



**NATIONAL CENTER FOR  
EDUCATIONAL QUALITY  
ENHANCEMENT**

**Accreditation Expert Group Report on Higher Education Programme**

**Civil Engineering, Bachelor**

**The University of Georgia**

Evaluation Date(s) 16.11.2023

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Tbilisi

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## Information about a Higher Education Institution <sup>1</sup>

Name of Institution Indicating its Organizational Legal Form	LLC - The University of Georgia
Identification Code of Institution	205037137
Type of the Institution	University

## Expert Panel Members

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<b>Member</b> (Name, Surname, HEI/Organisation, Country)	Mariam Gorgodze, Sul Khan-Saba Orbeliani University, Georgia

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<sup>1</sup> In the case of joint education programme: Please indicate the HEIs that carry out the programme. The indication of an identification code and type of institution is not obligatory if a HEI is recognised in accordance with the legislation of a foreign country.

## I. Information on the education programme

Name of Higher Education Programme (in Georgian)	სამოქალაქო ინჟინერია
Name of Higher Education Programme (in English)	Civil Engineering
Level of Higher Education	VI, Bachelor
Qualification to be Awarded <sup>2</sup>	Bachelor of Civil Engineering
Name and Code of the Detailed Field	0732 Building and Civil Engineering
Indication of the right to provide the teaching of subject/subjects/group of subjects of the relevant cycle of the general education <sup>3</sup>	
Language of Instruction	English
Number of ECTS credits	240
Programme Status (Accredited/ Non-accredited/ Conditionally accredited/new/International accreditation) Indicating Relevant Decision (number, date)	New
Additional requirements for the programme admission (in the case of an art-creative and/or sports educational programme, passing a creative tour/internal competition, or in the case of another programme, specific requirements for admission to the programme/implementation of the programme)	

<sup>2</sup> In case of implementing a joint higher education programme with a higher education institution recognized in accordance with the legislation of a foreign country, if the title of the qualification to be awarded differs, it shall be indicated separately for each institution.

<sup>3</sup> In case of Integrated Bachelor's-Master's Teacher Training Educational Programme and Teacher Training Educational Programme

## II. Accreditation Report Executive Summary

### ▪ General Information on Education Programme<sup>4</sup>

The study programme is relevant, timely and essential to training bachelor students, equipped with the necessary skills required to Civil engineering. But additional development of laboratory equipment is needed and there is a lack of additional academic staff.

### ▪ Overview of the Accreditation Site Visit

The bachelor study program provides quality education in the civil engineering, well-grounded in the fundamental principles and the study courses required for this. The study program is relevant, timely and essential to educate bachelor students, equipped with the necessary skills required to civil engineering. There a good recognition of the university at good educational level and efficient collaboration with international partners and joint agreements with international employers.

The study program is relevant, up-to-date and well implemented. This clearly show the relevance and alignment to civil engineering. Laboratory equipment base need additional development. The university has good library sources that supports students and staff. The program is provided with highly qualified human resources, but need additional human power in specific fields.

### ● Brief Overview of Education Programme Compliance with the Standards

**1 Standard: Substantially complies with requirements**

**2 Standard: Substantially complies with requirements**

**3 Standard: Substantially complies with requirements**

**4 Standard: Substantially complies with requirements**

**5 Standard: Complies with requirements**

### ▪ Recommendations

- Regarding the curriculum sequencing, there is a suggestion to enhance the logical progression of Construction Materials and Concrete Technology. Construction materials, currently taught in the 3rd semester, could be followed by Concrete Technology in the 4th semester, establishing a more coherent and sequential flow.
- Include additional professional software, for example Building information modeling as part of the study program.
- The mechanical error found in the self-assessment document should be corrected, where the Core subjects of the program are erroneously stated as 192 ECTS instead of the correct value of 198 ECTS.
- Additionally, it is recommended that the main component of concrete design mix, cement, be incorporated into the Building Materials course. This adjustment aligns with Section 5 of the reference manual (pages 144-180). Given that concrete design is

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<sup>4</sup> When providing general information related to the programme, it is appropriate to also present the quantitative data analysis of the educational programme.

covered in the 6th and 7th weeks of the construction materials study, understanding Portland cement in advance is crucial for students to effectively engage in concrete design. To facilitate this, it is advised to align the content of these two disciplines according to the specified guidelines.

- Now all study courses have 6 ECTS. In the future, we suggest that more important study courses (for example with course projects) be allocated 9 ECTS, while less important ones may require 3 ECTS.
- Establish relations with more institutions in Georgia and abroad in the civil engineering field in order to develop research and practical skills of students.
- It is recommended to incorporate additional practical components into the Engineering Surveying (CENG1001) teaching course and expand the inclusion of fieldwork, taking into account the specific characteristics of the course. This adjustment aims to enhance the hands-on learning experience and ensure a more comprehensive understanding of the course concepts.
- It is recommended to integrate more practical components into the Civil Engineering Drawing (CENG1031) teaching course, utilizing modern applications such as Computer-Aided Design (CAD), including software like AutoDesk. This enhancement will provide students with hands-on experience and exposure to contemporary tools, ensuring a more practical and relevant learning experience.
- It is recommended to ensure that the "Capstone Project" study course is assessed in accordance with the existing regulations of Georgia, incorporating both midterm and final assessments. Additionally, it is advisable to establish predetermined evaluation components, methods, criteria, and evaluation rubrics that are readily available to students.
- It is recommended to ensure that the Civil Engineering bachelor educational programme offers students sufficient possibilities to participate in international exchange programs.
- Meanwhile, most of the main subjects of the Civil Engineering specialty are taught by only three teachers. It is too much of a burden for them to teach well. Additional human power is required in specific fields.
- The laboratory equipment at the University of Georgia is limited in scope. To address this limitation, we recommend that the university consider entering into a

memorandum of understanding with an accredited laboratory or explore collaboration with another university laboratory to avail complete laboratory services.

▪ **Suggestions for Programme Development**

- After starting the study program, conduct surveys of internal and external stakeholders (employers, alumni, professional associations, etc.) about program learning outcomes.
- Constantly update literature sources used in educational courses.
- It's important to develop cooperation with more potential employers.
- University need to strengthen Erasmus connections with more partner universities (not only with the Technical University of Kosice).
- Exams result assessment criteria should be clarified.
- The budget envisages a sharp increase in the number of students (and income). It is necessary to justify how such growth will be achieved.
- It is suggested that the involvement of the all interested parties needs improvement in program development (especially student/graduate).

▪ **Brief Overview of the Best Practices (if applicable)<sup>5</sup>**

University established efficient system for academic staff and students to provide opportunities including financing for participation in international conferences, grants, journal publications.

An effective strategy for attracting foreign students. Active participation of foreign academic staff in the implementation of the study program.

▪ **Information on Sharing or Not Sharing the Argumentative Position of the HEI**

University shares the assessment given in the draft report and the experts' group can't take into account the changes made after the visit (according to paragraph 11 of Article 27/2 of the Accreditation Provision: when making a decision on the oral hearing, the document of the accreditation seeker which was drawn up after the accreditation visit is not taken into consideration).

**Considering arguments for recommendations in substandard 3.1**

The panel acknowledges that, at the institutional level, the University of Georgia has a mechanism and sufficient partnerships to offer international mobility opportunities for students, as elucidated in the report. Nevertheless, within the framework of the accreditation process, the evaluation pertains specifically to the international mobility opportunities available to students

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<sup>5</sup> A practice that is exceptionally effective and that can serve as a benchmark or example for other educational programme/programmes.

of a particular program rather than the institutional landscape in this regard. For the Civil Engineering bachelor education program, the agreement was signed only with the Technical University of Kosice, Slovakia. In an argumentative position, UG presented evidence of cooperation with universities in Turkey, Saudi Arabia, Germany, Iran, China, South Korea and South Africa. Despite the evident significance of these collaborations for the overall program, they do not specifically target the facilitation of exchange programs for students between HEIs. Taking into account the aforesaid circumstances, the recommendation remains unchanged.

- **In case of re-accreditation, it is important to provide a brief overview of the achievements and/or the progress (if applicable)**

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### III. Compliance of the Programme with Accreditation Standards

#### 1. Educational Programme Objectives, Learning Outcomes and their Compliance with the Programme

A programme has clearly established objectives and learning outcomes, which are logically connected to each other. Programme objectives are consistent with the mission, objectives and strategic plan of the HEI. Programme learning outcomes are assessed on a regular basis to improve the programme. The content and consistent structure of the programme ensure the achievement of the set goals and expected learning outcomes.

##### 1.1 Programme Objectives

Programme objectives consider the specificity of the field of study, level and educational programme, and define the set of knowledge, skills and competences a programme aims to develop in graduate students. They also illustrate the contribution of the programme to the development of the field and society.

#### Summary and Analysis of the Education Programme's Compliance with the Requirements of the Component of the Standard

The goals of the program are indicated as consider the university mission, the needs of the program's various constituencies, and these criteria as recommended by ABET. Accordingly, the program objectives are systematically utilized and effective process involving the program constituencies for the periodic review to provide high quality education in the civil engineering, well- grounded in the fundamental principles of mathematics and physics, strength of materials, structural analysis, engineering geology, soil mechanics, concrete technology, foundation engineering, road construction, earthquake engineering, construction management, and engineering economics.

Graduates of the program typically enter careers in construction testing, operation, and maintenance of buildings as well as infrastructures and may produce and utilize basic construction documents together with perform basic analysis and design of system components. Accordingly, they have the abilities:

- ✓ Utilization of principles, hardware, and software that are appropriate to produce drawings, reports, quantity estimates, and other documents related to civil engineering.
- ✓ Performance of standardized field and laboratory tests related to civil engineering.
- ✓ Utilization of surveying methods appropriate for land measurement and/or construction layout.
  
- ✓ Application of fundamental computational methods and elementary analytical techniques in sub-disciplines related to civil engineering.
- ✓ Planning and preparation of documents appropriate for design and construction.
- ✓ Performance of economic analyses and cost estimates related to design, construction, operations and maintenance of systems associated with civil engineering.
- ✓ Selection of appropriate engineering materials and practices.

✓ Performance of standard analysis and design in at least three sub-disciplines related to civil engineering.

The educational goals of the "Civil Engineering" program are fully consistent with the mission of the University of Georgia. This mission emphasizes the creation, transfer, and application of knowledge to advance science and contribute to the development of society, both at the local and international levels. The program's objectives are also in complete harmony with the strategic development plan of the Faculty. This plan is specifically geared towards shaping highly qualified and competitive professionals, arming them with the requisite skills and knowledge of cutting-edge technologies. This strategic focus enables graduates to effectively navigate modern challenges in a dynamically evolving environment, ensuring their relevance and desirability in both local and international labor markets. The program, therefore, serves as a vital component in fulfilling the broader mission of the university and the strategic objectives outlined by the Faculty.

Based on the self-evaluation report of the educational program, accompanying documentation, and information obtained during the accreditation visit, it is evident that the development of the civil engineering program incorporated evaluation, feedback, and recommendations from various stakeholders. Additionally, a labor market analysis was conducted, and its findings were considered in the program development.

The suggestions and recommendations formulated during this process are disseminated by the program working group. It is noteworthy that, apart from the stakeholders mentioned earlier, the academic and guest staff of the program, representatives of partner companies, and the administration were actively engaged in the program development.

While emphasizing the relevance of the educational program during interviews with employers, it is important to highlight that comprehensive information regarding the specific demand for the program within their companies and an approximate number of graduates to be employed directly could not be obtained during employer interviews.

According to experts, the goals of the program carefully consider the unique characteristics of the field of study, the academic level, and the educational program. They reflect the knowledge, skills, and competencies that the program aims to impart to graduates, as well as the program's intended contribution to the development of the field and society at large.

### **Evidences/Indicators**

- Mission of the University;
- Bachelor's Program of Civil Engineering;
- Comparative analysis with similar programs;
- Labor market research and analysis of employer's demand;
- ABET criteria for accrediting engineering programs, 2022-2023;
- Results of interviews.
  
- Prepared study program will enable to achieve the intended program objectives.
  
- Program objectives meet the demands of labor market and employers.

- Program objectives correspond to the mission, objectives and strategy of the HEI.
- Academic staff know program objectives and know how to implement them.

**Recommendations:**

- Proposal (s), which should be considered by the HEI, the programme to meet the requirements of the standard

**Suggestions for the Programme Development**

- Non-binding suggestions for programme development

**Evaluation**

Please, evaluate the compliance of the programme with the component

Component	Complies with requirements	Substantially complies with requirements	Partially complies with requirements	Does not comply with requirements
1.1 Programme Objectives	■	□	□	□

**1.2 Programme Learning Outcomes**

- The learning outcomes of the programme are logically related to the programme objectives and the specifics of the study field.
- Programme learning outcomes describe knowledge, skills, and/or the responsibility and autonomy that students gain upon completion of the programme.

**Summary and Analysis of the Education Programme's Compliance with the Requirements of the Component of the Standard**

The learning outcomes of the undergraduate educational program "Civil Engineering" have been developed taking into account the requirements of the local and international standards in force in the field, including the ABET accreditation standards. This, in turn, ensures the compliance of the learning outcomes of the program with the specifics of the field and the requirements of the labor market. The learning outcomes of the program are consistent with the program objectives. The civil engineering program envisages that the graduate should have:

- 1) An ability to identify, formulate, and solve complex engineering problems by applying principles of engineering, science, and mathematics.
- 2) An ability to apply engineering design to produce solutions that meet specified needs with consideration of public health, safety, and welfare, as well as global, cultural, social, environmental, and economic factors.
- 3) An ability to communicate effectively with a range of audiences.
- 4) An ability to recognize ethical and professional responsibilities in engineering situations and make informed judgments, which must consider the impact of engineering solutions in global, economic, environmental, and societal contexts.
- 5) An ability to function effectively on a team whose members together provide leadership, create a collaborative and inclusive environment, establish goals, plan tasks, and meet objectives.
- 6) An ability to develop and conduct appropriate experimentation, analyze and interpret data, and use engineering judgment to draw conclusions.
- 7) An ability to acquire and apply new knowledge as needed, using appropriate learning strategies.

According to experts assessment, the learning outcomes of the program exhibit a logical connection with the program's goals and the specific characteristics of the field of study. These outcomes comprehensively describe the knowledge, skills, and, where applicable, the responsibilities and autonomy that students acquire upon successfully completing the program.

### **Evidences/Indicators**

- Bachelor's Program of Civil Engineering;
- Comparative analysis of similar programs;
- Labor market research and analysis of employer's demand;
- ABET criteria for accrediting engineering programs, 2022-2023;
- Self-assessment report submitted by the institution;
- Syllabus of training courses;
- Map of Program Competencies;
- Results of the interview.

## Recommendations:

- Proposal (s), which should be considered by the HEI, the programme to meet the requirements of the standard

## Suggestions for Programme Development

- Non-binding suggestions for programme development

## Evaluation

Please, evaluate the compliance of the programme with the component

Component	Complies with requirements	Substantially complies with requirements	Partially complies with requirements	Does not comply with requirements
1.2 Programme Learning Outcomes	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

### 1.3 Evaluation Mechanism of the Programme Learning Outcomes

- Evaluation mechanisms of the programme learning outcomes are defined; the programme learning outcomes evaluation cycle consists of defining, collecting and analyzing data necessary to measure learning outcomes;
- Programme learning outcomes assessment results are utilized for the improvement of the programme.

## Summary and Analysis of the Education Programme's Compliance with the Requirements of the Component of the Standard

The monitoring of the implementation of the undergraduate educational program and the assessment of learning outcomes are based on both the method of evaluating the implementation of educational programs of the University of Georgia and the mechanism of evaluating the learning outcomes of the program developed within the framework of the undergraduate program of civil engineering. During the semester, the student's knowledge is assessed step by step, which includes midterm and final assessment. The forms of intermediate evaluation are as follows:

- Weekly evaluation (quiz);
- Abstract or other activity that assumes a presentation;
- Intermediate exam/colloquium;
- Evaluation of Practical Skills.

In each component of the educational program, depending on the specifics of it, the evaluation forms and points are different and written in it. Due to the specifics of the Program different evaluation forms may exist and they are determined by the respect program.

With the purpose of supporting the quality of education and constant improvement, the cycle of continuous quality enhancement is operated in the university. The goal of the (PDCA) cycle is to improve the activities in the process of education program implementation and to facilitate the elimination of deficiencies by responding in a timely manner. The cycle is composed of four main stages:

#### 1. Plan

At the starting stage, the process of the quality assurance of the educational program is planned, which includes the determination of frequency and procedures for receiving the feedback, expected outcomes, implementation time limits, checking criteria, resources, methods of achieving the outcomes, relevant goals, activities. At this stage the following is implemented:

- Analysis of similar local and international programs (secondary research);
- Direct targeted segment research of the program - potential students, potential employers, professor-teachers, experts;
- Bringing the field and general competencies in compliance with the national qualification frame
- and field document (if such exists);
- Quality inspection and its compliance with the legislative and university requirements in the survey results program;

#### 2. Do

In the second stage of the cycle, the activities planned within the relevant time limits are implemented in accordance with the agreed schedule, methods and resources.

#### 3. Check

In the third stage, the outcomes received as a result of the implementation in the second stage are analyzed in accordance with the criteria of the expected outcomes planned in the first stage, a comparison with the planned is made and the identification of deficiencies and mistakes is performed; at the stage of checking, the application of internal (all engaged parties) and external (experts) mechanisms is performed. Moreover, a statistical analysis of different components is performed during the course of the program.

#### 4. Act

The stage implies the determination of causes of deficiencies, mistakes and the development of recommendations for correcting activities with the purpose of eliminating the different between the existing and the planned expected outcomes. In addition, some questionnaires for Students, Graduates, Lecturers and Employers as well are utilized, the received results of which are employed for future modifications of program or any subject.

Based on the analysis of the data listed above and interviews conducted with the key personnel (with the head of the quality service, quality service specialists, program managers), it was revealed that the self-evaluation process aims to identify both the strengths and areas for improvement within the programs. Furthermore, this process helps determine the primary

needs for development and plan interventions accordingly. According to experts' assessment, the educational institution has defined mechanisms for evaluating the learning outcomes of the program. The process encompasses the identification, collection, and analysis of the necessary data to measure these learning outcomes. The analysis of program learning outcomes evaluation is utilized as a tool for enhancing and refining the program.

### Evidences/Indicators

- Bachelor's Program of Civil Engineering;
- The Provision of an Educational Program
- Programme learning outcomes assessment mechanism
- ABET criteria for accrediting engineering programs, 2022-2023
- Faculty strategic development plan;
- Interview results;
- Self-assessment report submitted by the institution;
  
- A program learning outcomes assessment mechanism has been prepared in which all stakeholders are included.
  
- Learning outcomes evaluation was performed.
  
- According to the assessment of the current situation, students have the opportunity to be actively involved in the process of continuous development of the educational program.

### Recommendations:

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### Suggestions for the Programme Development

- After starting the study program, conduct surveys of internal and external stakeholders (employers, alumni, professional associations, etc.) about program learning outcomes.

### Evaluation

Please, evaluate the compliance of the programme with the component

Component	Complies with requirements	Substantially complies with requirements	Partially complies with requirements	Does not comply with requirements
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**1.3 Evaluation Mechanism of the Programme Learning Outcomes**



**1.4. Structure and Content of Education Programme**

- The Programme is designed according to HEI's methodology for planning, designing and developing of education programmes.
  - The Programme structure is consistent and logical. The content and structure of the programme ensure the achievement of programme learning outcomes. The qualification to be granted is consistent with the content and learning outcomes of the programme.
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**Summary and Analysis of the Education Programme's Compliance with the Requirements of the Component of the Standard**

The content and structure of the Bachelor of Civil Engineering program is consistent with the qualifications awarded and ensures that the learning outcomes of the program are achieved. The curriculum consists of mandatory and optional learning components that reflect the current trends in the field and use the latest learning materials and resources.

Accordingly, 240 credits are considered by the program including

- 24 ECTS of University Core subjects;
- 198 ECTS of Program Core subjects;
- 72 ECTS of Elective subjects of the program, among which 24 ECTS should be selected.

Program core subjects contain:

- Mathematics: 30 ECTS
- Science: 18 ECTS
- Civil Engineering: 150 ECTS

The educational objectives of the undergraduate program in Civil Engineering are to provide a high-standard education and training to its students so that they have the knowledge and skills to enter careers in civil engineering. Guided by the Mission of the University, the Civil Engineering program is committed to preparing students who will be thoughtful, responsible, and successful citizens. Within three to five years of graduation, the program expects that civil engineering graduates will have:

- Become competent and engaged engineering professionals, applying their technical and managerial skills in the planning, design, construction, operation or maintenance of the built environment and global infrastructure, and utilizing their skills to analyze and



design systems, specify project methods and materials, perform cost estimates and analyses, and manage technical activities in support of civil engineering projects.

- Initiated an active program of life-long learning, including studies leading to professional licensure or an advanced degree in engineering, which provides for continued development of their technical abilities and management skills, and attainment of professional expertise.
- Developed their communication skills in oral, written, visual and graphic modes when working as team members or leaders, so they can actively participate in their communities and their profession.
- Established an understanding of professionalism, ethics, quality performance, public policy, safety, and sustainability that allows them to be professional leaders and contributors to society when solving engineering problems and producing civil engineering solutions.

In the final semester, the student will work on a final course design project (6 credits) that aims to prepare students for real-world challenges in the field of civil engineering. Within the scope of the final course design project, the student must apply the acquired theoretical knowledge and skills, as well as demonstrate effective work skills in solving the engineering task set before them. Specifically, the student has the ability to:

- Engineering Knowledge: Ability to apply knowledge of mathematics, science and engineering fundamentals and an engineering specialization to the solution of complex engineering problems.
- Problem Analysis: Ability to identify, formulate, research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences and engineering sciences.
- Design/Development of Solutions: Ability to design solutions for complex engineering problems and design systems, components, or processes that meet specified needs with appropriate consideration for public health and safety, cultural, societal, and environmental considerations.
- Investigation: Ability to investigate complex engineering problems in a methodical way including literature survey, design and conduct of experiments, analysis and interpretation of experimental data, and synthesis of information to derive valid conclusions.
- Modern Tool Usage: Ability to create, select and apply appropriate techniques, resources, and modern engineering and IT tools, including prediction and modeling, to complex engineering activities, with an understanding of the limitations.
- The Engineer and Society: Ability to apply reasoning informed by contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to professional engineering practice and solution to complex engineering problems.

- Environment and Sustainability: Ability to understand the impact of professional engineering solutions in societal and environmental contexts and demonstrate knowledge of and need for sustainable development.
- Ethics: Apply ethical principles and commit to professional ethics and responsibilities and norms of engineering practice.
- Individual and Team Work: Ability to work effectively, as an individual or in a team, on multifaceted and/or multidisciplinary settings.
- Communication: Ability to communicate effectively, orally as well as in writing on complex engineering activities with the engineering community and with society at large, such as being able to comprehend and write effective reports and design documentations, make effective presentations, and give and receive clear instructions.
- Project Management: Ability to demonstrate management skills and apply engineering principles to one's own work, as a member and/or leader in a team to manage projects in a multidisciplinary environment.
- Lifelong Learning: Ability to recognize importance of, and pursue lifelong learning in the broader context of innovation and technological developments.

According to expert assessment, the program was developed using the planning, development, and educational program methodologies employed by USD. The program's structure is coherent and logical, ensuring the achievement of learning outcomes. The content and structure are aligned with the qualification to be awarded. The academic and guest staff bring international experience to the program, facilitating exposure to the latest advancements in civil engineering. Despite the presence of new engineering laboratories, experts note that the laboratory equipment is not deemed appropriate. As a recommendation, it is suggested to explore the option of securing a comprehensive laboratory service, and the university is advised to consider issuing a memorandum to address this.

### **Evidences/Indicators**

- Mission of the University;
- Bachelor's Program of Civil Engineering;
- Syllabuses of Relevant Components;
- Matrix of Program Competencies;
- Comparative analysis with similar programs;
- Methodology for planning, designing and developing the educational programme;
- ABET criteria for accrediting engineering programs, 2022-2023.

### **Recommendations:**

- Regarding the curriculum sequencing, there is a suggestion to enhance the logical progression of Construction Materials and Concrete Technology. Construction

materials, currently taught in the 3rd semester, could be followed by Concrete Technology in the 4th semester, establishing a more coherent and sequential flow.

- Include additional professional software, for example Building information modeling as part of the study program.

### Suggestions for the programme development

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### Evaluation

Please, evaluate the compliance of the programme with the component

Component	Complies with requirements	Substantially complies with requirements	Partially complies with requirements	Does not comply with requirements
1.4 Structure and Content of Educational Programme	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

### 1.5. Academic Course/Subject

- The content of the academic course / subject and the number of credits ensure the achievement of the learning outcomes defined by this course / subject.
- The content and the learning outcomes of the academic course/subject of the main field of study ensure the achievement of the learning outcomes of the programme.
- The study materials indicated in the syllabus ensure the achievement of the learning outcomes of the programme.

### Summary and Analysis of the Education Programme's Compliance with the Requirements of the Component of the Standard

A planning stage precedes the development of the program in the University of Georgia, just like the renewal of the program, which includes the survey of the market, meetings with potential employers and probable or existing personnel implementing the program, analysis of the resources and consultations with the representatives of the School Administration. The program that has been developed or edited is reviewed by the School Board and goes through a university expertise conducted by the Quality Assurance Service. Director of the relevant School presents the program for the review at the Academic Board. Academic Board approves the new or the renewed program if considers the following facts are approved: the program outcomes

ensure the competitiveness of the graduates at the educational and employment market; the unity of the components of the program ensures the achievement of the goals and learning outcomes set by the program; the contents of all the components of the program, considering the teaching methods and credit capacity, ensure the achievement of the learning outcomes and goals set by the mentioned component, which will be relevantly reflected in the syllabus of the relevant component; the program is provided with human and material resources. The procedure for the approval and renewal of the Bachelor's program in Civil Engineering includes all of the mentioned-above steps.

The unity of the course of the Bachelor's program in Civil Engineering and their logical sequence ensures the learning outcomes considered by the program and therefore, meets the mission of the program, which is oriented on the employment market. The goals and outcomes of the program are aligned with the descriptor of the undergraduate educational qualification. Accordingly, 240 credits are considered by the program including 24 ECTS of University Core subjects including 18 ECTS of Free Elective subject, 198 ECTS of Program Core subjects, and 72 ECTS of Elective subjects of the program, among which 24 ECTS should be selected.

All subjects given in the proposed curriculum prepare graduates to apply knowledge of mathematics through differential equations, calculus-based physics, chemistry, and at least one additional area of basic science; apply probability and statistics to address uncertainty; analyze and solve problems in at least four technical areas appropriate to civil engineering; conduct experiments in at least two technical areas of civil engineering and analyze and interpret the resulting data; design a system, component, or process in at least two Civil Engineering contexts; include principles of sustainability in design; explain basic concepts in project management, business, public policy, and leadership; analyze issues in professional ethics; and explain the importance of professional licensure.

Construction materials, which is taught in the 3rd semester, and concrete technology, which is a logical continuation of this subject, is taught in the 5th semester, preferably concrete technology is taught after construction materials, in the 4th semester;

It is also desirable that cement, which is the main component of the concrete design mix, is taught in Building Materials, as described in Section 5 of the reference manual (pages 144-180), because in the 6th and 7th weeks of the construction materials study, concrete design is studied, water -cement ratio and if the student has not yet learned Portland cement, he will not be able to design concrete. It is desired that the topics of these two disciplines be written according to the specified guidelines.

The content of the course/subject and the number of credits ensure the achievement of the learning outcomes defined by this course/subject. The course/subject content and learning outcomes of the core area ensure that the learning outcomes of the program are achieved. The study material specified in the syllabus largely ensures the achievement of the learning outcomes of the program.

### **Evidences/Indicators**

- Mission of the University
- Bachelor's Program of Civil Engineering
- Programme learning outcomes assessment mechanism
- Syllabuses of Relevant Components
- Study literature, textbooks
- Labor market research and analysis of employer's demand
- ABET criteria for accrediting engineering programs, 2022-2023

### **Recommendations:**

- The mechanical error found in the self-assessment document should be corrected, where the Core subjects of the program are erroneously stated as 192 ECTS instead of the correct value of 198 ECTS.
- Additionally, it is recommended that the main component of concrete design mix, cement, be incorporated into the Building Materials course. This adjustment aligns with Section 5 of the reference manual (pages 144-180). Given that concrete design is covered in the 6th and 7th weeks of the construction materials study, understanding Portland cement in advance is crucial for students to effectively engage in concrete design. To facilitate this, it is advised to align the content of these two disciplines according to the specified guidelines.
- Now all study courses have 6 ECTS. In the future, we suggest that more important study courses (for example with course projects) be allocated 9 ECTS, while less important ones may require 3 ECTS.

### **Suggestions for the programme development**

- Constantly update literature sources used in educational courses.

### **Evaluation**

Please, evaluate the compliance of the programme with the component

Component	Complies with requirements	Substantially complies with requirements	Partially complies with requirements	Does not comply with requirements
1.5. Academic Course/Subject	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

### Compliance of the Programme with the Standard

1. Educational programme objectives, learning outcomes and their compliance with the programme	Complies with requirements	<input type="checkbox"/>
	Substantially complies with requirements	X
	Partially complies with requirements	<input type="checkbox"/>
	Does not comply with requirements	<input type="checkbox"/>

### 2. Methodology and Organisation of Teaching, Adequacy of Evaluation of Programme Mastering

Prerequisites for admission to the programme, teaching-learning methods and student assessment consider the specificity of the study field, level requirements, student needs, and ensure the achievement of the objectives and expected learning outcomes of the programme.

#### 2.1 Programme Admission Preconditions

The HEI has relevant, transparent, fair, public and accessible programme admission preconditions and procedures that ensure the engagement of individuals with relevant knowledge and skills in the programme to achieve learning outcomes.

#### Summary and Analysis of the Education Programme's Compliance with the Requirements of the Component of the Standard

The prerequisites for the admission to the program consider the specificity of the program, ensure the inclusion of persons possessing the mandatory knowledge, skills and competencies for completing the program for studying at the program; the prerequisites for the admission to the program are logically linked to the contents of the program, the learning outcomes and the qualification to be awarded.

The enrollment of the students to the program is performed in accordance with the regulation stipulated by the legislation, as below:

✓ Foreign high-school graduates who received complete general education abroad or its equivalent and the last two years of complete general education had studied abroad or students who lived abroad for the last two or more years and who are currently studying abroad in higher educational institutions recognized by the legislation of the host countries will be able to enter the program without passing Uniform National Entrance Examinations according to Order №224/N of the Minister of Education and Science of Georgia (December 29, 2011). If the applicant does not have the English language certificates in FCE (First Certificate in English), he / she must pass the English language B2 level university test (60% positive assessment).

✓ For citizens of Georgia Students are enrolled in the first level of academic higher education (undergraduate programs) according to the results of the Unified National Examinations or by the order of the Minister of Education and Science of Georgia №224 / n (December 29, 2011), on the basis of the administrative registration and the order of the president.

According to the experts' assessment, the educational institution has defined appropriate, transparent, fair, public and accessible prerequisites and procedures for admission of individuals to the program. These measures ensure the inclusion of individuals with relevant knowledge and skills, aligning with the program's learning outcomes.

#### **Evidences/Indicators**

- Bachelor's Program of Civil Engineering;
- Interview results.

#### **Recommendations:**

- Proposal (s), which should be considered by the HEI, the programme to meet the requirements of the standard

#### **Suggestions for the programme development**

- Non-binding suggestions for the programme development

#### **Evaluation**

Please, evaluate the compliance of the programme with the component

Component	Complies with requirements	Substantially complies with requirements	Partially complies with requirements	Does not comply with requirements
2.1 Programme Admission Preconditions	■	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

## 2.2. The Development of Practical, Scientific/Research/Creative/Performing and Transferable Skills

Programme ensures the development of students' practical, scientific/research/creative/performing and transferable skills and/or their involvement in research projects, in accordance with the programme learning outcomes.

### Summary and Analysis of the Education Programme's Compliance with the Requirements of the Component of the Standard

The program includes educational objectives incorporating research techniques and opportunities that are consistent with the mission of the institution, the needs of the program's various constituencies, and these criteria. Accordingly, a documented, systematically utilized, and effective process is taken into account involving program constituencies for the periodic review of these program educational objectives as well as research skills in all four technical areas of the program that ensures they remain consistent with the institutional mission, the program's constituents' needs, and these criteria.

University will try to cooperate with several institution and organizations regarding the civil engineering field of study with the purpose of developing research and practical skills of students. The cooperation considers the joint establishment of scientific connections with universities and research centers to implement joint research works as explained in Annex 07 and Annex 08.

Regular seminars will be conducted at the university with the purpose of delivering the newest ideas and existing problems in the civil engineering field of study, deepening knowledge, familiarization with the vision, popularization of the associated research areas, formation of an opinion and sharing experiences. Attending and participating in these seminars for students leads to make an additional opportunity to establish the culture of debates, and to present evidences for the development and strengthening of skills to defend their positions.

The University facilitates including Civil Engineering Laboratory (CELAB) may utilize to enhance the research skills of students. With this purpose, the main subject in the program is: a research thesis, within the frames of which students develop their skills of searching for information, its analysis and processing; implementing practical research, analyzing outcomes



and forming conclusions. Additionally, students often work on such topics that represent the subjects of research scopes considered by the academic personnel of the program.

Also, the university can give some opportunities including financing all expenses for participation in international conferences, grants system associated with international collaboration as well as journal publications for the academic personal of the program.

In addition to the theoretical knowledge required for the field, the bachelor's program focuses on the development of practical skills. The development of practical skills is provided in individual courses by performing projects/assignments of a practical nature based on the principle of individual or group work, by participating in laboratory work. Also, with a final course design project focused on the development of practical skills.

According to experts, the program guarantees, in alignment with the learning outcomes the development of students', practical, scientific / research / creative / performing and transfer skills and/or their engagement in research projects.

#### **Evidences/Indicators**

- Journal publications;
- CELAB activities;
- Statute of Student Clubs and Services Center;
- Report of Employment Support Center.
  
- Interview results.

#### **Recommendations:**

- Establish relations with more institutions in Georgia and abroad in the civil engineering field in order to develop research and practical skills of students.

#### **Suggestions for the programme development**

- It's important to develop cooperation with more potential employers.
- University need to strengthen Erasmus connections with more partner universities ( not only with the Technical University of Kosice).

#### **Evaluation**

Please, evaluate the compliance of the programme with the component

Component	Complies with requirements	Substantially complies with requirements	Partially complies with requirements	Does not comply with requirements
2.2.The Development of practical, scientific/research/creative/performing and transferable skills	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

### 2.3. Teaching and Learning Methods

The programme is implemented by use student-oriented teaching and learning methods. Teaching and learning methods correspond to the level of education, course/subject content, learning outcomes, and ensure their achievement.

#### Summary and Analysis of the Education Programme's Compliance with the Requirements of the Component of the Standard

Teaching in the bachelor's program of civil engineering is carried out using a variety of teaching-learning methods. The teaching methods used in the program correspond to the undergraduate level of education, the content of the course/component and serve to achieve the goals and learning outcomes of the course/component. Their use ensures the active participation of students in the learning process, their interaction both with each other and with the instructor, and the development of such competencies as autonomy, critical reasoning and analytical skills.

Various modern teaching methods are used in the program, namely:

- Lecture - Seminars: informative speech prepared in advance for addressing in front of the audience, by means of which the explanation and interpretation of the main material considered by the course is performed. The method includes the elements of questioning the explained material.
- Laboratory Exercises: by means of the facilities available in the Civil Engineering Laboratory (CELAB), the key issues of a particular topic will be experimentally studied and it will be tried to make the topic of the lecture clear for the students by answering their questions and providing practical experiments. The method enables the student to process the material independently on the basis of the recommendations given by the lecturer.
- Team Work: engagement of students in the lecturing process, joint discussion of issues related to the topic of the lecture by lecturer and employing a question-and-answer regime, during which students participate in the discussion, express their opinions, ask new questions, with regard to which the lecturer provides an explanation.

- Verbal or Oral Method: a lecture, reading, conversation and other activities are included in this method.

Based on the information gathered by experts, it is recommended to revise and enhance the hands-on learning experience. This adjustment aims to improve the overall effectiveness and applicability of the educational experience focusing on the practical teaching.

### **Evidences/Indicators**

- Bachelor’s Program of Civil Engineering;
- Syllabuses of relevant components;
- Student survey report;
- Teaching Methods Manual.

### **Recommendations:**

- It is recommended to incorporate additional practical components into the Engineering Surveying (CENG1001) teaching course and expand the inclusion of fieldwork, taking into account the specific characteristics of the course. This adjustment aims to enhance the hands-on learning experience and ensure a more comprehensive understanding of the course concepts.
- It is recommended to integrate more practical components into the Civil Engineering Drawing (CENG1031) teaching course, utilizing modern applications such as Computer-Aided Design (CAD), including software like AutoDesk. This enhancement will provide students with hands-on experience and exposure to contemporary tools, ensuring a more practical and relevant learning experience.

### **Suggestions for the programme development**

- Non-binding suggestions for the programme development

### **Evaluation**

Please, evaluate the compliance of the programme with the component

<b>Component</b>	<b>Complies with requirements</b>	<b>Substantially complies with requirements</b>	<b>Partially complies with requirements</b>	<b>Does not comply with requirements</b>

### 2.3. Teaching and learning methods



### 2.4. Student Evaluation

Student evaluation is conducted in accordance with the established procedures. It is transparent, reliable and complies with existing legislation.

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#### Summary and Analysis of the Education Programme's Compliance with the Requirements of the Component of the Standard

The University of Georgia (hereinafter – UG) has established internal regulations and procedures for student evaluation. According to the regulations, the study component of the programme is evaluated with a 100-point system, in which the mid-term makes a total of 60 points, and the rest 40 points are assigned to the final assessment. Each study course has one final and two or three (depending on whether the course has a laboratory exercise or not) mid-term exams. A student must accumulate at least 20 points (50%) in the final/additional exam to pass it.

The assessment system includes five types of positive and two types of negative evaluations –

- (A) Excellent - 91-100 points;
- (B) very good – 81-90 points;
- (C) Good – 71-80 points;
- (D) Satisfactory - 61-70 points;
- (E) Sufficient – 51-60 points;
- (FX) Unsatisfactory - 41-50 points, which means that the student needs more work to pass and is allowed to take the make-up exam once after independent work;
- (F) Failed – 40 points or less, which means that the work done by the student is not enough and he has to study the course/subject again.

The specificity of the assessment system in UG is that part of the positive evaluations (A, B, C, D) includes three degrees by itself –

Percentage rate	University grading	Results average coefficient (GPA)
97-100	A+	4,00
94-96	A	3,75
91-93	A-	3,50
87-90	B+	3,25
84-86	B	3,00
81-83	B-	2,75
77-80	C+	2,50
74-76	C	2,25

71-73	C-	2,00
67-70	D+	1,75
64-66	D	1,50
61-63	D-	1,25
51-60	E	1,00

Information regarding evaluation methods, components, and criteria of each study course is known in advance to students – syllabi are uploaded and available in the electronic learning management system my.ug.edu.ge. Students receive further explanation about the evaluation system in the first lecture of the study course. Based on the studied syllabi, the expert panel finds that the components and methods of assessment of each course are in accordance with the specificity of the subject and are relevant to the learning outcomes.

According to the interviews with students and academic/invited personnel, it has been confirmed that students receive feedback on learning outcomes as well as on improving their own strengths and areas for improvement. While grading students' work, the online UG System offers the possibility for lecturers to leave comments on each answer. Lecturers' feedback (comments) is available to students in the electronic portal "My UG" alongside the assessment results. If necessary, lecturers provide further feedback during the lectures. Hereby, it should be noted that lecturers cannot see whose work they are assessing, which ensures objectiveness of evaluation.

The curriculum of the Civil Engineering bachelor educational programme includes a "capstone project" as a mandatory course. Students have to take this course in the 8<sup>th</sup> semester. The expert panel has found that the syllabus of the abovementioned course includes no information regarding evaluation methods, components, or criteria.

During the site visit, the panel addressed the evaluation process of the "capstone project." The program head clarified that students are sent to partner organizations for this project, and assessment occurs only once, during the final project presentation. However, as the "capstone project" is a study course, in accordance with Order #3/n of the Minister of Science and Education of Georgia, it should involve both mid-term and final assessments.

It is recommended to align the evaluation of the "capstone project" with existing Georgian regulations, incorporating both midterm and final assessments. Additionally, it is advised to establish predetermined evaluation components, methods, criteria, and rubrics, making this information readily available to students. This ensures consistency with regulatory standards and enhances transparency in the assessment process.

Appealing of students' assessment results is ensured. The process is transparent and objective. According to the "Bachelor's regulation", students are entitled to address the programme head by the statement through "My UG". The program head makes a decision on the appeal admissibility and requests the calling of the appeal committee. Interview results confirm that students are aware of the possibility to appeal assessment results. The existing appeal mechanism includes the involvement of other evaluators in the process.

The HEI has developed internal regulations and mechanisms for academic integrity, plagiarism prevention, detention, and response, which are used in the student assessment process. UG uses

the anti-plagiarism program "Turnitin". "The rule for using the Turnitin program in the School of Science and Technology" determines that academic/invited personnel should use the Turnitin program for plagiarism detection in their own and students' works. The institution has also determined the requirements for the academic style, UG uses APA style for the papers. Detailed information regarding the academic style is available in the "Instruction for writing the university paper in compliance with the APA style requirements".

Studied documentation confirms that the institution has implemented mechanisms to analyze student evaluation results and use them to improve the teaching process. "The provision of Educational Program" includes "The Continuous Mechanism of the Evaluation and Development of the Educational Program". According to the mentioned regulation, the evaluation of program outcomes includes the direct and indirect methods of evaluation. Direct Evaluation of the Program Outcome is carried out by analyzing whether the students have reached the learning outcomes determined for the program courses. The results are utilized to refine/develop the competencies of the program learning outcomes.

### **Evidences/Indicators**

- Self-evaluation report;
- Programme curriculum and syllabi;
- "Bachelor's Regulation";
- "The provision of Educational Program";
- "The rule for using the Turnitin program in the School of Science and Technology";
- "Instruction for writing the university paper in compliance with the APA style requirements";
- "A Handbook for using Turnitin";
- "Academic Integrity Policy";
- Electronic learning management portal – [my.ug.edu.ge](http://my.ug.edu.ge);
- Website – [ug.edu.ge](http://ug.edu.ge);
- Interview results.

### **Recommendations:**

- It is recommended to ensure that the "Capstone Project" study course is assessed in accordance with the existing regulations of Georgia, incorporating both midterm and final assessments. Additionally, it is advisable to establish predetermined evaluation components, methods, criteria, and evaluation rubrics that are readily available to students.

## Suggestions for the programme development

- Exams result assessment criteria should be clarified.

## Evaluation

Please, evaluate the compliance of the programme with the component

Component	Complies with requirements	Substantially complies with requirements	Partially complies with requirements	Does not comply with requirements
2.4. Student evaluation	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

## Compliance with the programme standards

2. Methodology and Organisation of Teaching, Adequacy of Evaluation of Programme Mastering	Complies with requirements	<input type="checkbox"/>
	Substantially complies with requirements	<input checked="" type="checkbox"/>
	Partly complies with requirements	<input type="checkbox"/>
	Does not comply with requirements	<input type="checkbox"/>

## 3. Student Achievements, Individual Work with Them

The programme ensures the creation of a student-centered environment by providing students with relevant services; promotes maximum student awareness, implements a variety of activities and facilitates student involvement in local and/or international projects; proper quality of scientific guidance is provided for master's and doctoral students.

### 3.1 Student Consulting and Support Services

Students receive consultation and support regarding the planning of learning process, improvement of academic achievement, and career development from the people involved in the programme and/or structural units of the HEI. A student has an opportunity to have a diverse learning process and receive relevant information and recommendations from those involved in the programme.

## **Summary and Analysis of the Education Programme's Compliance with the Requirements of the Component of the Standard**

Based on the studied documentation and interview results, the expert panel finds that the Civil Engineering bachelor educational programme has the necessary mechanisms for planning the learning process for students, improving academic achievements, providing appropriate counseling on employment, and supporting career development.

Interview results with the related programme students and alumni confirm that students receive appropriate and sufficient consulting and support from the academic/invited and administrative personnel regarding the planning of the learning process, as well as providing information on available services, academic achievement improvement, career development, and local/international opportunities. According to the results of the interview, students are informed about the consultations available in the institution. In the process of student counseling, UG actively uses the online platform [my.ug.edu.ge](http://my.ug.edu.ge) – which gives them the opportunity to receive and send correspondences to the students, share information regarding the learning process, planned activities, etc.

According to the interview results, students received support from the institution in the process of integration into the internal university space. The “International Students and International Relations” office organizes meetings for international students and has active communication with them to provide necessary information and counseling. Students and alumni have mentioned that UG provided sufficient and effective support in the integration process regarding every relevant topic.

UG has a Student Affairs Center which plans and carries out different extracurricular activities for students. According to the “Students Affair Regulation” “the mission of the center is: To maintain constant contact with students/graduates and involve them in current university life; Interesting student life: Promoting extracurricular student sports, cultural, adventure events and initiatives, as well as self-governing student clubs; Liaison between student self-government and university administration. Student clubs of UG are voluntary associations of students around a common interest/goal and they organize activities according to the profile. The club is autonomous from the university.

The studied documentation confirmed that related programme students have participated in the conferences and other field-related activities, such as the “Students Science Conference in Physics 2023”, “STEAM Festival 2023”, Web3 training at TalTech University, Working seminar in ICT institute, “Student Conference STEM-2023”.

The students’ and graduates’ employment support center provides support for students and graduates in the process of career development. The center organizes thematic activities, for example, the Training series “5 steps towards employment” (the content of the training was as follows: 1. First steps towards the career; 2. LinkedIn as a source of employment; 3. What are the expectations of employers for the candidates? 4. Employment in the Public sector; 5.



CV/Resume Writing and Job Interview Skills), employment forums, individual consultations, providing information regarding available vacancies (through the “My UG” platform, website, Facebook page and groups, and emails), and individual meetings with the representatives of the organizations.

UG has a partnership with foreign HEIs and also participates in Erasmus+ exchange programmes on the institutional level. Nevertheless, for the Civil Engineering bachelor educational programme, the institution has only started a collaboration with the Technical University of Kosice, Slovakia. The representatives of UG explained that further partnership would be carried out after the accreditation of the programme. The expert panel clarifies that UG has the potential and sufficient international partnerships to ensure international mobility possibilities for the programme students in general, however, the compliance of the programme with the accreditation standards is evaluated based on the present state of the programme. Accordingly, it is recommended to ensure that the Civil Engineering bachelor educational programme offers students sufficient possibilities to participate in international exchange programs.

The institution has implemented mechanisms to receive and analyze feedback from the interested parties. Various surveys are conducted with students and alumni, e.g., evaluation of the study courses, evaluation of lecturers, evaluation of acquired knowledge, and evaluation of student satisfaction with the learning process. The results of the surveys are discussed and analyzed by the Program Development Council. According to the survey results, when necessary, the council takes relevant measures.

### **Evidences/Indicators**

- o Self-evaluation report;
- o “Students Affair Regulation”;
- o “Student involvement (conferences)”;
- o “Information on available student services”;
- o “International collaboration”;
- o Survey forms;
- o Results of study course evaluation by students;
- o Results of lecturer evaluation by students;
- o Analyses of acquired knowledge evaluation by alumni;
- o Minute of the Program Development Council;
- o Electronic learning management portal – [my.ug.edu.ge](http://my.ug.edu.ge);

- o Website – ug.edu.ge;
- o Interview results.

**Recommendations:**

- o It is recommended to ensure that the Civil Engineering bachelor educational programme offers students sufficient possibilities to participate in international exchange programs.

**Suggestions for Programme Development**

- o Non-binding suggestions for programme development

**Evaluation**

Please, evaluate the compliance of the programme with the component

Component	Complies with requirements	Substantially complies with requirements	Partially complies with requirements	Does not comply with requirements
3.1 Student Consulting and Support Services	<input type="checkbox"/>	X	<input type="checkbox"/>	<input type="checkbox"/>

**3.2. Master's and Doctoral Student Supervision**

- A scientific supervisor provides proper support to master’s and doctoral students to perform the scientific-research component successfully.
- Within master’s and doctoral programmes, ration of students and supervisors enables to perform scientific supervision properly.

**Summary and Analysis of the Education Programme's Compliance with the Requirements of the Component of the Standard**

Describe, analyse and evaluate the compliance of the education programme with the requirements of the component of the standard, based on the information collected through the self-evaluation report (SER), the enclosed documents and site-visit.

The study program does not include master's and doctoral students.

<b>Data related to the supervision of master's/ doctoral students</b>	
Quantity of master/PhD theses	
Number of master's/doctoral students	
Ratio	

### **Evidences/Indicators**

- Component evidences/indicators, including the relevant documents and interview results

### **Recommendations:**

- Proposal (s), which should be considered by the HEI, the programme to meet the requirements of the standard

### **Suggestions for the programme development**

- Non-binding suggestions for the programme development

### **Evaluation**

Please, evaluate the compliance of the programme with the component

<b>Component</b>	<b>Complies with requirements</b>	<b>Substantially complies with requirements</b>	<b>Partially complies with requirements</b>	<b>Does not comply with requirements</b>
<b>3.2. Master's and Doctoral Students Supervision</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

### **Compliance with the programme standards**

<b>3. Students Achievements, Individual Work with them</b>	Complies with requirements	<input type="checkbox"/>
	Substantially complies with requirements	X
	Partly complies with requirements	<input type="checkbox"/>
	Does not comply with requirements	<input type="checkbox"/>

#### 4. Providing Teaching Resources

Human, material, information and financial resources of educational programme ensure sustainable, stable, efficient and effective functioning of the programme and the achievement of the defined objectives.

##### 4.1 Human Resources

- Programme staff consists of qualified persons, who have necessary competences in order to help students to achieve the programme learning outcomes.
- The number and workload of programme academic/scientific and invited staff ensures the sustainable running of the educational process and also, proper execution of their research/creative/performance activities and other assigned duties. Quantitative indicators related to academic/scientific/invited staff ensure programme sustainability.
- The Head of the Programme possesses necessary knowledge and experience required for programme elaboration, and also the appropriate competences in the field of study of the programme. He/she is personally involved in programme implementation.
- Programme students are provided with an adequate number of administrative and support staff of appropriate competence.

#### Summary and Analysis of the Education Programme's Compliance with the Requirements of the Component of the Standard

The program is provided with qualified human resources, but need additional human power in specific fields. The Head of the Programme possesses necessary knowledge and experience required for programme elaboration, and also the appropriate competences in the field of study of the programme. He is actively involved in programme assessment, development and implementation activities. Bachelor students are provided with an adequate number of administrative and support staff with appropriate competence.

The persons (academic and invited staff) implementing programme are engaged in the programme in accordance with the legislation and internal regulations of the HEI. Qualification of personnel is in compliance with their qualification requirements, functions and current legislation. Their qualification is proved by scientific papers and projects, which proves staff's

competence in the civil engineering field. The number of academic and invited personnel at the programme is not adequate with regard to the number study modules.

<b>Number of the staff involved in the programme (including academic, scientific, and invited staff)</b>	<b>Number of Programme Staff</b>	<b>Including the staff with sectoral expertise<sup>6</sup></b>	<b>Including the staff holding PhD degree in the sectoral direction<sup>7</sup></b>	<b>Among them, the affiliated staff</b>
Total number of academic staff	11	11	11	11
- Professor	5	5	5	5
- Associate Professor	6	6	6	6
- Assistant-Professor				
- Assistant				
Visiting Staff				–
Scientific Staff				–

### **Evidences/Indicators**

- Personal files of the staff;
- Interview results.

### **Recommendations:**

- Meanwhile, most of the main subjects of the Civil Engineering specialty are taught by only three teachers. It is too much of a burden for them to teach well. Additional human power is required in specific fields.

### **Suggestions for Programme Development**

- Non-binding suggestions for programme development

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<sup>6</sup> Staff implementing the relevant components of the main field of study

<sup>7</sup> Staff with relevant doctoral degrees implementing the components of the main field of study

## Evaluation

Please, evaluate the compliance of the programme with the component

Component	Complies with requirements	Substantially complies with requirements	Partially complies with requirements	Does not comply with requirements
4.1 Human Resources	<input type="checkbox"/>	X	<input type="checkbox"/>	<input type="checkbox"/>

### 4.2 Qualification of Supervisors of Master's and Doctoral Students

The Master's and Doctoral students have qualified supervisor/supervisors and, if necessary, co-supervisor/co-supervisors who have relevant scientific-research experience in the field of research.

#### Summary and Analysis of the Education Programme's Compliance with the Requirements of the Component of the Standard

Describe, analyse and evaluate the compliance of the education programme with the requirements of the component of the standard, based on the information collected through the self-evaluation report (SER), the enclosed documents and site-visit.

The study program does not include master's and doctoral students.

Number of supervisors of Master's/Doctoral theses	Thesis supervisors	Including the supervisors holding PhD degree in the sectoral direction	Among them, the affiliated staff
Number of supervisors of Master's/Doctoral thesis			
- Professor			
- Associate Professor			
- Assistant-Professor			
Visiting personnel			–
Scientific Staff			–

## Evidences/Indicators

- Component evidences/indicators, including the relevant documents and interview results

## Recommendations:

- Proposal (s), which should be considered by the HEI, the programme to meet the requirements of the standard

## Suggestions for the programme development

- Non-binding suggestions for programme development

## Evaluation

Please, evaluate the compliance of the programme with the component

Component	Complies with requirements	Substantially complies with requirements	Partially complies with requirements	Does not comply with requirements
4.2 Qualification of Supervisors of Master's and Doctoral Students	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

## 4.3 Professional Development of Academic, Scientific and Invited Staff

- The HEI conducts the evaluation of programme staff and analyses evaluation results on a regular basis.
- The HEI fosters professional development of the academic, scientific and invited staff. Moreover, it fosters their scientific and research work.

## Summary and Analysis of the Education Programme's Compliance with the Requirements of the Component of the Standard

The University conducts the evaluation of academic, scientific and invited staff and analyzes evaluation results on a regular basis. The University analyzes and actively utilizes the results of

the evaluation of the programme staff and staff satisfaction surveys. The University fosters professional development of the academic, scientific and invited staff and at the same time fosters their scientific and research work University established efficient system for academic staff to provide opportunities including financing for participation in international conferences, grants, journal publications.

**Evidences/Indicators**

- The results of the staff evaluation;
- Interview results.

**Recommendations:**

- Proposal (s), which should be considered by the HEI, the programme to meet the requirements of the standard

**Suggestions for the programme development**

- Non-binding suggestions for programme development

**Evaluation**

Please, evaluate the compliance of the programme with the component

Component	Complies with requirements	Substantially complies with requirements	Partially complies with requirements	Does not comply with requirements
<b>4.3 Professional development of academic, scientific and invited staff</b>	X	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**4.4. Material Resources**

Programme is provided by necessary infrastructure, information resources relevant to the field of study and technical equipment required for achieving programme learning outcomes.

**Summary and Analysis of the Education Programme's Compliance with the Requirements of the Component of the Standard**



Programme is provided with good library sources and scientific databases that supports students and staff. The program is provided with appropriate the basic material and technical resources. Students are informed about the availability of the resources and know how to use them. The staff and students are provided with appropriate resources to organize efficient educational process. Laboratory equipment base (CELAB laboratory) is new but need additional development to cover at least most fields of civil engineering.

**Evidences/Indicators**

- Library visit;
- Laboratory visit;
- Interview results;

**Recommendations:**

- The laboratory equipment at the University of Georgia is limited in scope. To address this limitation, we recommend that the university consider entering into a memorandum of understanding with an accredited laboratory or explore collaboration with another university laboratory to avail complete laboratory services.

**Suggestions for the programme development**

- Non-binding suggestions for programme development

**Evaluation**

Please, evaluate the compliance of the programme with the component

Component	Complies with requirements	Substantially complies with requirements	Partially complies with requirements	Does not comply with requirements
4.4 Material Resources	<input type="checkbox"/>	X	<input type="checkbox"/>	<input type="checkbox"/>

#### 4.5 Programme/Faculty/School Budget and Programme Financial Sustainability

The allocation of financial resources stipulated in the programme/faculty/school budget is economically feasible and corresponds to the programme needs.

#### Summary and Analysis of the Education Programme's Compliance with the Requirements of the Component of the Standard

The program budget is the part of the school budget that includes income and expenses for all programs. The program is developed by receiving income through tuition fees. During the initial development of the study program, funds are allocated from the school budget. Some programs offered by the school are not profit oriented, so such costs are covered from the school budget or the central budget of University. The budget of the study programme stipulates the support of the programme by the University. Allocation of financial resources for the programme from the budget is financially feasible and ensures the sustainability of the programme.

#### Evidences/Indicators

- Budget;
- Interview results.

#### Recommendations:

- Proposal (s), which should be considered by the HEI, the programme to meet the requirements of the standard

#### Suggestions for the programme development

- The budget envisages a sharp increase in the number of students (and income). It is necessary to justify how such growth will be achieved.

#### Evaluation

Please, evaluate the compliance of the programme with the component

Component	Complies with requirements	Substantially complies with requirements	Partially complies with requirements	Does not comply with requirements
4.5. Programme/Faculty/School Budget	X	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

### Compliance with the programme standard

<b>4. Providing Teaching Resources</b>	Complies with requirements	<input type="checkbox"/>
	Substantially complies with requirements	X
	Partly complies with requirements	<input type="checkbox"/>
	Does not comply with requirements	<input type="checkbox"/>

### 5. Teaching Quality Enhancement Opportunities

In order to enhance teaching quality, programme utilises internal and external quality assurance services and also, periodically conducts programme monitoring and programme review. Relevant data is collected, analysed and utilized for informed decision making and programme development.

#### 5.1 Internal Quality Evaluation

Programme staff collaborates with internal quality assurance department(s)/staff available at the HEI when planning the process of programme quality assurance, developing assessment instruments, and implementing assessment process. Programme staff utilizes quality assurance results for programme improvement.

### Summary and Analysis of the Education Programme's Compliance with the Requirements of the Component of the Standard

The quality assurance system of the University of Georgia is guided by internal and external evaluation tools and widely uses a cyclical process based on the principle of planning, doing, checking and acting (PDCA). The educational policy and regulatory documents developed in the university ensure the management of the mentioned cyclical nature.

**I. Plan** - preparation of educational programs for accreditation is carried out according to the procedures constituting the quality assurance policy of educational programs. The quality assurance service is not the only entity that takes responsibility for these processes, but structural units of the university are actively involved in quality control and assurance.

**II. Do** - On the second stage of the cycle, the activities planned within the relevant time limits are implemented in accordance with the agreed schedule, methods and resources.

**III. Check** - This phase includes the verification/evaluation process. In order to determine compliance with the standards, the quality assurance service checks: a) educational programs b) training courses/components c) academic/invited staff d) infrastructure, etc.

**IV. Act** -Assessments are carried out according to the regulations approved by the university. This stage includes the analysis of the data obtained as a result of the inspection/assessment, drawing appropriate conclusions.

It should be noted that the quality assurance service is analyzing the data and drawing relevant conclusions, and the stage of developing recommendations and determining the measures to be implemented is also defined, which is one of the necessary conditions.

Based on the presented documentation and observing the interview process, it should be said that the staff involved in the program cooperates with the internal quality assurance service in the planning of the program quality assessment process, development of assessment tools and implementation of the assessment.

The involvement of academic/visiting staff was felt in the program development part, but the role of employers in program development was less evident. In addition, neither students nor graduates were directly involved in the process, which I think is a factor to consider. It is suggested that the involvement of all interested parties needs improvement in program development (especially student/graduate).

Various events and training are conducted by the Quality Assurance Service to develop the curriculum and improve the teaching process at the University. The Quality Assurance Office presented the list of activities / training conducted to improve the existing programs at the University.

Based on the presented documents, it can be said that the theoretical foundations of quality assurance are fully relevant and the procedures performed based on these documents are also transparent and consistent.

### Evidences/Indicators

- programme of civil engineering;
- Quality Assurance Mechanisms;
- Templates of questionnaires;
- Report of internal assessment;
- Self-Assessment Report;
- Results of conducted interviews.

### Recommendations:

- None

### Suggestions for the programme development

- It is suggested that the involvement of the all interested parties needs improvement in program development (especially student/graduate)

### Evaluation

Please, evaluate the compliance of the programme with the component

Component	Complies with requirements	Substantially complies with requirements	Partially complies with requirements	Does not comply with requirements
5.1 Internal quality evaluation	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

### 5.2 External Quality Evaluation

Programme utilises the results of external quality assurance on a regular basis.

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### **Summary and Analysis of the Education Programme's Compliance with the Requirements of the Component of the Standard**

The University of Georgia uses external assessment tools for program accreditation in the process of preparing higher education programs. It cooperates with the National Center for Educational Quality Enhancement.

Two external evaluators (experts) from partner universities participated in the external evaluation of the program. None of the external evaluators is a representative of the program to be evaluated, is not an interested party, adheres to the norms of ethics during the evaluation, and has relevant field competencies.

In the external evaluation, the program was evaluated positively overall. Several recommendations were made, which were taken into account when working on the program.

The university uses the results of the external evaluation to develop/improve the program. Quality assurance and management of the program is carried out according to the regulations approved by the HEI, which ensures the transparency of all processes.

#### **Evidences/Indicators**

- Bachelor's Program of Civil Engineering;
- ABET criteria for accrediting engineering programs, 2022-2023;
- External expert assessments;
- Self-Assessment Report;
- Results of conducted interviews.

#### **Recommendations:**

- None

#### **Suggestions for the programme development**

- None

## Evaluation

Please, evaluate the compliance of the programme with the component

Component	Complies with requirements	Substantially complies with requirements	Partially complies with requirements	Does not comply with requirements
5.2. External Quality Evaluation	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

### 5.3 Programme Monitoring and Periodic Review

Programme monitoring and periodic evaluation is conducted with the involvement of academic, scientific, invited, administrative, supporting staff, students, graduates, employers and other stakeholders through systematic data collection, study and analysis. Evaluation results are applied for the programme improvement.

#### Summary and Analysis of the Education Programme's Compliance with the Requirements of the Component of the Standard

The presented documentation and the interviews conducted during the visit revealed that the quality assurance system of the University of Georgia is guided by "The law on Higher Education", authorization and accreditation provisions, university statutes, other normative documents and standards.

Program monitoring and periodic evaluation at The University of Georgia is carried out systematically using both direct and indirect research methods. Indirect measurement uses surveys of students, alumni, and employers and analyzes these results to identify areas for program improvement and plan for improvement.

The direct method of evaluation involves analyzing the program's target achievement rates, learning outcomes assessments, and grade statistics.

At the end of each semester, the quality assurance office evaluates courses and lecturers through questionnaires based on student surveys (the survey is available in the "Online UG" electronic system).

The Quality Assurance office also monitors the academic performance of students, the results of which are processed according to study courses, lecturers and schools. Final results are reviewed by the Educational Program Development Board. The university administration uses the evaluation results to improve educational programs and the academic process.

One of the mechanisms of quality assurance at the University of Georgia is the systematic assessment of the professional development of the academic and invited staff, which is reflected in the annual or semester reports submitted by them. Reports reflect information about their achievements, participation in international conferences, publication of articles, attraction of local or international grants, etc.

During the interviews, it was clarified that the academic and visiting staff are aware of the student surveys and actively take them into consideration in the development of the program.

The document development and analysis stages involved the involvement of relevant stakeholders, including academic and administrative staff, students, alumni and employers.

In the process of working on the program, the program was compared with similar programs in foreign universities, which is confirmed by the relevant interviews, and the results of the analysis are also documented as a Benchmark document.

#### **Evidences/Indicators**

- Programme of Civil Engineering;
- Programme self-assessment report;
- Benchmark document with similar programs of foreign universities;
- Results of conducted interviews.

#### **Recommendations:**

- None

#### **Suggestions for the programme development**



- None

**Evaluation**

Please, evaluate the compliance of the programme with the component

Component	Complies with requirements	Substantially complies with requirements	Partially complies with requirements	Does not comply with requirements
5.3. Programme monitoring and periodic review	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**Compliance with the programme standards**

5. Teaching Quality Enhancement Opportunities	Complies with requirements	<input checked="" type="checkbox"/>
	Substantially complies with requirements	<input type="checkbox"/>
	Partially complies with requirements	<input type="checkbox"/>
	Does not comply with requirements	<input type="checkbox"/>

Attached documentation (if applicable):

Name of the Higher Education Institution:

The University of Georgia

Name of Higher Education Programme, Level:

Civil Engineering, BA

### Compliance with the Programme Standards

Evaluation Standards	Complies with requirements	Substantially complies with requirements	Partially complies with requirements	Does not comply with requirements
1. Education Programme Objectives, Learning Outcomes and their Compliance with the Programme	<input type="checkbox"/>	X	<input type="checkbox"/>	<input type="checkbox"/>
2. Teaching Methodology and Organisation, Adequacy Evaluation of Programme Mastering	<input type="checkbox"/>	X	<input type="checkbox"/>	<input type="checkbox"/>
3. Student Achievements, Individual Work with them	<input type="checkbox"/>	X	<input type="checkbox"/>	<input type="checkbox"/>
4. Providing Teaching Resources	<input type="checkbox"/>	X	<input type="checkbox"/>	<input type="checkbox"/>
5. Teaching Quality Enhancement Opportunities	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**Signatures:**

**Chair of Accreditation Expert Panel**

**Full name, signature**

Saulius Vasarevicius



**Accreditation Expert Panel Members**

**Full name, signature**

Nino Patariaia

ს. ზოგადი მენა

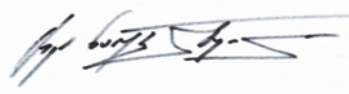
**Full name, signature**

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