Database Systems
3.			Database Administration
4.	Akaki Khvedelidze	Invited Lecturer	System Administration I
5.	Aleskandre Lomadze	Invited Lecturer	Artificial Intelligence
6.	Giorgi Alkhazishvili	Invited Lecturer	Software Engineering I
			Software Engineering II
7.	Giorgi Datukishvili	Professor	Computer Skills and Office Applications
			Data Analysis
8.	Giorgi Iashvili	Invited Lecturer	Usable Security
9.	Giorgi Karanadze	Invited Lecturer	Digital Marketing
10.	Giorgi Lomidze	Invited Lecturer	Computer Architecture
11.	Giorgi Cubinidze	Invited Lecturer	IT Project Management
12.	Giorgi Jibladze	Invited Lecturer	Web Technologies I
			Web Technologies II
13.	Gaioz Japharidze	Professor	Political Science
14.	Davit Gogolashvili	Invited Lecturer	Machine Learning
15.	Ekaterine Kvachantiradze	Professor	Introduction to World History & Civilization
16.		Invited Lecturer	.NET Technologies I
			.NET Technologies II
17.	Emili Avdaliani	Invited Lecturer	Principles of Networking
18.	Lasha Kharazi	Invited Lecturer	Philosophy
19.	Zaza gamezardashvili		Algorithms & Data Structures I
			Algorithms & Data Structures II
20.	Zurab Bragvadze	Professor	History of Georgia
21.	Zurab tikaradze	Invited Lecturer	Java Programming Language I
			Java Programming Language II
22.	Michal Malafiejski	Invited Lecturer	Principles of Computer Programming I
			Principles of Computer Programming II
			Object Oriented Programming
23.	Tamar Sharashenidze-Soyucok	Invited Lecturer	B2.0 General English Language
			B2 General English Language
24.	Tamta Mshvidobadze	Invited Lecturer	C1.0 General English Language
			C1 General English Language
25.	Temur Jangveladze	Invited Lecturer	Scientific Computing
26.	Ioseb Dzmanashvili	Professor	Web Technologies III
			Programming Paradigms
			Mobile Programming
27.	Mariam Kobuladze	Invited Lecturer	User Interfaces
28.	Giorgi Iashvili	Assistant	Computer Security
29.	Maksim Iavich	Professor	
			Software Security

			Cryptography
30.	Merab Tavartkiladze	Professor	System Administration II
31.	Mzia Tediashvili	Professor	Psychology
32.	Zviad Khukhunashvili	Invited Lecturer	Probability & Statistics
33.	Natia Putkaradze	Invited Lecturer	Academic Writing
34.	Giorgi Lomidze	Invited Lecturer	Principles of Physics
35.	Salome Gogberashvili	Invited Lecturer	B1.0 General English Language
			B1 General English Language
36.	Soso Tsotniashvili	Invited Lecturer	Calculus I
			Calculus II
			Discrete Mathematics
37.	Lasha Matiashvili	Invited Lecturer	Sociology
38.	Nikoloz Alavidze	Invited Lecturer	Operating Systems
39.	Shalva Svanishvili	Invited Lecturer	Network Security