



საქართველოს ტექნიკური უნივერსიტეტი
GEORGIAN TECHNICAL UNIVERSITY

Modified by
Academic Board of GTU
2 April 2008
Order № 01-05-04/96

Bachelor's Educational Program

Name of the program

მშენებლობის მენეჯმენტი

Construction Management

Faculty

სამშენებლო

Construction

Programme manager

Professor Vakhtang Balavadze

Qualification to award and program credits

(Bachelor of Management)

Will be awarded In case of a minimum of 240 credits, combined with the combination of 220 credits and free components in the program

The language of teaching

Georgian

Precondition for admission to the program

A bachelor's degree is allowed only for the holder of a state certificate, certifying a complete general education or a person corresponding to it, who will be matriculated in accordance with the legislation of Georgia.

Description of the program

Program was developed according ECTS system, 1 credit is equal to 25 hours, which is meant as a contact, as well as independent work hours. The distribution of credits represented in the curriculum.

Undergraduate - educational program student enrolls at least 240 (ECTS) credits.

Annual total amount of credits accrued by the student

- a) It is permissible to exceed 60 ECTS credits,
- b) Less than 60 ECTS credits are allowed.
- c) It is not allowed to exceed 75 ECTS credits.

The duration of the program is 4 years (8 semester)The semester includes 20 weeks

The training week is 15

The right to go to the final exam is given to the student who has fully fulfilled the prerequisites provided by the educational program and passed the minimum competency margin in the interim assessments. At the same time, the minimum amount of work defined by the program was passed.

In case of accumulation of the score of 41-50 points for the interim assessment and the final examination (FX evaluation can't be passed), or accumulating the total 51 or more points of the assessment, the doctorate is entitled to pass an additional examination during the same session. The interval between the conclusion and the addition test must be at least 5 days.

Part of the level of evaluation of student learning results in each component consists of intermediate assessment and final exam. The interim assessment includes the current activity and the mid-examination exam. Each component of the evaluation has minimum competence level defined in the instructional management of the Technical University of Georgia and is also defined in the course courses (syllabus).

More information can be found on the following link:http://gtu.ge/Study-Dep/Files/Pdf/martvis_%20instruqc_18_SD.PDF

After completion of the program, a bachelor's degree will be awarded: Bachelor of Management, in case of not less than 20 credits of 220 credit and free components of basic specialty.

220 credits of basic specialty include:

Compulsory training courses of specialty - total of 186 credits;

Foreign Language Component - Total 6 Credits. It includes English, Russian, German and French language courses. The student chooses one of the foreign languages at the beginning of the study;

Compulsory selection courses - 3 credits in total;

Compulsory elective training courses in specialty: in total - 10 credits. In the seventh semester, the student chooses the bachelor's choice of specialty courses.

Previous Project Practices in Management: 5 Credits.

Bachelor's Project: 10 credits.

In addition, the program includes free components: In total, 20 credits, From the subject line of free components, the student chooses at least 20 credits in the 8th semester.

The thematic load includes the following semesters:

I semester

Engineering Mathematics 1 - 5 Credits Foreign language 1 - 3 credits, General Physics 1 - 5 credits, Construction statistics - 4 credits; Introduction to specialty - 5 credits, Fundamentals of programming in management - 5 credits, Elective Courses: 3 Credits (History of Georgia, Fundamentals of Philosophy, Fundamentals of Politics, Cultural Studies, Modern Technologies of Language Communication, Introduction to Sociology, Introduction to Psychology)

II semester

Engineering Mathematics 1 - 5 Credits, General Physics 1 - 5 credits, Foreign language 1 - 3 credits, Basics of material strength - 5 credits, Business Basics- 4 credits , Theoretical Mechanics (Kinematics, Kinetics)- 5 credits Architectural planning - 3 credits;

III semester

Engineering Mathematics 3 - 5 Credits Plan and construction drawing - 5 credits, Principles of Economics - 5 credits, construction materials - 5 credits, Environmental protection and ecology 2 - 5 credits, construction Mechanism - 5 credits;

IV semester

Construction structures - 5 credits, Construction ethics, law and contracts - 5 credits, Introduction to Human Resources Management - 5 credits, Basics of Engineering Geodesy - 5 credits, Operation and Management of construction Production / Companies - 5 credits, building construction technology -5 credits,

V semester

Labor security in construction - 5 credits, Basis of accounting- 5 credits , Construction marketing; - 5 credits, Construction Economics - 5 credits, Introduction to expenditure accounting - 5 credits, construction Investment Activities and Development - 5 credits;

VI semester

Construction projects management 1 - 5 credits, Construction cost estimate - 5 credits, Financial Accounting - 5 credits, Construction organization and planning - 5 credits, construction material-technical support and procurement organization - 5 credits, Real estate assessment and management - 5 credits;

VII semester

Construction projects management 2 - 5 credits, Compulsory elective courses of specialty - 10 credits, Technical analysis of construction business - 5 credits, Innovative technology management in construction - 5 credits, Previous Project Practices in Management - 5 Credits;

VIII semester

Free components - 20 credits;
Bachelor's Project - 10 credits.

The purpose of the program

- Train Bachelors of Management giving due consideration to the specifics of Construction Management;
- Teach Bachelors how to identify both the strong and weak points of the business activities, how to comprehend them and establish the cause-and-effect relations between them;
- Teach the methods of developing construction business plans in adherence to the construction norms and rules and the economic requirements toward construction for the purpose of inclusion into the management of the construction business processes;
- Teach them the mechanisms of management of the economic, financial, insurance, marketing, innovative and other processes involved in the construction business activities;
- Train qualified, competitive specialists with civic consciousness and activeness developed at a high level who will be motivated to become part of the growth of the economic potential of his/her country, demonstrating his/her professional conduct and ethical responsibility in striving toward these goals.

Learning Outcomes and Competences (General and Sectoral)

- **Knowledge and Understanding** – the Graduates will Have:
Wide knowledge of the management sphere, building the foundation for developing the skills that are necessary for construction management, understanding the limits of professional activities and critical judgment thereof;

The ability to identify the processes ongoing in the field of business and assessment of their effectiveness, knowledge of the methods for determining the participants in the process of construction-business activities;

Knowledge of the theoretical fundamentals of defining the market options and performing the relevant actions;

The ability to learn and comprehend the economic and simple economic-mathematical methods of managerial processes;

Knowledge of fundamentals of the natural sciences and the ability to employ it in resolution of minor problems;

Knowledge and understanding of the construction norms and rules as well as the complex issues related to the technological processes used in the process of construction;

Knowledge and ability of conduction of construction works in safe and environmentally friendly manner. Understanding of the inter mutual dependence between technical and environmental issues;

- **Ability to use the Acquired Knowledge and Skills in Practice** – the Graduates will Have and be Able to:

The ability to participate in identifying the market options and performing the relevant actions;

The ability to prepare and deliver reports as per the predetermined instructions, provide explanations for financial documents, prepare reports on financial information, use accounting statement systems and develop budgets;

The ability to identify the resources required for management of deliverables within his/her competence;

The ability to manage simple construction processes utilizing modern techniques and technologies;

The ability to identify, formulate and resolve the general problems existing in the industry that are characteristic to the field of construction as per the instructions.

The ability to conduct simple working processes in adherence to the construction norms and Rules and giving due consideration to the economic requirements toward construction.

- **Conclusion-Making Skills** – the Graduates will Have:

The ability to provide explanations and formulate conclusions based upon the marketing data collection and analysis performed for the processes in the construction business;

The ability to obtain the required information from scientific and technical reference materials and through the internet, analyze them and make the relevant conclusions;

The ability to ensure correct comprehension and evaluation of the risk factors existing in the sector during the construction and operation processes and to draw the relevant conclusions

- **Communication skills**– the Graduates will Have:

The ability to make up business documentation using the terminology of the management sphere;

The ability to prepare detailed written reports concerning the ideas, existing problems and the ways of their resolution in the field of construction in both Georgian and foreign languages, to verbally communicate information to the industry specialists as well as to non-specialists; the ability to use the modern information and communication technologies creatively.

- **Learning Skills** – the Graduates will Have:

The ability to perform coherent and versatile assessment of his/her own educational process;

The ability to identify the needs for the process of studies at next academic level (Master's Program), employing the obtained coherent knowledge and skills.

- **Values** – the Graduates will Have:

The ability to participate in the process of forming the managerial values and strive for their enrooting;

The ability to act in adherence to the main laws of ethics, exercising both professional and ethical responsibilities, demonstrating care for public health and safety, giving due consideration to aesthetic values at the same time;

The graduates will demonstrate respect toward ecological systems and undertake environmental protection duties;

The ability to observe professional values (accuracy, punctuality, unbiased judgment, being organized, etc.).

Methods of achieving learning outcomes (teaching and learning)

Lecture Seminar (team working) Practice Laboratory Practice
 Course paper/project Consultation Independent work

Based on the specific course of study in the learning process, the relevant below listed activities of the teaching-learning methods are used, which are reflected in the relevant training courses (syllabus):

(Discussion, debate, presentation, group work, etc.)

1. **Discussion/debates.** This is the most widely spread method of interactive teaching. A discussion process greatly increases the quality of students' involvement and their activity. A discussion may turn into an argument and this process is not merely confined to the questions posed by the teacher. It develops students' skills of reasoning and substantiating their own ideas.
2. **Cooperative teaching** is a teaching strategy in the process of which each member of a group not only has to learn the subject himself, but also to help his fellow-student to learn it better. Each member of the group works at the problem until all of them master the issue.
3. **Collaborative work;** using this method implies dividing students into separate groups and giving each group its own task. The group members work at their issues individually and at the same time share their opinions with the rest of the group. According to the problem raised, it is possible to shift the functions among the group members in this process. This strategy ensures the students' maximum involvement in the learning process.
4. **Problem-based learning (PBL)** is a method which uses a concrete problem as the initial stage both for acquiring new knowledge and integration process.
5. **Eurastic method** is based on the gradual solution of the task set. This process is carried out independently of the learning facts and by seeing the connections between them.
6. **Case study** – the teacher discusses concrete cases together with the students and they study the issue thoroughly. E.g., in the sphere of engineering safety it can be a discussion of a concrete accident or catastrophe, or in political science it can be a study of a concrete
7. **Brain storming** – this activity implies to form and promote radically different opinion, idea on concrete issue/problem. This activity contributes to the development of a creative approach to the problem. Its application is effective in case of a large number of students and consists of several main stages: – Problem / issue determination in a creative perspective; – In a certain period of time, without criticism, note the ideas expressed by the listeners (mainly on the board); – Determination of assessment criteria to determine the establish the conformity of the idea with the aim of the research; – Assessment of selected ideas with predetermined criteria; – By process of elimination, distinguish those ideas that are most relevant to the issue. – Demonstration of the highest evaluation idea as the best way to solve the set problem
8. **Role and situational games** – games that are fulfilled according to predefined scenario allow students to look at the issue differently. It helps them to develop an alternative viewpoint. Like discussions, these games also formulate the student's ability to express and protect his/her position independently
9. **Demonstration method** implies presenting information with the help of visual aids. It is quite effective in reaching the required result. It is frequently advisable to present the material simultaneously through audio and visual means. The material can be presented both by a teacher and a student. This method helps us to make different steps of perceiving the teaching material more obvious, specify what steps the students are supposed to take independently; at the same time this strategy visually shows the essence of an issue/problem. Demonstration can be very simple.
10. **Induction is** such a form of transmitting any knowledge when the process of thinking in the course of the study is directed towards generalization, in other words when delivering the material the process is going from concrete to general.

11. **Demonstration method** implies presenting information with the help of visual aids. It is quite effective in reaching the required result. It is frequently advisable to present the material simultaneously through audio and visual means. The material can be presented both by a teacher and a student. This method helps us to make different steps of perceiving the teaching material more obvious, specify what steps the students are supposed to take independently; at the same time this strategy visually shows the essence of an issue/problem. Demonstration can be very simple.
12. **Analytical method** helps us to divide the whole teaching material into constituent parts. In this way the detailed interpretation of separate issues within the given complex problem is simplified.
13. **Synthetic method** implies forming one issue from several separate ones. This method helps students to develop the ability of seeing the problem as a whole.
14. **Verbal or oral method** comprises a lecture, narration, conversation, etc. During the process the teacher conveys, explains the material verbally, and students perceive and learn it by comprehending and memorizing.
15. **Written method** implies the following forms of activity: copying, taking notes, composing theses, writing essays.
16. **Practical activity** unite all the teaching forms that stimulate developing practical skills in students. In this case a student independently performs different kinds of activity on the basis of the knowledge acquired
17. **Explanatory method** is based on discussing a given issue. In the process of explaining the material the teacher brings concrete examples the detailed analysis of which is made in the framework of the given topic.
18. **Activity-oriented teaching** implies teachers' and students' active involvement in the teaching process, when practical interpretation of the theoretical material takes place.

Designing and presenting a project. While designing a project a student applies the knowledge and skills he has acquired for solving a problem. Teaching by means of designing projects increases students' motivation and responsibility. Working on a project involves the stages of planning, research, practical activity and presenting the results according to the chosen issue. The project is considered to be completed if its results are presented clearly, convincingly, and correctly. It can be carried out individually, in pairs or in groups; also, within the framework of one or several subjects (integration of subjects); on completion the project is presented to a large audience.

Student knowledge assessment system

Grading system is based on a 100-point scale

Positive grades:

- **(A)** - Excellent - the rating of 91-100 points;
- **(B)** - Very good - the rating of 81-90 points
- **(C)** - Good - the rating of 71-80 points
- **(D)** - Satisfactory - the rating of 61-70 points
- **(E)** - Enough - the rating of 51-60 points

Negative grades:

- **(FX)** - Did not pass - 41-50 points of rating, which means that the student needs more work to pass and is given the right to take the exam once more with independent work;
- **(F)** - Failed - 40 points and less, which means that the work carried out by the student is not enough and he/she has to learn the subject from the beginning

Field of employment

The graduate will be employed in the construction business, Construction project design firms, City Hall Supervision, Architect service, In the Ministry of Cultural Heritage and Monument Protection, In the utility services of Georgian cities and municipalities of populated areas, In the construction offices under the Ministry of Economy and Sustainable Development.

Opportunity to continue learning

Master's Educational Programs

Human and material resources necessary for the implementation of the program

The program is provided with relevant human resources. The document confirming the material-technical resource and the CV of the academic personnel for the implementation of the program are available in the attached documents.

Number of attached syllabus: 68

Program subject load

№	Subject	Precondition of admit	ECTS credits								
			I year		II year		III year		IV year		
			Semester								
I	II	III	IV	V	VI	VII	VIII				
1	Engineering Mathematics 1	N/A	5								
2	General physics 1	N/A	5								
3	Foreign language		3								
3.1	English language for technical specialties – 1	The English language was passed on the unified national examination									
3.2	Russian language for technical specialties – 1	A Russian language was passed on a unified national examination									
3.3	French language for technical specialties – 1	French language was passed on a unified national examination									
3.4	German language for technical specialties – 1	German language was passed on the unified national examination									
4	Construction statistics	N/A	4								
5	Introduction to specialty	N/A	5								
6	Fundamentals of programming in	N/A	5								

№	Subject	Precondition of admit	ECTS credits											
			I year		II year		III year		IV year					
			Semester											
			I	II	III	IV	V	VI	VII	VIII				
	management													
7	Compulsory elective training courses	N/A	3											
7.1	History of Georgia	N/A												
7.2	The basics of philosophy	N/A												
7.3	The basics of politics	N/A												
7.4	Culturology	N/A												
7.5	Modern Technologies of Language Communication	N/A												
7.6	Introduction to Sociology	N/A												
7.7	Introduction to psychology	N/A												
8	Engineering Mathematics2	Engineering Mathematics 1		5										
9	General physics 2	General physics 1		5										
10	Foreign language			3										
10.1	English language for technical specialties – 2	English language for technical specialties – 1												
10.2	Russian language for technical specialties – 2	Russian language for technical specialties – 1												
10.3	French language for technical specialties – 2	French language for technical specialties – 1												
10.4	German language for technical specialties – 2	German language for technical specialties – 1												
11	Fundamentals of Material Strength	General physics 1; Engineering Mathematics 1		5										
12	Business Basics	N/A		4										
13	Theoretical mechanics (kinematics, kinetics)	Engineering Mathematics 1; General physics 1		5										
14	Basics of Architectural Planning	N/A		3										
15	Engineering Mathematics 3	Engineering Mathematics 2			5									
16	Planned and construction drawing	N/A			5									
17	Principles of Economics	N/A			5									
18	Construction materials	N/A			5									
19	Environmental protection and ecology2	N/A			5									
20	Construction mechanics	Engineering Mathematics 1, Theoretical mechanics and material strength			5									
21	Construction structures	Construction materials				5								

№	Subject	Precondition of admit	ECTS credits							
			I year		II year		III year		IV year	
			Semester							
			I	II	III	IV	V	VI	VII	VIII
22	Construction ethics, law and contracts	N/A				5				
23	Introduction to Human Resources Management	N/A				5				
24	Basics of Engineering Geodesy	N/A				5				
25	Operating and management of construction industry / company	Business basics, introduction in specialty				5				
26	Technology of Building Construction	N/A				5				
27	Labor safety in construction	N/A					5			
28	Basis of accounting	N/A					5			
29	Construction Marketing	Introduction to specialty					5			
30	Construction Economics	Engineering Mathematics 2					5			
31	Introduction to expenditure accounting	Technology of Building Construction					5			
32	construction Investment Activities and Development	Introduction to specialty					5			
33	Construction Projects Management1	N/A						5		
34	Construction cost estimate	Introduction to Cost Accounting						5		
35	Financial accounting	Basis of accounting						5		
36	construction organization and planning	Introduction to specialty						5		
37	Material and technical support for construction And procurement organization.	Construction ethics, law and contracts; Introduction to specialty						5		
38	Real estate assessment and management	Financial accounting						5		
39	Construction Projects Management 2	Construction Projects Management 1							5	
40	Elective Compulsory training courses of specialty 1								5	
40.1	Tax case	Basis of accounting							0	
40.2	Basics for designing civil and industrial buildings	Construction structures							0	
41	Elective Compulsory training courses of specialty 2								5	
41.1	Basics of Construction Technical Expertise	Construction structures							0	
41.2	Construction business and finances	Business Basics							0	
42	Construction business technical-	Construction							5	

№	Subject	Precondition of admit	ECTS credits							
			I year		II year		III year		IV year	
			Semester							
			I	II	III	IV	V	VI	VII	VIII
	economic analysis	organization and planning; Financial accounting;								
43	Innovative technology management in construction	N/A							5	
44	Previous Project Practice in Management	Required at least 120 credits in Compulsory training courses of specialty							5	
45	Free components:									20
45.1	Management of the company's management	N/A								5
45.2	Management Psychology	N/A								5
45.3	Ground mechanics	N/A								5
45.4	Technology and Organization of Construction Repair Work	Technology of Building Construction								5
45.5	Designing of buildings using reinforced concrete structures	N/A								5
45.6	Banking	N/A								5
45.7	Numerical methods of solving engineering and economic tasks	N/A								5
45.8	Insurance case	N/A								5
45.9	Economics of nature use	N/A								5
46	Bachelor's Project	Previous Project Practice in Management								10
	total									30
		Per semester	30	30	30	30	30	30	30	30
		Per year	60		60		60		60	
		Total	240							

Map of learning outcomes

Nº	Subject	Knowledge and understanding	Ability to use knowledge in practice	Making judgments	communication skill	ability to learn	Values
1	Engineering Mathematics 1	X	X			X	
2	General physics 1	X		X		X	
3	Foreign language						
3.1	English language for technical specialties –1	X	X		X	X	
3.2	Russian language for technical specialties –1	X	X		X	X	
3.3	French language for technical specialties –1	X	X		X	X	
3.4	German language for technical specialties –1	X	X		X	X	
4	Construction statistics	X	X	X			
5	Introduction to specialty	X	X	X			
6	Fundamentals of programming in management	X	X	X	X		
7	Compulsory elective learning courses						
7.1	History of Georgia	X	X	X	X		
7.2	The basics of philosophy	X	X				X
7.3	The basics of politics	X	X	X	X		
7.4	Culturology	X			X		X
7.5	Modern Technologies of Language Communication	X	X		X		
7.6	Introduction to Sociology	X	X	X			X
7.7	Introduction to psychology	X	X		X		
8	Engineering Mathematics2	X	X			X	
9	General physics2		X	X		X	
10	Foreign language						
10.1	English language for technical specialties –2	X	X		X	X	
10.2	Russian language for technical specialties – 2	X	X		X	X	
10.3	French language for technical specialties –2	X	X		X	X	
10.4	German language for technical specialties –2	X	X		X	X	
11	Fundamentals of Material Strength	X	X	X	X	X	
12	Business Basics	X	X	X			
13	Theoretical mechanics (kinematics,kinetics)	X	X	X		X	
14	Basics of Architectural Planning	X	X	X	X	X	
15	Engineering Mathematics 3	X	X			X	
16	Planned and construction drawing	X	X			X	
17	Principles of Economics	X	X	X	X	X	X
18	Construction materials	X	X	X		X	
19	Environmental protection and ecology 2	X	X		X		X
20	Labor safety in construction	X	X	X			

Nº	Subject	Knowledge and understanding	Ability to use knowledge in practice	Making judgments	communication skill	ability to learn	Values
21	Construction mechanics	X	X	X			
22	Construction ethics, law and contracts	X	X		X		X
23	Introduction to Human Resources Management	X	X	X	X	X	X
24	Basics of Engineering Geodesy	X	X	X			
25	Operating and management of construction industry / company	X	X	X			
26	Technology of Building Construction	X	X	X			
27	Construction structures	X	X			X	
28	Basis of accounting	X	X	X			
29	Construction Marketing	X	X	X			X
30	Construction Economics	X	X	X			
31	Introduction to expenditure accounting	X	X	X			
32	Construction Investment Activities and Development	X	X	X			
33	Construction Projects Management 1	X	X	X			
34	Construction cost estimate	X	X	X			
35	Financial accounting	X	X	X			
36	Construction organization and planning	X	X	X			
37	Construction material-technical support and organizing procurement	X	X	X			
38	Real estate assessment and management	X	X	X			
39	Construction Projects Management 2	X	X	X			
40	Elective Compulsory training courses of specialty 1:						
40.1	Tax case	X	X	X			
40.2	Basics for designing civil and industrial buildings	X	X			X	
41	Elective Compulsory training courses of specialty 2						
41.1	Basics of Construction Technical Expertise	X	X	X	X		X
41.2	Construction business and finances	X	X	X			
42	Construction business technical-economic analysis	X	X	X			
43	Innovative technology management in construction	X	X	X			
44	Previous Project Practice in Management	X	X	X	X	X	X
45	Free components:						
45.1	Management of the company's management	X	X	X			
45.2	Management Psychology	X	X			X	
45.3	Ground mechanics	X	X	X			
45.4	Technology and Organization of Construction Repair Work	X	X	X	X		
45.5	Designing of buildings using reinforced concrete structures		X		X		X

Nº	Subject	Knowledge and understanding	Ability to use knowledge in practice	Making judgments	communication skill	ability to learn	Values
45.6	Banking	X	X			X	
45.7	Numerical methods of solving engineering and economic tasks	X	X			X	
45.8	Insurance case	X	X			X	X
45.9	Economics of nature use	X	X			X	
46	Bachelor's Project	X	X	X	X	X	X

]

Program curriculum

Nº	Subject code	subject	ECTS credits / hours	Hour								
				Lecture	Seminar (work in the group)	Practical	Laboratory	Practice	Course work/ project	Middle semester exam	Final exam	Independent work
1	MAS33508G1-LP	Engineering Mathematics 1	5/125	15		30				1	1	78
2	PHS50208G1-LB	General physics 1	5/125	15			30			1	2	77
3		Foreign language										

№	Subject code	subject	ECTS credits / hours	Hour								
				Lecture	Seminar (work in the group)	Practical	Laboratory	Practice	Course work/ project	Middle semester exam	Final exam	Independent work
3.1	LEH14412G1-P	English language for technical specialties – 1	3/75			30				1	1	43
3.2	LEH14612G1-P	Russian language for technical specialties –1	3/75			30				1	1	43
3.3	LEH14812G1-P	French language for technical specialties –1	3/75			30				1	1	43
3.4	LEH15012G1-P	German language for technical specialties –1	3/75			30				1	1	43
4	AAC80801G1-LS	Construction statistics	4/100	15	15					1	1	68
5	AAC82101G1-LP	Introduction to specialty	5/125	15		30				1	1	78
6	ICT32501G2-LPB	Fundamentals of programming in management	5/125	15		15	15			1	1	78
7		Compulsory elective learning courses										
7.1	HEL2021G1-LS	History of Georgia	3/75	15	15					1	1	43
7.2	HEL30212G121-LS	The basics of philosophy	3/75	15	15					1	1	43
7.3	SOS62411G1-LS	The basics of politics	3/75	15	15					1	1	43
7.4	SOS43811G1-LS	Culturology	3/75	15	15					1	1	43
7.5	LEH12012G1-LS	Modern Technologies of Language Communication	3/75	15	15					1	1	43
7.6	SOS40312G1-LS	Introduction to Sociology	3/75	15	15					1	1	43
7.7	SOS30312G1-LS	Introduction to psychology	3/75	15	15					1	1	43
8	MAS33608G1-LP	Engineering Mathematics 2	5/125	15		30				1	1	78
9	PHS50308G1-LB	General physics 2	5/125	15			30			1	2	77
10		Foreign languages										
10.1	LEH14512G1-P	English language for technical specialties – 2	3/75			30				1	1	43
10.2	LEH14712G1-P	Russian language for technical specialties –2	3/75			30				1	1	43
10.3	LEH14912G1-P	French language for technical specialties –2	3/75			30				1	1	43
10.4	LEH15112G1-P	German language for technical specialties –2	3/75			30				1	1	43
11	EET71005G1-P	Fundamentals of strength of	5/125	15		15	15			1	1	78

№	Subject code	subject	ECTS credits / hours	Hour								
				Lecture	Seminar (work in the group)	Practical	Laboratory	Practice	Course work/ project	Middle semester exam	Final exam	Independent work
		materials										
12	BUA75201G1-LS	Business Basics	4/100	15	30					1	1	68
13	MAS40301G1-LPB	Theoretical mechanics (kinematics,kinetics)	5/125	15		15	15			1	1	78
14	AAC13406G-1LK	Basics of Architectural Planning	3/75	15					15	1	1	43
15	MAS33708G1-LP	Engineering Mathematics 3	5/125	15		30				1	1	78
16	AAC80401G1-LPB	Projective and civil drawing	5/125			45				1	1	78
17	SOS53901G1-LS	Principles of Economics	5/125	15	30					1	1	78
18	AAC81901G1-LB	Construction materials	5/125	30			15			1	1	78
19	EET26001G1-LSB	Environmental protection and ecology 2	5/125	15	15		15			1	1	78
20	AAC82201G1-LB	Labor safety in construction	5/125	30			15			1	1	78
21	AAC81501G1-LPK	Construction mechanics	5/125	15		15			15	1	1	78
22	AAC81301G1-LP	Construction ethics, law and contracts	5/125	15		30				1	1	78
23	BUA75101G1-LS	Introduction to Human Resources Management	5/125	15	30					1	1	78
24	PHS40403G1-LB	Basics of Engineering Geodesy	5/125	15			30			1	1	78
25	AAC82501G1-LS	Operating and management of construction industry / company	5/125	15	30					1	1	78
26	AAC30401G1-LSK	Technology of Building Construction	5/125	15		15				1	1	78
27	AAC81401G1-LP	Construction structures	5/125	15		30				1	1	78
28	BUA12001G1-LP	Basis of accounting	5/125	15		30				1	1	78
29	BUA53401G1-LS	Construction Marketing	5/125	15	30					1	1	78
30	AAC80501G1-LS	Construction Economics	5/125	15	30					1	1	78
31	AAC82001G1-LP	Introduction to expenditure accounting	5/125	15		30				1	1	78
32	AAC81001G1-LP	Construction Investment Activities and Development	5/125	15		30				1	1	78
33	AAC81601G1-LP	Construction Projects Management 1	5/125	15		30				1	1	78
34	AAC82401G1-LPK	Construction cost estimate	5/125	15		15			15	1	1	78
35	BUA12001G1-LP	Financial accounting	5/125	15		30				1	1	78
36	AAC80701G1-LP	Construction organization and	5/125	15		30				1	1	78

№	Subject code	subject	ECTS credits / hours	Hour									
				Lecture	Seminar (work in the group)	Practical	Laboratory	Practice	Course work/ project	Middle semester exam	Final exam	Independent work	
		planning											
37	AAC80601G1-LS	Construction material-technical support and organizing procurement	5/125	15	30						1	1	78
38	BUA48201G1-LP	Real estate assessment and management	5/125	15		30					1	1	78
39	AAC81701G1-LP	Construction Projects Management 2	5/125	15					30	1	1	78	
40		Elective Compulsory training courses of specialty 1											
40.1	BUA12101G1-LP	Tax case	5/125	15		30					1	1	78
40.2	AAC81101G1-LS	Basics for designing civil and industrial buildings	5/125	15	30						1	1	78
41		Elective Compulsory training courses of specialty 2											
41.1	AAC81801G1-LP	Basics of Construction Technical Expertise	5/125	15		30					1	1	78
41.2	BUA28301G1-LP	Construction business and finances	5/125	15		30					1	1	78
42	AAC81201G1-LK	Construction business technical-economic analysis	5/125	15					30	1	1	78	
43	BUA75001G1-LSP	Innovative technology management in construction	5/125	15	15	15					1	1	78
44	BUA31601G2-P	Previous Project Practice in Management	5/125					45		2	2	76	
45		Free components:											
45.1	BUA31701G2-LS	Management of the company's management	5/125	30	15						1	1	78
45.2	BUA38505G1-LS	Management Psychology	5/125	30	15						1	1	78
45.3	PHS35901G2-LPB	Ground mechanics	5/125	15		15			15	1	1	78	
45.4	AAC08001G1-LSK	Technology and Organization of Construction Repair Work	5/125	15	15				15	1	1	78	
45.5	AAC07901G1-LP	Designing of buildings using reinforced concrete structures	5/125	15		15			15	1	1	78	
45.6	BUA29301G1-LS	banking	5/125	15	30						1	1	78

№	Subject code	subject	ECTS credits / hours	Hour								
				Lecture	Seminar (work in the group)	Practical	Laboratory	Practice	Course work/ project	Middle semester exam	Final exam	Independent work
45.7	ICT32601G2-LPB	Numerical methods of solving engineering and economic tasks	5/125	15	15		15			1	1	78
45.8	BUA29401G1-LS	Insurance case	5/125	30	15					1	1	78
45.9	ENV20601G1-LS	Economics of nature use	5/125	15	30					1	1	78
46	BUA31501G2-K	Bachelor's Project	10/250						75	2	2	171

Program Supervisor

Vakhtang Balavadze

Faculty of Civil Engineering
Head of Quality Assurance Service

Marina Javakhishvili

Dean of the Faculty

David Gurenidze

Agreed with

Quality Assurance Service of GTU

Irma inashvili

Modified

Faculty of Civil Engineering
At the meeting of Faculty Board
N 25 30.03.2018
Chairman of the Faculty Board

David Gurgenidze