



NATIONAL CENTER FOR  
EDUCATIONAL QUALITY  
ENHANCEMENT

## Accreditation Expert Group Report on Higher Education Programme

**An Integrated Master's Educational Programme in Veterinary Medicine,  
Level of Education – Master**

**Georgian Technical University**

Evaluation Date(s)

8 – 9 May, 2023

Report Submission Date

11 July 2023

Tbilisi

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

Name of Institution Indicating its Organizational Legal Form	Legal Entity of Public Law Georgian Technical University
Identification Code of Institution	211349192
Type of the Institution	University

### Expert Panel Members

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<b>Member</b> (Name, Surname, HEI/Organisation, Country)	Giorgi Mgvdeladze, Tbilisi State Medical 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)	ვეტერინარია
Name of Higher Education Programme (in English)	Veterinary Medicine
Level of Higher Education	7 <sup>th</sup>
Qualification to be Awarded <sup>2</sup>	Master of Veterinary Medicine (MVM)
Name and Code of the Detailed Field	Veterinary 0841
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	Georgian
Number of ECTS credits	347
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>**

Veterinary medicine is one of the seven regulated professions in the European Union (EU). These requirements are laid down in a single legislative document, the EU Professional Qualifications Directive 2013/55/EU (amending old Directive 2005/36/EC). After completion of the integrated long-cycle veterinary degree programme, a graduate will obtain the status of a veterinarian, i.e., the right to practice veterinary medicine. It is common that each country has at least one state/government-funded veterinary faculty or a higher veterinary education establishment. Currently, two state universities have a long-cycle veterinary degree programme in Georgia.

An Integrated Veterinary Master's Programme is being developed according to the requirements of the Sectoral Characteristics of Veterinary in Higher Education, developed by the National Center for Educational Quality Enhancement (order of the Director of the National Center for Educational Quality Enhancement №09, 03.01.2018), as well as considering field specifics, labour market and employer requirements, and experience in implementing similar programmes at European leading higher education institutions (ONIRIS – Nantes, Alfort, Toulouse, Lyon).

The programme consists of 347 credits and is presented in the following volume and structure: General and Basic Courses – 83 credits (24% of total credits) and the specialty in Veterinary Medicine – 264 credits (76% of total credits). The standard duration of the programme is five years (10 semesters).

The new programme focuses on meeting the needs of the sector and the society, and reflects modern understanding of veterinary medicine that covers an extensive range of issues as vets are trained not only for veterinary practice (i.e., diagnosing and treating diseases), but also for careers in food safety and security, prevention and control of zoonotic diseases, the pharmaceutical industry, market access, veterinary and biomedical research, government service, etc.. This involves much more than just diagnosing and treating diseases.

For example, the National Food Agency who has been involved in the preparatory processes, and its representative is convinced that the study programme is adequate and relevant to the needs of the labour market. He also confirmed that practical training opportunities for veterinary students at NFA have been discussed.

The expert committee found that the University has made a great effort to prepare a veterinary study programme the structure and format of which can meet modern international standards for higher veterinary education. The relevant structural unit of the Technical University responsible for veterinary studies is the Faculty of Agricultural Sciences and Biosystems Engineering. However, the University's key decision makers expect to receive an approval for the new veterinary study programme before planning more substantial investments and activities. Contrarily, the expert committee expected to see more preparatory work done already at this very early stage.

The University has demonstrated that it has the capacity and means to effectively implement the new veterinary study programme. However, a lot needs to be done to ensure that teaching – especially related to clinical training – would be consistent with the internal quality standards of the University as well as with national quality requirements and agreements. This includes building of University's own clinical facilities and setting up the logistics of student rotations at collaborating partner institutions to provide adequate supervision.

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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.

- **Overview of the Accreditation Site Visit**

The team consisted of 5 members – Toomas Tiirats, Chair and international expert, Giorgi Melashvili, Nino Milashvili, Nino Jojua and Giorgi Mghvdeladze. The site visit took place on 8-9 May, 2023 at the Georgian Technical University. During the visit, meetings and interviews were conducted with members of the University’s administration (8 representatives), the self-evaluation team (8 representatives) the programme academic staff (6 representatives), the programme invited staff (5 representatives), students (5), alumni (5) representatives from related programmes present, potential future employers (7 organizations), and the Head of the French-Georgian University. A meeting was also held with Programme Leaders, Faculty Dean, Academic and Invited Staff, and the Heads of the Quality Assurance Departments at University and Faculty level. A tour of the University facilities including the study area, library, museum, laboratories, clinical facilities and off-campus facilities was organized (see “Site Visit Agenda” for more details).

The expert team would like to express their gratitude to the enthusiastic personnel for the most interesting and informative discussions that took place at a highly professional level.

- **Brief Overview of Education Programme Compliance with the Standards**

**standard 1. Substantially complies with requirements**, as 1.1, 1.2, 1.3, 1.5 Substantially complies with requirements, 1.4 - Partially complies with requirements

**standard 2. Partially complies with requirements as:**

2.1 Complies with requirements

2.2 and 2.3 Partially complies with requirements

2.4 Substantially complies with requirements

**standard 3. Complies with requirements as**

3.1 and 3.2 Complies with requirements

**standard 4. Substantially complies with requirements as**

4.1 , 4.3 and 4.5 Substantially complies with requirements

4.2 Complies with requirements

4.4 Partially complies with requirements

**standard 5. Substantially complies with requirements as**

5.1 and 5.3 Substantially complies with requirements

5.2 Complies with requirements

- **Recommendations**

1.1

- The expert committee recommends revising the curriculum credits, taking into account the Georgian reality and societal expectations, in order to be sure that objectives can be achieved within 5 years;

1.2

- The expert committee recommends revising the program to be achieved predefined learning outcomes;

1.3

- In the document "Evaluation and Development of Learning Outcomes", the frequency of the learning outcomes evaluation of the "Veterinary" integrated Master's educational programme should be added in a specified form and predetermined benchmarks, with which the obtained outcomes will be compared;

1.4

- The expert committee recommends revising the curriculum credits to reduce them, taking into account the Georgian reality and societal expectations;

1.5

- It is recommended to use modern and adequate literature in the syllabuses;
- Review and correct every syllabus with errors and correct missing/misleading content;

2.2

- It is recommended that the university develop clinical practical elements according the best European veterinary practices;
- It is crucial that program develops a broad range of diagnostic and therapeutic, including, but not limited to: clinical diagnostic imaging, clinical pathology, anaesthesia, surgery and treatment skills, and is able to provide intensive/critical care, ambulatory services, pharmacy and necropsy activities;

2.3

- The use of live animals in teaching is important, considered carefully and must be guaranteed at every level of the study period (with special focus on farm animals);
- It is strongly recommended that practical training as learning method be provided as Core Clinical Training under immediate supervision of the University's teaching staff members (e.g. ambulatory clinics, herd health management, practical training in Veterinary Public Health, including Food Safety and Quality) to be implemented in the program;

## 2.4

- The maximum total grade for the midterm assessment during the semester is 60 points, which is distributed over 15 weeks. The maximum grade for each week is 4 points. Given that each practice lasts for 3 to 5 weeks, experts believe that the criteria and methods for evaluating students in the syllabi of external practice should be adjusted accordingly;

## 4.1

- The university is expected to establish a core group of permanent academic staff with a veterinary background;
- It is expected that the heads of the program will be part of the university's permanent academic staff;
- The engagement of teaching staff needs to be arranged in an optimal and balanced manner to maintain the quality of teaching while ensuring that the workload of each individual teacher remains reasonable and adequate;

## 4.3

- The university is expected to introduce a system of academic evaluation for the invited staff.
- The university is responsible for taking care of and providing training on pedagogical skills to the invited staff. Additionally, efforts should be made to find ways to engage them in research activities.

## 4.4

- The University should ensure that students have access to a broad range of diagnostic and therapeutic facilities, including, but not limited to: clinical skills laboratory, diagnostic imaging, clinical pathology, anaesthesia, surgeries and treatment facilities, intensive/critical care, ambulatory services, pharmacy and necropsy facilities. Procedures and facilities should also be available for soft skills training, e.g. communication skills training through role-play.
- It is recommended to use modern and adequate literature (Textbooks and teaching-learning materials in Russian and in Georgian from 1960s and '70s were suggested beside up-to-date English literature. Such outdated information in their original format cannot be considered as appropriate or useful material).
- The transport of students, but also that of live animals, cadavers, materials from animal origin, and other teaching materials must be organised (i.e. biosafety and biosecurity rules introduced) in a way that ensures the safety of students and staff, animal welfare, and prevents the spread of infectious agents.

## 4.5

- The University should develop a relevant action plan (facilities, equipment, personnel, etc.) with the necessary funds foreseen.



## 5.1

- Coordinate the provision of detailed resources evaluation and the development of a possible detailed scheme for the acquisition of the necessary materials and tools.

## 5.2

- It is important to more comprehensively use the mechanisms prescribed by the regulations in order to develop the quality of the programme - evaluation of material resources, programme prerequisites/a reader in the Georgian language, programme sustainability, evaluation of academic personnel, etc.

## • **Suggestions for Programme Development**

### 1.4

- It is of vital interest to formalize a cooperation agreement between Nantes Veterinary School and the Georgian Technical University to ensure constant improvement of the courses taught and teaching quality.
- Challenging modern curricula and adoption of the French model (including content) requires new approaches in the processes (interdisciplinary teaching across curricular disciplines), which need to be closely monitored and coordinated.

### 1.5

- The expert committee proposes to launch international cooperation projects (Erasmus, etc.) also in the veterinary field. Formalized cooperation would help further develop the course content and train the present and future academic staff.

### 2.1

- It is suggested for the university to create a plan and implement measures to address the English language challenge faced by first-year students.

### 2.4

- It is suggested that students be assessed in clinical disciplines by an objectively structured clinical examination (OSCE).

### 4.3

- Opportunities for didactic and pedagogic training and specialisation should be available. A clearly defined system of reward for teaching excellence should be established.
- A veterinary doctoral study programme should also be established at the University in the long run.
- International cooperation is an immediate prerequisite for ensuring the sustainability of the veterinary programme. In order to increase its clinical practical competence, joint research projects and introduce the best veterinary practices, the University shall develop international co-operation and exchange programmes for the academic personnel.

#### 4.4

- The University is expected to develop a comprehensive equipment procurement list to ensure adequate quality of hands-on learning. University's own clinical facilities as well as those of the partners (private clinics and animal shelters) should be equipped with relevant up-to-date veterinary apparatus and instruments.

#### 5.1

- Determine the pedagogical basis, design, delivery methods and assessment methods delivered by academic and invited staff at single subjects in order to identify and meet their training needs, aimed at maintaining and enhancing their competence to work on curriculum development.

#### 5.2

- Once the implementation of the programme has been completed, the University should continue the development process following the standards set by EAEVE (European Association of Establishments for Veterinary Education) for undergraduate veterinary education.

#### 5.3

- In order to obtain more objective and reliable information for decision-making, the institution should consider increasing the number of respondents involved in the surveys - especially students and graduates.
- **Brief Overview of the Best Practices (if applicable)<sup>5</sup>**
- **Information on Sharing or Not Sharing the Argumentative Position of the HEI**

Experts truly hope that the keypersons at the University understand that our criticism is not about the overall structure of the study program (i.e., the French model), but rather about the University's preparatory work done so far and its capability to make it work in Tbilisi. Especially considering the absence of previous experience in veterinary medicine education at the university.

It should be acknowledged that some recommendations and suggestions may seem to overlap, as mentioned in the university's response letter. However, these comments are made from different perspectives, depending on the focus of each paragraph. This means that attention should be given to various aspects of these problems.

Recommendation #1 proposes revising the curriculum credits to align with the Georgian reality and societal expectations to ensure that the goals can be achieved within 5 years. One of the concerns raised is that if a student fails a subject, the next semester will include credits for the failed subject, potentially resulting in an accumulation of more than 70 credits in a year. Article 2.1 of the Order No. 105/N of the Minister of Education and Science of Georgia dated December 29, 2021 "On

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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.

Approval of the Rules for Calculation of Credits for Higher Education Programmes"; academic week/semester/academic year,5. Taking into account the features of the higher education programme and/or the student's individual curriculum, it is allowed for the student's study load to exceed 60 credits or be less than 60 credits during one academic year. It is not allowed for a student's study load to exceed 75 (ECTS) credits in one academic year.

The first academic year at the integrated master's educational programme in Veterinary Medicine includes 70 credits, the second academic year - 70 credits, the third academic year - 69 credits, the fourth academic year - 69 credits, the fifth academic year - 69 credits, a total of 347 credits. According to experts, in the case of re-taking some academic courses, during one academic year, the student has the opportunity to obtain only 5 or 6 credits within the framework of 75 credits. If we take into account the fact that 9-10-11 academic courses are taught in the semester, and that the prerequisite for studying some academic courses is 14, 15 and sometimes more courses, the issue of the number of programme credits to achieve the goals and learning outcomes of the programme should be reconsidered.

Recommendation #2 emphasizes the need to revise the program to achieve predetermined learning outcomes. It highlights the significant differences in farming traditions, disease patterns, and the epidemiological situation between Georgia and France. Simply copying the program from a French university may not be appropriate since Georgian veterinarians will be working in Georgia, not France, and the practical success of following a parasitology and infectious diseases program designed for the French context may be limited.

There is currently no contract in place with a French university provided to ensure further collaboration. It would be essential to establish formal agreements or partnerships with universities or institutions that can contribute valuable knowledge and resources to the veterinary education program in Georgia. This could involve developing exchange programs, joint research projects, or faculty collaborations to enhance the quality of education and ensure it aligns with the specific needs of Georgian veterinary practice.

Nevertheless, this report reflects the current situation, and the recommendations and suggestions provided aim to support the university during the implementation process of the study program.

However, it's important to note that true accreditation can only occur once the curriculum is implemented, and the first graduates are released.

As a result of the expert's analysis and arguments, which are given in the report, the recommendations remain unchanged.

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

### 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 programme objectives are drawn from the sector benchmarks for Veterinary Higher Education, which define the knowledge, skills and competences required developed by an independent expert group. The new programme corresponds to the understanding that veterinary medicine covers an extensive range of issues, and vets are trained not only for veterinary practice, but also for careers in food safety and security, prevention and control of zoonotic diseases, the pharmaceutical industry, market access, veterinary and biomedical research, government service, etc.

During the development of the programme, the University has consulted with external stakeholders in the veterinary sector. The programme is a product of teamwork, In this respect, the Georgian Technical University fulfills the requirements as the objectives and learning outcomes for a veterinary programme have been clearly established. However the duration of the model veterinary curriculum in Nantes is six years. However, the current curriculum being evaluated is of a shorter duration, compressing six years into five years with 70 credits per year. This would result in a significantly heavier workload for students, raising questions about whether the intended objectives can be achieved within a shorter timeframe.

Furthermore the model veterinary programme of the Nantes Veterinary School requires a revised approach to teaching. More cooperation between teachers of different subjects-courses is needed. Would it work if the teaching staff is used with classical teaching methods in veterinary education? Although the current curriculum under evaluation has been made shorter (originally 6 years in Nantes), it still represents a significantly heavier workload from the student's perspective.

## Evidences/Indicators

- Programme description;
- Mission of the Georgian Technical University;
- Strategic Plan of the Faculty of Agricultural Sciences and Biosystems Engineering;
- Interview with programme management and administration team;
- Interviews with students and graduates;
- Interview with affiliated academic staff and invited academic staff;
- Interview with representatives of employees;
- Interview with the Head of the Quality Assurance Department.

## Recommendations:

- The expert committee recommends revising the curriculum credits, taking into account the Georgian reality and societal expectations, in order to be sure that objectives can be achieved within 5 years

## 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	<input type="checkbox"/>	X	<input type="checkbox"/>	<input type="checkbox"/>

## 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 Expert Team realised that the curriculum is designed to ensure that all students who have successfully completed the course will be fully compliant with the EU Directive 2005/36/EC (as amended by directive 2013/55/EU) and its Annex V.4.1. The curriculum includes the subjects (input) and may allow the acquisition of the Day One Competences (output) listed in the ESEVT SOP Annex 2 (EAEVE) if resourced, managed and implemented as planned. This concerns Basic Sciences, Clinical Sciences in companion animals (including

equine and exotic pets), Clinical Sciences in food-producing animals (including Animal Production and Herd Health Management), Veterinary Public Health (including Food Safety and Quality), as well as Professional Knowledge (including soft skills, e.g. communication, team working skills, management skills).

However, changing from the 6-year programme of the Nantes Veterinary School to a 5-year programme at the Georgian Technical University may impact learning outcomes, and is a concern for the Expert Committee.

The programme is adapted to the needs of the professional labour market, but it also is aimed to prepare students for PhD study. Currently veterinary medicine PhD programmes are not offered at the Georgian Technical University.

The programme covers different areas of competence and learning outcomes, both cognitive and practical. The courses are focused on both academic and professional needs. The study programme description taken over from Nantes seems to be well structured, comprises benchmarks for student learning and achievements. However the duration of the veterinary curriculum in Nantes taken as an example is six years. This means that the question remains as to whether the programme learning outcomes can be achieved in a curriculum of smaller volume. As the current curriculum under evaluation is of shorter duration, it would cause a significantly heavier workload for students. Furthermore, it is unclear how well the program has been optimized for the realities and needs of Georgia. For instance, the situation concerning animal infectious diseases in Georgia differs from the EU average.

#### **Evidences/Indicators**

- Educational programme
- self-evaluation document
- Sectoral Characteristics of Higher Veterinary Education Map of programme objectives and learning outcomes;
- Analysis of labor market and employer demands;
- Interview with programme management and administration team;
- Interviews with students and graduates;
- Interview with affiliated academic staff and invited academic staff;
- Interview with representatives of employees.

#### **Recommendations:**

- The expert committee recommends revising the program to be achieved predefined learning outcomes

#### **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 type="checkbox"/>	X	<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

Guided by the model program (Nantes), the learning outcomes are also taken over. This raises the question of whether the modified content of subjects ensures the achievement of the described learning outcomes using a curriculum of the same content and structure of a shorter duration, compressing six years into five years with 70 credits per year. Learning outcomes in the "Veterinary" integrated Master's educational program are presented in the form of two macro-competence areas: Sectoral (specific) for the veterinarian and general (transversal) which is also adapted to the specifics of the veterinary profession.

Specific indicators of the knowledge demonstration will help educators to evaluate the efficient implementation of acquired by the student competencies through indicating the observable signs of the skills.

The level of demonstration (form) for each outcome is specific and reflects what outcomes should have the student achieved according to the following topology:

- Knowledge and understanding - "has seen", mastered and understood;
- Ability to perform - "conducted", carried out with instructions and supervision; Performance autonomy - "knows how to conduct", performs autonomously;

Each outcome can be demonstrated during a clinical rotation or internship (practice), in the form of a live or simulated experiment.

The program is accompanied by a 'Skills Assessment Chart' which sets out each of the competencies and skills to be assessed in years 4 and 5.

The Faculty of Agricultural Sciences and Biosystems Engineering of the Technical University of Georgia has developed a document "Evaluation and Development of Learning Outcomes" that includes information on:

1. Stages of the programme learning outcomes evaluation.

1.1. Establishing the programme learning outcomes;

1. The programme objectives compliance with the University Mission;

1.1.2. The programme learning outcomes; 1.1.3. Map of the programme objectives and learning outcomes; 1.2. Curriculum analysis;

1.3 Evaluation of the programme learning outcomes; 1.3.1. The programme learning outcomes evaluation frequency;

1.4. Using the evaluation results for the programme improvement

Section 1.1.2 of the document describes the learning outcomes of the "Veterinary" integrated master's educational programme; Section 1.1.3 includes information on the programme objectives and learning outcomes map; In point 1.2 of the curriculum analysis section, the role of teaching and research components for the achievement of learning outcomes at the levels of Introduction, Enhancement, Reinforcement" is clearly visible.

The programme learning outcomes are assessed by direct and indirect evaluation methods. Examples of direct assessment methods are: written / oral examination / survey, presentation, abstracts, practical projects, etc. The method of indirect assessment is the survey of employers, graduates, curriculum analysis, student survey and etc.

Learning outcomes evaluation tools are materials, evidence - students' papers, etc.

According to 1.3.1 the programme learning outcomes evaluation frequency of the same document, the learning outcomes the programme educational course will be evaluated "once in an academic year, no later than 1 st month before re-implementation of the mentioned course and compared to the benchmark percentage indicators . Each learning outcome of the programme is measured according to the Assessment Plan at the end of the semester, when the mentioned learning outcome took place.

In section 1.4. of the document the use of learning outcomes to improve the programme is described, which implies modification of the programme if required;

According to experts, the document "Evaluation and Development of Learning Outcomes" should include the frequency of the learning outcomes evaluation of the "Veterinary" integrated Master's educational programme in a specified manner (since the "Skills Assessment Scheme" indicates the 4th and 5th years) and predefined benchmarks, with which the obtained outcomes will be compared.

Suggestion, In the document "Evaluation and Development of Learning Outcomes", the frequency of the learning outcomes evaluation of the "Veterinary" integrated Master's educational programme



should be added in a specified form and predetermined benchmarks, with which the obtained outcomes will be compared.

### Evidences/Indicators

- Programme description;
- Interview with programme management and administration team;
- Syllabuses;
- Interview with affiliated academic staff and invited academic staff;
- Agreements/Memorandums;
- Mechanism for evaluating the learning outcomes of the program;
- Appendix - skills assessment scheme;
- Scheme of learning outcomes;

### Recommendations:

- In the document "Evaluation and Development of Learning Outcomes", the frequency of the learning outcomes evaluation of the "Veterinary" integrated Master's educational programme should be added in a specified form and predetermined benchmarks, with which the obtained outcomes will be compared

### 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
1.3 Evaluation Mechanism of the Programme Learning Outcomes	<input type="checkbox"/>	X	<input type="checkbox"/>	<input type="checkbox"/>

### 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.

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

The programme's modern structure is well defined. The Content section contains necessary information related to programme goals, qualifications, admission requirements, learning outcomes, students assessment system, teaching methods for achieving learning outcomes, learning plan, learning process organization, financial issues, quality development issues, material resources needed for programme implementation, human resources, etc. The content is in accordance with applicable laws and bylaws in those parts which are prepared by virtue of legal acts. The courses are divided into modules – compulsory, elective, professional practical training, and thesis.

Consequently, an effective mix of theoretical, applied, and research-based learning has been outlined. Such an approach gives students the opportunity to gain knowledge in a specific field along with developing practical and research skills.

Master's thesis regulations (supervision, quality control, defence procedure) were found to be well established.

In the structure of the programme by speciality directions, there is a mathematical inaccuracy in the table of distribution of credits according to the semesters. Also, in the semester V, there is a scientific component with 3 credits, and in the semester X, the completion and defence of a master's thesis with 20 credits, I suppose 3 credits - is a training course.

The expert committee found that the University has made a great effort to prepare a veterinary study programme the basic structure and format of which are internationally comparable. The University has demonstrated ongoing preparatory work to implement a veterinary study programme that is consistent with the quality standards of the University as well as national quality requirements and regulations. It should be highlighted that a "communication" course has been introduced, and is considered very relevant for veterinary students. The duration of the model veterinary curriculum in Nantes is six years (360 credits). This raises the question of whether the planned objectives can be achieved using a curriculum of the same content and structure but of shorter duration (5 years with 70 credits). Ideally, it would be preferable to set the study duration at GTU (Georgian Technical University) to six years, but this decision is not within the university's control. However, it is suggested that the relevant authorities consider this recommendation. It is important to note that five years of veterinary studies is only a minimum requirement in the EU.

Discussions with alumni of related programmes indicated overall satisfaction. However, there is an opinion that more practical training should be given throughout the courses. COVID restrictions obviously had an impact on this over the recent years.

In general, it seems that the academic staff are free to select and implement study methods themselves. It is sufficient to run a classical veterinary curriculum. However, challenging modern

curricula and adoption of the French model (including content) requires new (interdisciplinary) approaches in the processes (including teaching methods), which need to be closely monitored and coordinated. For example, anatomy is divided into courses in the first and third year. This may cause problems with integrating different subjects and facilitating effective collaboration among academic staff. It is of vital interest to formalize a cooperation agreement between Nantes Veterinary School and the Georgian Technical University to ensure constant improvement of the courses taught and teaching quality.

#### Evidences/Indicators

- Programme description;
- Interview with programme management and administration team;
- Syllabuses;
- Interview with affiliated academic staff and invited academic staff;
- Agreements/Memorandums;

#### Recommendations:

- The expert committee recommends revising the curriculum credits to reduce them, taking into account the Georgian reality and societal expectations

#### Suggestions for the programme development

- It is of vital interest to formalize a cooperation agreement between Nantes Veterinary School and the Georgian Technical University to ensure constant improvement of the courses taught and teaching quality.
- Challenging modern curricula and adoption of the French model (including content) requires new approaches in the processes (interdisciplinary teaching across curricular disciplines), which need to be closely monitored and coordinated.

#### 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 type="checkbox"/>	X	<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.

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

The courses are designed to achieve the programme outcomes, i.e., the course learning outcomes are aligned with programme goals and objectives. Relevant schemes are provided in the programme. In general, it seems that the academic staff are free to select and implement study methods themselves. It is sufficient to run a classical veterinary curriculum. However, challenging modern curricula and adoption of the French model (including content) requires new approaches in the processes (including teaching methods), which need to be closely monitored and coordinated.

Teaching materials listed in the syllabuses are not yet fully available at the library in print and e-version. However, the library is doing its best to purchase all relevant materials in a short time frame. The University's library provides a pleasant and comfortable working environment that can be considered one of the strengths of the University.

The volume of the demanding study programme is 347 credits within 5 years. The duration of the model programme in Nantes is actually six years. This raises the question of whether the modified content of subjects ensures the achievement of the described learning outcomes using a curriculum of the same content and structure while the subjects are of a smaller volume (less number of credits).

The expert committee proposes to launch international cooperation projects (Erasmus Plus, etc.) also in the veterinary field. The experts would recommend taking the lead from the Veterinary School in Nantes in terms of meeting the accreditation requirements of the EAEVE evaluation system. Formalized cooperation would help further develop the course content and train the present and future academic staff. Remarks were made about possible overlaps (general microbiology vs infectiology) and introduction of biosafety measures in laboratories.

The proposed textbooks are in English. The development of language skills is an important topic in the curriculum. Different modules have been introduced across the curriculum, however, minimal threshold has not been established.

The teaching and learning materials specified in the syllabus ensure the achievement of the learning outcomes of the programme. However, different textbooks and teaching-learning materials in Russian and in Georgian from the 1960s and '70s were suggested beside up-to-date English literature. Syllabus 26, Integrated Physiology of Major Functions, Syllabus 44, Pathological Anatomy, Oncology and General Pathology.

Such outdated information in their original format cannot be considered as appropriate or useful material. The list of academic and invited staff engaged does not correspond to the names indicated as responsible teachers in the syllabi.

Relevant state-of-the-art learning resources are the foundation of a quality veterinary education. The University has to proceed with the procurement of necessary library study materials, clinical apparatus and tools to ensure the best teaching and learning standards at the teaching clinics as well as sufficient capacity for hands-on training of the students enrolled to the programme (see more 4.4. Material resources).

The teaching methods used in the university are mainly copied from the French program. This approach has both strong and weak points. It is evident that personnel have very little room for improvisation, which results in less compatibility with the veterinary situation and legislative terms in Georgia. For example, the varieties of diseases are obviously different, and the traditions and culture of animal keeping in France and Georgia are completely mismatched.

One strong point of such an educational system is that in the future, the knowledge acquired can be more aligned with European standards, although this may take a considerable amount of time. However, the most obvious problem lies in the length of the course and the amount of study materials provided to students. There is a possibility that students may struggle to cope with the extensive cross-disciplinary study materials because the system is very unfamiliar in Georgia.

This approach has resulted in several issues in various syllabi. For instance, in syllabus #17, in the laboratory practice section, there appears to be a mechanical error where the course ends with training in PPE usage and hand hygiene. This should be the first thing students learn when working in a laboratory. We strongly recommend rearranging the themes to address biosafety and biosecurity concerns. In syllabus #22, "immunology, inflammation, and vaccination," there is a missing section on inflammation, and most of the themes in the "laboratory course" are materials more suitable for a seminar. This may be a mechanical error but needs to be addressed. The current themes cannot be implemented in the laboratory. The content of the syllabus #15 "General Veterinary English" and syllabus #41, "Scientific communication" are similar, including formatting errors.

All the syllabi related to external practice (#34, 35, 56) lack clarity on where the practice report should be sent. Instead of providing the supervisor's email, an email example from the French syllabus (prenom.nom@oniris-nantes.fr) has been copied. Additionally, all these syllabi have copied literature from other sources, which, in some cases, is not suitable for the practice content and gives the impression of mechanical copying without any analysis or review from the professors or staff.

Although the current program includes teaching on large animal medicine, the university currently lacks the facilities for large animals. During the interview, a farm in Dmanisi was mentioned, but at this moment, no memorandum or contract has been provided. The probability of students not acquiring the necessary skills is very high.

#### **Evidences/Indicators**

- Programme description;
- Interview with programme management and administration team;
- Syllabuses;
- Interview with affiliated academic staff and invited academic staff;
- Agreements/Memorandums;

#### **Recommendations:**

- It is recommended to use modern and adequate literature in the syllabuses
- Review and correct every syllabus with errors and correct missing/misleading content

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

- The expert committee proposes to launch international cooperation projects (Erasmus, etc.) also in the veterinary field. Formalized cooperation would help further develop the course content and train the present and future academic staff.

## 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"/>	X	<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 University's admission requirements to the veterinary integrated programme are relevant and publicly accessible. Admission of students to the integrated master's educational programme in "Veterinary Medicine" of the Georgian Technical University is carried out in accordance with the legislation of Georgia. Specifically, individuals who possess a document confirming completion of general education or an equivalent qualification are eligible for admission. Admission is based on the ranking (of coefficients of points) obtained in the unified national exams, granting the right to study at the Georgian Technical University.

To enrol in the programme, applicants are required to pass the following subjects in the unified national exams:

- Georgian language and literature
- Foreign language (English)
- Biology/Chemistry (attaining the minimum competence threshold established by the law).  
The number of seats for each subject (biology/chemistry) should not be less than 10% of the total announced seats for the programme.

Additionally, students enrolled under the mobility rule, as outlined in Order No. 10/N of the Minister of Education and Science of Georgia, dated 4 February 2010, on the procedure and fees for transferring from one higher educational institution to another, may also be admitted to the programme.

The expert committee has raised a concern about the ability of incoming students, who have varying levels of English language proficiency (which are relatively poor), to study courses in the first year that require mandatory study materials in English. However, the university plans to introduce readers to assist these students.

There is a definite national shortage of high-quality production-animal veterinary services in Georgia. The experts found that the University carefully considers the impact of group size on the performance of students to ensure that the future graduates receive quality training. Yearly intake of 30 students for a 5-year Integrated Master's Educational Programme in Veterinary Medicine is planned, which can be considered reasonable.

#### **Evidences/Indicators**

- Programme description;
- Interview with programme management and administration team;
- Interview with representatives of employees

#### **Recommendations:**

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

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

- It is suggested for the university to create a plan and implement measures to address the English language challenge faced by first-year students.

#### **Evaluation**

Please, evaluate the compliance of the programme with the component

Component	Complies with	Substantially	Partially complies	Does not comply
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	requirements	complies with requirements	with requirements	with requirements
2.1 Programme Admission Preconditions	X	<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 study programme and the proposed courses have to provide students with core theoretical and practical knowledge. Memorandums or agreements of cooperation have been concluded with different organisations regarding practical placements and internships. Importantly, such partnerships will enhance employment opportunities for graduates. Master's students have the possibility to choose the thesis topic as well as the supervisor. Master's thesis regulations (supervision, quality control, defence procedure) were found to be well established. However veterinary-related research is currently not undertaken at the Georgian Technical University. Likewise, there is no doctoral programme in veterinary medicine at the University. A new graduate should be capable of independently performing appropriate entry-level tasks and duties of the veterinary profession and confident enough to practice veterinary medicine at a primary care level on their own. In order to increase its clinical practical competence and introduce the best veterinary practices, the University shall develop international co-operation and exchange programmes for the academic personnel. It appeared that the organization of supervised practical training in production animal medicine may have been inadequately planned due to the collaborating farms being located too far away. The University should ensure that students have access to a broad range of diagnostic and therapeutic facilities, including, but not limited to: clinical skills laboratory, diagnostic imaging, clinical pathology, anaesthesia, surgery and treatment facilities, intensive/critical care, ambulatory services, pharmacy and necropsy facilities. Procedures and facilities should also be available for soft skills training, e.g. communication skills training through role-play. (please also check standard 4.4).

A practical training component is included in several courses of this integrated master's programme, including the production practice component (6 credits) delivered in the second and third academic year in parallel with the courses taught in the field of specialization. Students will be fully involved in clinical activities in semesters 8 and 9. Training will be conducted in a hybrid mode (online and onsite), and will include activities in both the university clinic (HEI intends to establish it in the near future), as well as practical training placements at institutions of veterinary profile\* "external practice" - in accordance with the relevant agreements. "Clinical activity" involves the internship of students at the Oniris Veterinary University Hospital Center (Oniris CHUV/ <https://chuv.oniris-nantes.fr>). HEI has developed the Rules for Conducting and Evaluating the Practice of Students of the Georgian Technical University ([https://gtu.ge/Study-Dep/Files/Pdf/pragtika\\_18\\_SD.pdf](https://gtu.ge/Study-Dep/Files/Pdf/pragtika_18_SD.pdf)), which



allows students to familiarize themselves with the issues related to placements (practice), the rights and duties of the head of placements appointed by HEI, the representative of the placement (practice) host, the duties of students during the course of practical training placements, etc.

The scientific research component of the programme – "Knowledge Enhancement & Master's Thesis" that comprises 35 credits – will be taught in the 10th semester. Within this component, students may choose to deepen their knowledge and skills in one of the following areas:

- Agricultural/Production animal sector (module made up of 4 courses);
- Companion animal sector (9 courses);
- Veterinary public health sector (8 courses);

The Knowledge Enhancement & Master's Thesis component includes two stages of activities: theoretical and practical training, and preparation and defense of master's thesis.

The first stage – theoretical and practical training, comprising 15 credits, will be delivered at both the veterinary schools (Georgian Technical University and the Nantes National Veterinary School (Oniris)) and the placement host.

The second stage – Preparation and defense of the master's thesis, comprising 20 credits will be carried out at the veterinary schools (Georgian Technical University and Nantes National Veterinary School (Oniris)), and in the facilities provided for in the agreement within the programme (the placement host), various veterinary institutions in Georgia, HEIs of non-veterinary profile (e.g., business schools), or appropriate scientific research centers (diagnostic laboratories, etc.).

HEI offers students extracurricular activities, conferences, public lectures, etc., as revealed in interviews with students of other educational programmes of the Faculty of Agricultural Sciences and Biosystems Engineering.

#### **Evidences/Indicators**

- Programme description;
- Syllabuses;
- Interview with programme management and administration team;
- Interviews with students and graduates;
- Interview with affiliated academic staff and invited academic staff;
- Interview with representatives of employees;
- Agreements/Memorandums;
- [https://gtu.ge/Study-Dep/Files/Pdf/pragtika\\_18\\_SD.pdf](https://gtu.ge/Study-Dep/Files/Pdf/pragtika_18_SD.pdf)
- [https://gtu.ge/Study-Dep/Files/Pdf/mag\\_debuleba\\_2020\\_SD.pdf](https://gtu.ge/Study-Dep/Files/Pdf/mag_debuleba_2020_SD.pdf)

#### **Recommendations:**

- It is recommended that the university develop clinical practical elements according to the best European veterinary practices.

- It is crucial that program develops a broad range of diagnostic and therapeutic, including, but not limited to: clinical diagnostic imaging, clinical pathology, anaesthesia, surgery and treatment skills, and is able to provide intensive/critical care, ambulatory services, pharmacy and necropsy activities

### 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
2.2.The Development of practical, scientific/research/creative/performing and transferable skills	<input type="checkbox"/>	<input type="checkbox"/>	X	<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

The teaching and learning methods seem to be aligned to the learning outcomes. There is flexibility to address the needs of individual students within the context of the requirements of the veterinary sector benchmarks in Higher Education. The University has competence in animal sciences and food technology, in both teaching and research, which is a strong bonus when introducing veterinary curricula. The teaching and learning methods used must ensure that the students graduating the veterinary programme have obtained the day one skills. According to the current plans, practical training will be outsourced to external providers. However, this cannot replace Core Clinical Training under immediate supervision of the University's teaching staff members (e.g. ambulatory clinics, herd health management, practical training in VPH, including Food Safety and Quality).

In general, it seems that the academic staff are free to select and implement study methods themselves. It is sufficient to run a classical veterinary curriculum. However, challenging modern curricula and adoption of the French model (including content) requires new approaches in the processes (including teaching methods), which need to be closely monitored and coordinated.

The use of live animals in teaching is important and has to be considered carefully. It is anticipated that hands-on training is a vital part of veterinary training. It appears that the organization of supervised practical training with production animals is not adequately ensured due to the

collaborating farms being located too far away. The learning environment and methods must ensure that all students receive similar and comprehensive training. Therefore, the Objective Structured Clinical Examination (OSCE) should be used as an evaluative tool after the completion of different courses or cycles. Furthermore, development of an anatomy wet lab, necropsy theatre, and other clinical facilities at the University would contribute to positive learning outcomes

**Evidences/Indicators**

- Self-Evaluation Report and course syllabi
- Interviews with staff and students

**Recommendations:**

- The use of live animals in teaching is important, considered carefully and must be guaranteed at every level of the study period (with special focus on farm animals);
- strongly recommended that practical training as learning method be provided as Core Clinical Training under immediate supervision of the University’s teaching staff members (e.g. ambulatory clinics, herd health management, practical training in VPH, including Food Safety and Quality) to be implemented in the program.

**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
2.3. Teaching and learning methods	<input type="checkbox"/>	<input type="checkbox"/>	X	<input type="checkbox"/>

**2.4. Student Evaluation**

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

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

The University’s student evaluation system is based on legislative requirements. Course-based assessment approach has been adopted. Teachers have regular office hours for students, so they can discuss relevant issues individually and privately. Students consider the University’s evaluation

system fare and transparent. There were no student complaints regarding evaluation. Students are aware of their rights and duties. Students feel that the University offers not only profound theoretical education, but also sufficient practical courses. Students believe that there are a lot of motivated young people in Georgia interested in studying veterinary medicine.

The Georgian Technical University has developed an educational process management instruction in accordance with the legislation of Georgia, which describes in detail the procedure for evaluating the educational and scientific-research component of each level of higher education. The evaluation system is in accordance with the Order No. 3 of the Minister of Education and Science of 5 January 2007 "Approval of the method of calculation of higher education programmes with credits". "Regulations of the Georgian Technical University on the Master's Degree" are in force at HEI, the appendices of which include detailed information on the personal plan of a Master's student, the rules for evaluating the research component of the Master's educational programme, and the instructions for completing the thesis submitted for obtaining the Master's academic degree. (<https://gtu.ge/Study-Dep/Forms/Regulations.php>).

HEI has also developed the "Rules for Conducting and Evaluating the Practice of Students of the Georgian Technical University". ([https://gtu.ge/Study-Dep/Files/Pdf/pragtika\\_18\\_SD.pdf](https://gtu.ge/Study-Dep/Files/Pdf/pragtika_18_SD.pdf)),

In the programme, the training component "External Practice" will be carried out at the facilities provided by the practical training placement host on the basis of a contract.

A 100-point grading system will be used to evaluate the students' performance during placement. Mid-term and final evaluations will be conducted.

Mid-term (multiple) assessments will be conducted by the university's academic and teaching staff members in accordance with the assessment methods and criteria described in the syllabus. The evaluation of personal project presentations (presentation on the work done during practical training) is carried out by an evaluation committee established on the basis of the relevant document issued by the governing body of the faculty. The committee will consist of the mentor, other persons invited from the organization, and other specialists in the field.

The current curriculum being evaluated is of a shorter duration, compressing six years into five years with 70 credits per year. This would result in a significantly heavier workload for students.

The maximum total grade for the midterm assessment during the semester is 60 points, which is distributed over 15 weeks. The maximum grade for each week is 4 points. Given that each practice lasts for 3 to 5 weeks, experts believe that the criteria and methods for evaluating students in the syllabi of external practice should be adjusted accordingly.

It is suggested that students be assessed in clinical disciplines through an objectively structured clinical examination (OSCE).

**Evidences/Indicators**

- Programme;
- Syllabuses;
- Interview results

**Recommendations:**

- The maximum total grade for the midterm assessment during the semester is 60 points, which is distributed over 15 weeks. The maximum grade for each week is 4 points. Given that each practice lasts for 3 to 5 weeks, experts believe that the criteria and methods for evaluating students in the syllabi of external practice should be adjusted accordingly.

**Suggestions for the programme development**

- It is suggested that students be assessed in clinical disciplines by an objectively structured clinical examination (OSCE).

**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"/>	X	<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 type="checkbox"/>
	Partly complies with requirements	X
	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.

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

Since the Veterinary program at GTU does not have any students yet, an interview was conducted with students from related programs. Students from the Faculty of Agricultural Sciences and Biosystems Engineering at Georgian Technical University receive appropriate information to plan their learning process and enhance their academic achievements. This is achieved through the utilization of a webpage and emails, which provide students with the opportunity to track their progress in studies and communicate with representatives of the administration and lecturers.

GTU has introduced a new electronic database called <https://vici.gtu.ge/> , which offers students various functions such as accessing personal information, semester details, Grade Point Index (GPI), accumulated and current credits, program curriculum, and syllabi that have been approved by students. Additionally, the university has an electronic learning system called <https://elearning.gtu.ge> . When necessary, the university ensures the creation of an individual teaching schedule for students, as well as the preparation of individual study plans.

The student interviews revealed also that students receive adequate information and support regarding the planning of the learning process, improvement of academic achievement, employment, and professional development. They are aware of the relevant sources of information and support services available to them. The students have opportunities to participate in conferences and other kinds of extracurricular activities. During the interviews students noted that they would like to improve the laboratories and modernize of apparatus for practical training and teaching.

#### **Evidences/Indicators**

- SER
- Educational Program
- University website
- Interview results

#### **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
3.1 Student Consulting and Support Services	X	<input type="checkbox"/>	<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

The regulations of the master's studies of the Technical University of Georgia EI has developed "Regulations of the Georgian Technical University on the Master's Degree", which describes in detail the competencies, rights and duties of a master's supervisor/co-supervisor, especially in paragraph 3 of this Regulation:

3.1; "Supervisor/Supervisors of MA student". A master's supervisor can be a professor, associate professor, assistant professor, visiting staff/teacher with a doctorate degree, emeritus from a respective academic department of GTU, but also a chief or senior scientific associate of a scientific research institute/center integrated with GTU, who holds a PhD. A master's supervisor can be an employee of another institution (holding a PhD), if an agreement/memorandum has been signed between GTU and this institution.

3.2. In consent with the master's student, the supervisor shall prepare a personal work plan (Appendix 1), in which the title of the master's thesis, the list of mandatory and optional subjects/modules and the activities provided for by the scientific-research component should be specified.

3.3. The master's supervisor supervises the thesis until completion of research work and preparation for the defense of the dissertation. A total of 59 persons are engaged in the implementation of the integrated master's programme in veterinary medicine, including 18 academic staff, 39 invited lecturers, and two research scientists.

Staff members holding an academic degree of Doctor of Veterinary Medicine do have research experience in the field. Several academic/visiting staff members are involved in international projects. The scientific research component of the programme titled "Knowledge Enhancement & Master's Thesis"(35 credits) will be taught in semester 10 of the programme. Within this component, students

will have an opportunity to deepen their knowledge and skills in one of the following areas: agricultural/production animal husbandry sector, companion animal sector, and veterinary public health sector. Students will be given an opportunity to choose a supervisor/co-supervisor for the research topic.

The students of the Master's programme will have qualified supervisors, as evidenced by appropriate documentation (personal files of the programme academic staff). Heads of programs have many years of experience in academic and scientific activities. The University has developed a guide for the preparation of Master's theses as well as relevant thesis defence instructions that outline the rights and responsibilities of supervisors and students.

The document outlines the students' rights regarding reprovide for relevant requirements for supervisors (co-supervisors) of master's students and the procedures for their appointment/approval, change/addition of a scientific supervisor.

Receipt of general scientific advice, support in finding bibliographic data, research work preparation, integration into the local and the international scientific community, participation in scientific events and presentation of research results, as well as with advice on the publication of articles in peer-reviewed journals.

Doctoral programmes in veterinary medicine are not offered at the Georgian Technical University. External stakeholders do support the development and launch of a veterinary programme. They demonstrate willingness to cooperate with the University, especially regarding practical training placements. They realise the urgent need for qualified veterinarians in Georgia as the availability of qualified professionals is vital for their businesses. The University has an opportunity to attract business operators to provide practical training placements for students. This may also help students to choose thesis topics that produce results of practical value.

<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**

- Educational Program



- Regulations of Georgian Technical University
- Study courses and syllabi
- University website
- Interview results
- supervisors' CV and research publications

#### Recommendations:

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

#### Suggestions for the programme development

- o 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
3.2. Master's and Doctoral Students Supervision	X	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

#### Compliance with the programme standards

3. Students Achievements, Individual Work with them	Complies with requirements	X
	Substantially complies with requirements	<input type="checkbox"/>
	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 number and workload of the academic and invited staff implementing the programme is minimal to ensure the implementation of the curriculum, as well as performing relevant research and other functions assigned to them. The balance between the academic and invited staff may influence the sustainability of the programme. The number of academic and invited staff of the academic programme is regulated in accordance with the University's "Rules for Determining the Number of Academic Staff." A total of 59 persons are engaged in the implementation of the integrated master's programme in veterinary medicine, including 18 academic staff, 39 invited lecturers, and two research scientists. Most teaching staff involved in veterinary training must be veterinarians. It is expected that more than 2/3 of the instruction that the students receive, as determined by student teaching hours, is delivered by qualified veterinarians.

The invited staff has not undergone any academic evaluation but are able to demonstrate previous teaching experience.

Developments in the higher education policy (especially related to higher veterinary education) over the past decades have been unsuitable for educating a motivated new generation of veterinary professionals in Georgia. This generation is actually missing in Georgia. It will obviously be difficult to recruit qualified academic staff. However, the location (Tbilisi) is rather attractive. It seems that different universities share the same veterinary personnel. Invited staff may have good practical knowledge, but lack pedagogical skills and research experience. Furthermore, the University has to take care of training young teachers to replace the well-trained but elderly professors (academic and invited) nearing retirement.

International cooperation is an immediate prerequisite for ensuring the sustainability of the veterinary programme.

The interviews revealed that many teaching staff members have an exceptionally heavy workload. For example, one invited staff member teaches a total of seven subjects. The expert committee considers this unreasonable and unacceptable. Each subject should be taught by a dedicated

instructor/specialist rather than a generalist. This fact raises the question of whether the teaching staff is prepared and has a clear understanding of the nature of the challenging French curriculum being used as a model. A modern structure of a veterinary curriculum is challenging and requires a different (interdisciplinary) approach to it from the academic staff, i.e. not following the classical pattern of veterinary education where one subject is taught by a single teacher.

The invited staff has not undergone any academic evaluation but are able to demonstrate previous teaching experience. The expert committee has expressed significant concern about the large number of invited staff, which poses a threat to the program's sustainability. Another critical issue is that both program heads are part of invited personnel. The university is expected to establish a core group of permanent academic staff with a veterinary background. Additionally, it is expected that the heads of the program will be part of the university's permanent academic staff.

Number of the staff involved in the programme (including academic, scientific, and invited staff)	Number of Programme Staff	Including the staff with sectoral expertise <sup>6</sup>	Including the staff holding PhD degree in the sectoral direction <sup>7</sup>	Among them, the affiliated staff
Total number of academic staff	59	31	19	18
- Professor	16	2	2	16
- Associate Professor	2	-	-	2
- Assistant-Professor	-	-	-	-
- Assistant	-	-	-	-
Visiting Staff	39	29	17	-
Scientific Staff	2	-	-	-

#### Evidences/Indicators

- Self Evaluation Report
- CVs of personnel engaged
- Rules for evaluating the educational and scientific-research work of the Georgian Technical University" - Resolution No. 450 of the Academic Council of the GTU dated May 6, 2011; <http://gtu.ge/quality/Files/Pdf/450cesi.pdf>;
- Resolution No. 531 of the Academic Council of the Georgian Technical University "On the evaluation system and response of professors and teachers of the Georgian Technical University" dated September 27, 2011; <https://gtu.ge/pdf/dadgenilebebi/dadg531.pdf>

#### Recommendations:

<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

- The university is expected to establish a core group of permanent academic staff with a veterinary background.
- It is expected that the heads of the program will be part of the university's permanent academic staff.
- The engagement of teaching staff needs to be arranged in an optimal and balanced manner to maintain the quality of teaching while ensuring that the workload of each individual teacher remains reasonable and adequate.

#### 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
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

It is a new study programme, therefore there has been no intake of students yet. A doctoral study programme in veterinary medicine is not offered by the University.

HEI has developed "Regulations of the Georgian Technical University on the Master's Degree", which describes in detail the competencies, rights and duties of a master's supervisor/co-supervisor, especially in paragraph 3 of this Regulation:

3.1; "Supervisor/Supervisors of MA student". A master's supervisor can be a professor, associate professor, assistant professor, visiting staff/teacher with a doctorate degree, emeritus from a respective academic department of GTU, but also a chief or senior scientific associate of a scientific research institute/center integrated with GTU, who holds a PhD. A master's supervisor can be an employee of another institution (holding a PhD), if an agreement/memorandum has been signed between GTU and this institution.

3.2. In consent with the master's student, the supervisor shall prepare a personal work plan (Appendix 1), in which the title of the master's thesis, the list of mandatory and optional subjects/modules, and the activities provided for by the scientific-research component should be specified.

3.3. The master's supervisor supervises the thesis until completion of research work and preparation for the defense of the dissertation. A total of 59 persons are engaged in the implementation of the integrated master's programme in veterinary medicine, including 18 academic staff, 39 invited lecturers, and two research scientists.

Staff members holding an academic degree of Doctor of Veterinary Medicine do have research experience in the field. Several academic/visiting staff members are involved in international projects. The scientific research component of the programme titled "Knowledge Enhancement & Master's Thesis"(35 credits) will be taught in semester 10 of the programme. Within this component, students will have an opportunity to deepen their knowledge and skills in one of the following areas: agricultural/production animal husbandry sector, companion animal sector, and veterinary public health sector. Students will be given an opportunity to choose a supervisor/co-supervisor for the research topic

<b>Number of supervisors of Master's/Doctoral theses</b>	<b>Thesis supervisors</b>	<b>Including the supervisors holding PhD degree in the sectoral direction</b>	<b>Among them, the affiliated staff</b>
Number of supervisors of Master's/Doctoral thesis	<b>36</b>	<b>19</b>	
- Professor	10	2	
- Associate Professor	-	-	
- Assistant-Professor	-	-	
Visiting personnel	24	17	–
Scientific Staff	2	-	–

#### **Evidences/Indicators**

- Programme;
- Self evaluation document;
- Interview with programme management and administration team;
- Interviews with students and graduates;
- Interview with affiliated academic staff and invited academic staff;
- [https://gtu.ge/Study-Dep/Files/Pdf/mag\\_debuleba\\_2020\\_SD.pdf](https://gtu.ge/Study-Dep/Files/Pdf/mag_debuleba_2020_SD.pdf)

**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	X	<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 has infrastructure and resources for both research and teaching/learning, including the library that is equipped with computers and an electronic scientific database (catalogue). Currently, only a few members of the academic staff are involved in international projects. The University collaborates with other HEIs within the Erasmus project. The University has adopted rules for the assessment of research. According to these rules, the University supports research-related activities, e.g., preparation and publishing of monographs, textbooks, and scientific articles. The academic staff members are expected to be engaged in research. However, we noticed that collaboration with foreign HEIs regarding research projects is weak.

Because of the challenging modern programme, more attention has to be paid on pedagogical training of the teaching staff, especially invited staff with good practical skills, but lacking teaching experience.

A veterinary doctoral study programme should also be established at the University. The University has to take care of training young teachers to replace the well-trained but elderly professors nearing retirement or already retired.

Opportunities for didactic and pedagogic training and specialisation should be available. A clearly defined system of reward for teaching excellence must be established.

The University's administration already has experience with international projects. The expert committee proposes to formalise international cooperation projects (Erasmus Plus, etc.) also in the veterinary field. The experts would recommend co-operation with ONIRIS Nantes because of the similar structure of the study programme. Furthermore, Nantes holds international accreditation from EAEVE (European Association of Establishments for Veterinary Education).

It is advisable to engage more visiting veterinary practitioners to teach some practical parts of clinical subjects. Students who have successfully completed the programme should be capable of independently performing appropriate entry-level tasks and duties of the veterinary profession, and confident enough to practice veterinary medicine at a primary care level on their own. In order to increase its clinical practical competence and introduce the best veterinary practices, the University shall develop international co-operation and exchange programmes for the academic personnel.

#### **Evidences/Indicators**

- Rules for evaluating the educational and scientific-research work of the Georgian Technical University" - Resolution No. 450 of the Academic Council of the GTU dated May 6, 2011; <http://gtu.ge/quality/Files/Pdf/450cesi.pdf>;
- Resolution No. 531 of the Academic Council of the Georgian Technical University "On the evaluation system and response of professors and teachers of the Georgian Technical University" dated September 27, 2011; <https://gtu.ge/pdf/dadgenilebebi/dadg531.pdf>
- "Rules for Planning, Elaboration, Evaluation, and Development of the Educational Programme at Georgian Technical University," approved by GTU Academic Council Resolution No. 01-05- 04/261 of September 23, 2019
- Interviews held during the accreditation visit;
- Self Evaluation Report.

#### **Recommendations:**

- The university is expected to introduce a system of academic evaluation for the invited staff.
- The university is responsible for taking care of and providing training on pedagogical skills to the invited staff. Additionally, efforts should be made to find ways to engage them in research activities.

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

- Opportunities for didactic and pedagogic training and specialisation should be available. A clearly defined system of reward for teaching excellence should be established.
- A veterinary doctoral study programme should also be established at the University in the long run.
- International cooperation is an immediate prerequisite for ensuring the sustainability of the veterinary programme. In order to increase its clinical practical competence, joint research projects and introduce the best veterinary practices, the University shall develop international co-operation and exchange programmes for the academic personnel.
- It is of vital interest to formalize a cooperation agreement between Nantes Veterinary School and the Georgian Technical University to ensure constant improvement of the courses taught and teaching quality.

## 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
4.3 Professional development of academic, scientific and invited staff	<input type="checkbox"/>	X	<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

The experts were pleased to see the IT solutions available for teaching, classrooms equipped with computers, and modern presentation means. The facilities inspected are sufficient to provide adequate theoretical and some practical training in basic sciences. However, the development of more sophisticated laboratories like anatomy wetlab are of immediate importance. The University does not yet have its own clinical settings or a necropsy theatre. The use of collaborating partners is not sustainable in the long run. The University should ensure that students have access to a broad range of diagnostic and therapeutic facilities, including, but not limited to: clinical skills laboratory, diagnostic imaging, clinical pathology, anaesthesia, surgery and treatment facilities, intensive/critical care, ambulatory services, pharmacy and necropsy facilities. Procedures and facilities should also be available for soft skills training, e.g. communication skills training through role-play.

The University is expected to develop a comprehensive equipment procurement list to ensure adequate quality of hands-on learning. University's own clinical facilities as well as those of the



partners (private clinics and animal shelters) should be equipped with relevant up-to-date veterinary apparatus and instruments.

External stakeholders, e.g., heads of private clinics, Head of the National Food Agency, Head of the State Laboratory of Agriculture, etc., firmly support the development and launch of a veterinary programme at the Georgian Technical University in Tbilisi. They demonstrate willingness to cooperate with the University, especially regarding practical training placements. They realise the urgent need for qualified production animal veterinarians in Georgia whose skills are vital for their business success. The University must encourage businesses to provide practical training placements for students.

Relevant state-of-the-art learning resources are the foundation of a quality veterinary education. It was found that all staff members and students have on-site access to the academic library, information technology facilities, and an e-learning platform. However, the University has to proceed with the procurement of necessary library study materials, clinical apparatus and tools to ensure the best teaching and learning standards at the teaching clinics as well as sufficient capacity for hands-on training of the students enrolled to the programme. First of all, this concerns the fourth- and fifth-year clinical disciplines. A new graduate should be capable of independently performing appropriate entry-level tasks and duties of the veterinary profession and confident enough to practice veterinary medicine at a primary care level on their own. In order to increase its clinical practical competence and introduce the best veterinary practices, the University shall formalize and develop international co-operation and exchange programmes for the academic personnel (Nantes).

It is most important that relevant state-of-the-art learning resources support the provision of veterinary education. It was found that all staff members and students have on-site access to academic library resources, information technology facilities, and an e-learning platform.

The urgent need for well-trained researchers in the field of food science and biotechnology was addressed by stakeholders. Likewise, the fast-growing fisheries and aquaculture sector needs qualified professionals. During the site visit, the university's leadership confirmed their willingness to invest in the development of the veterinary programme as a priority in the forthcoming years. It is worth noting that the grant office of HORIZON Europe is located at the Georgian Technical University.

The number and variety of healthy and diseased animals, cadavers, and material of animal origin must be adequate for providing the practical and safe hands-on training in all relevant areas.

The University is aware of the importance of developing a comprehensive equipment procurement list to ensure that the labs and clinical facilities will be equipped with up-to-date apparatus and tools required for contemporary veterinary practice.

Internet is available across the campus. The scientific library is supplied with a complete electronic catalogue. The University can use the NAPR electronic resources. The University can also use the following electronic resources: Cambridge Journals Online, BioOne Complete, e-Duke Journals

Scholarly Collection, Edward Elgar Publishing Journals and Developments Studies e-books, IMechE Journals, New England Journals of Medicine, Royal Society Journals Collection, SAGE Premiers.

However, the library purchase of the required veterinary literature is still in progress, and the majority of textbooks are currently unavailable. Timely access to learning resources, whether through print, electronic media or other means, is important to students and staff.

However, different textbooks and teaching-learning materials in Russian and in Georgian from 1960s and '70s were suggested beside up-to-date English literature. Such outdated information in their original format cannot be considered as appropriate or useful material.

The market for companion animal health has seen significant growth in recent years. Thanks to the stakeholders engaged (private clinics, shelter), the University has an opportunity to handle a sufficient number of clinical cases in small animals. Contrarily, the practical training opportunities in the area of farm animal medicine (cattle, swine, sheep, goats, chicken) remain uncertain. It appeared that the organization of supervised practical training in production animal medicine may have been inadequately planned due to the collaborating farms being located too far away.

The transport of students, but also that of live animals, cadavers, materials from animal origin, and other teaching materials must be organised in a way that ensures the safety of students and staff, animal welfare, and prevents the spread of infectious agents.

The university recognizes the need for specific requirements for the successful implementation of the veterinary curriculum. Further efforts are required to build up the material basis and ensure sustainability and adequate succession planning for academic staff in order to effectively implement the study programme. However, a relevant action plan (facilities, equipment, personnel, etc.) with the necessary funds foreseen seems not to be in place yet.

However, the University has to proceed with the procurement of necessary library study materials, laboratory and clinical apparatus and tools, to ensure the best teaching and learning standards at the teaching clinics, as well as sufficient capacity for hands-on training of the students enrolled to the programme. First of all, this concerns the fourth- and fifth-year clinical disciplines.

#### **Evidences/Indicators**

- Programme budget;
- Program internal and external evaluation, questionnaires, analyses, surveys;
- Interviews held during the accreditation visit;
- Actual situation /site visit.
- Agreements/Memorandums;

### Recommendations:

- The University should ensure that students have access to a broad range of diagnostic and therapeutic facilities, including, but not limited to: clinical skills laboratory, diagnostic imaging, clinical pathology, anaesthesia, surgeries and treatment facilities, intensive/critical care, ambulatory services, pharmacy and necropsy facilities. Procedures and facilities should also be available for soft skills training, e.g. communication skills training through role-play.
- It is recommended to use modern and adequate literature (Textbooks and teaching-learning materials in Russian and in Georgian from 1960s and '70s were suggested beside up-to-date English literature. Such outdated information in their original format cannot be considered as appropriate or useful material).
- The transport of students, but also that of live animals, cadavers, materials from animal origin, and other teaching materials must be organised (i.e. biosafety and biosecurity rules introduced) in a way that ensures the safety of students and staff, animal welfare, and prevents the spread of infectious agents.

### Suggestions for the programme development

- The University is expected to develop a comprehensive equipment procurement list to ensure adequate quality of hands-on learning. University's own clinical facilities as well as those of the partners (private clinics and animal shelters) should be equipped with relevant up-to-date veterinary apparatus and instruments.

### 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"/>	<input type="checkbox"/>	X	<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 University's administration is aware of the need to invest in launching a study programme in veterinary medicine. As a big university, it has a capacity to allocate necessary funds.

To be more realistic, the university presented the 5-year budget, and revenues are calculated on a minimal quantity of students (the university plans to yearly announce 30 places, and the 5-year budget is calculated on 150 students' tuition fees).

However, the allocation of financial resources stipulated in programme/faculty/school budget is not economically feasible, and it is not clear whether it is relevant to programme needs. It is understandable as this only concerns the next year (the first year ever) while the calculations have been made with an intake of 30 students. However, more careful planning of funds is anticipated by expert committee. The budgeted expenses should include both expenditures (separated into personnel costs, operating costs, maintenance costs and equipment) and revenues (separated into public funding, tuition fees, services, research grants and other sources).

The university recognizes the need for specific requirements for the successful implementation of the veterinary curriculum. However, a relevant action plan (facilities, equipment, personnel, etc.) with the necessary funds foreseen seems not to be in place yet. The university should develop a more detailed strategic plan for implementing a veterinary programme, including short- and medium-term objectives, and an operating plan with a timeframe and indicators for its implementation. The above allows to plan and produce an adequate and economically feasible budget for forthcoming years.

The University has to proceed with the procurement of necessary clinical apparatus and tools to ensure the best teaching and learning standards at the teaching clinics as well as sufficient capacity for hands-on training of the students enrolled to the programme. First of all, this concerns the fourth and fifth-year clinical disciplines. The University may incur substantial additional expenses during the implementation phase. Resources allocation must be regularly reviewed to ensure that available resources meet the requirements.

#### **Evidences/Indicators**

- Internal mechanisms of quality assurance approved by the Resolution No. 01-05-04/108 of the Academic Council of the Georgian Technical University on April 17, 2018;
  
- "Regulations on the Quality Assurance Service of the Georgian Technical University ", approved by the Resolution of the Representative Council (Senate) of the Georgian Technical University No. 01-06-02/05 dated January 17, 2020;
- "Rules for Planning, Elaboration, Evaluation, and Development of the Educational Programme at Georgian Technical University," approved by GTU Academic Council Resolution No. 01-05- 04/261 of September 23, 2019

- Programme budget;
- Program internal and external evaluation, questionnaires, analyses, surveys;
- Interviews held during the accreditation visit;
- Actual situation

**Recommendations:**

The University should develop a relevant action plan (facilities, equipment, personnel, etc.) with the necessary funds foreseen.

**Suggestions for the programme development**

- o 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
4.5. Programme/ Faculty/School Budget and Programme Financial Sustainability	<input type="checkbox"/>	X	<input type="checkbox"/>	<input type="checkbox"/>

**Compliance with the programme standard**

4. Providing Teaching Resources	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**

It is important that the University gives a proof of a QA system that promotes and monitors the presence of a teaching environment highly conducive to learning, including self-learning. Details of the type, provision and updating of appropriate learning opportunities for the students, as well as the involvement of students are expected to be clearly described.

Issues related to the internal quality assurance in GTU are coordinated by the University's quality assurance service, whose main areas of activity are the promotion of quality improvement of teaching and research, evaluation of educational and scientific-research activities, organization of self-evaluation processes, development recommendations to improve the quality of educational programmes, teaching and learning processes, research, and other related activities, as well as ensuring continuous assessment of resources and other activities defined by the service's regulations and are based on the principle - "Plan, do, check, act".

For the purpose of quality assurance and programme evaluation, the university uses the main guidance documents approved by the Academic Council.

According to the resolution 01-05-04/108 "Internal mechanisms of quality assurance of STU" approved by the Academic Council of GTU on 17 April 2018, the main principles of the internal quality assurance mechanism are the basic principles given in international standards: customer orientation; leadership; employee engagement; continuous improvement; making decisions based on facts and data; mutually beneficial relationship with partners; The constituent part and appendix of this document is the quality assurance policy of GTU, which takes into account the leadership's vision and core values, includes the main principles, directions and functions of the functioning and development of the quality assurance system of the university.

The rule of planning, elaboration, evaluation and development of educational programmes has been developed at the Georgian Technical University and approved by the Academic Council (Georgia No. 01- 05-04/261 of September 23, 2019), which defines the methodology for the elaboration/development of programmes for each educational programme. According to this regulation, the process of planning, designing, evaluating and developing the programme should be an open, transparent and collaborative process, in which all stakeholders should participate - academic and scientific staff of the relevant field, students, graduates, employers, professional associations, and other parties (if any).

The planning, development, evaluation, and monitoring process, and the effective implementation of the educational programme are coordinated by the quality assurance service of the faculty and the quality assurance service of GTU.

During the interviews of the accreditation visit, the self-evaluation team, students, graduates, employers confirmed that they were involved in the programme development process, that the preparation of the programme self-evaluation report was a collaborative process involving academic staff, students, administration representatives. The opinions of employers and graduates were taken into account during the development of the programme. Meetings were held periodically, problematic issues and ways of solving them were identified.

During the programme development, the experience of French universities and veterinary colleges was taken into account and studied and analyzed, namely:

✓ Nantes-Atlantic National College of Veterinary Medicine, Food Science and Engineering (École nationale vétérinaire, agroalimentaire et de l'alimentation de Nantes- Atlantique (ONIRIS))-  
<https://www.oniris-nantes.fr>

✓ National Veterinary School of Alfort (École nationale vétérinaire d'Alfort (EnvA))  
[-https://www.vet-alfort.fr](https://www.vet-alfort.fr)

✓ National Veterinary School of Toulouse (École nationale vétérinaire de Toulouse (envt))  
[-https://envt.fr](https://envt.fr)

✓ Veterinary School of Lyon (Ecole Vétérinaire de Lyon (VetAgro Sup)) -  
<https://www.vetagrosup.fr>

All interested parties - academic staff, students, graduates, potential employers - participated in the self-evaluation group of the programme.

During the development of the programme, the opinions and problems of students and graduates of adjacent programmes were discussed and taken into account. Student members of the self-evaluation group voiced student opinions and the programme development group took them into account - such as strengthening practice and laboratory and practical work, and evaluating laboratory work.

The programme was developed in collaboration with the Nantes Veterinary College, France. –French programme's duration is 6 years, so it was modified to meet Georgian standards. That was one of the challenges. Also, the request of the French party (Nantes Veterinary College) was that a student should learn practical issues (for example, distilling alcohol) not only by observation, but also by practice, and be evaluated for their activities.

During the interviews, academic staff, students, alumni, and potential employers confirmed that they cooperated with the Quality Assurance Office when planning the process of programme quality assurance, creating assessment instruments, and analyzing assessment results; Programme staff takes

into consideration quality assurance results when making programme-related decisions; They confirmed that they were involved in the process of developing the programme, and that their opinions were taken into account. The academic staff confirmed that during the development of the programme, they were constantly consulted by the quality assurance service regarding the requirements of the standards, and were provided with information about the issues identified during the research and evaluation analysis, and that their suggestions were taken into account. Review and approval of the syllabi of the relevant courses took place in the respective departments.

The accreditation package includes survey questionnaires for graduates, students, academic staff, and employers. Also, survey analyses and their use were provided. A total of 20 employers, 16 graduates, 20 students, and 30 academic staff were interviewed.

As a result of the visual inspection of the material and technical resources /teaching and research infrastructure (equipment and facilities), and the interviews conducted during the visit, it was revealed that the material and technical base of the institution needs to be developed in accordance with the needs of this specific program. It should be noted that the representatives of the institution are aware of this and hope that as a result of the accreditation, appropriate financial resources will be allocated and the needs of the programme will be met. The presented document is not that detailed and does not include such information. The budget of the presented programme indicates the programme development cost in the amount of 87,367 GEL, that represents the total amount to be spent over 6 years.

Since one of the aspects of the university's quality assurance system is the provision of continuous assessment of resources, a more detailed analysis of the mentioned issue is required to more specifically identify the needs of the programme to ensure the achievement of the established learning outcomes.

#### **Evidences/Indicators**

- Internal mechanisms of quality assurance approved by the Resolution No. 01-05-04/108 of the Academic Council of the Georgian Technical University on April 17, 2018;
- "Regulations on the Quality Assurance Service of the Georgian Technical University ", approved by the Resolution of the Representative Council (Senate) of the Georgian Technical University No. 01-06-02/05 dated January 17, 2020;



- "Rules for Planning, Elaboration, Evaluation, and Development of the Educational Programme at Georgian Technical University," approved by GTU Academic Council Resolution No. 01-05- 04/261 of September 23, 2019
- Programme budget;
- Program internal and external evaluation, questionnaires, analyses, surveys;
- Interviews held during the accreditation visit;
- Actual situation.

**Recommendations:**

- Coordinate the provision of detailed resources evaluation and the development of a possible detailed scheme for the acquisition of the necessary materials and tools

**Suggestions for the programme development**

- Determine the pedagogical basis, design, delivery methods and assessment methods delivered by academic and invited staff at single subjects in order to identify and meet their training needs, aimed at maintaining and enhancing their competence to work on curriculum 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
5.1 Internal quality evaluation	<input type="checkbox"/>	X	<input type="checkbox"/>	<input type="checkbox"/>

**5.2 External Quality Evaluation**

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

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

The mechanisms of external assessment are authorization and accreditation, which is carried out by the National Center for Educational quality enhancement. The recommendations received during the evaluation will be taken into account in the development and implementation of the programme.

The University uses the assessments of practitioners and experts in the field as an important prerequisite for the development of the educational programme. A letter of support from the Director of the French Institute of Georgia is provided by the university.

**Evidences/Indicators**

- SELF Evaluation Report
- Interview results
- External Evaluation

**Recommendations:**

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

**Suggestions for the programme development**

- Once the implementation of the programme has been completed, the University should continue the development process following the standards set by EAEVE (European Association of Establishments for Veterinary Education) for undergraduate veterinary education.

**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	X	<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**

In order to assess and develop the educational programme, based on the order of the rector and the submission of the head of the quality assurance service of the university, a programme commission will be established at the faculty. The chairperson of the commission will be the head of the quality assurance service of the faculty.

The commission verifies the compliance of the laboratory equipment, appropriate literature, human resources implementing the programme, auditoriums and other parameters of the programme with the requirements of authorization and accreditation, as well as the progress of the process of implementation of the educational and research components of the programme provided by the educational programme and training course programmes.

In the process of monitoring the implementation of the programme, special attention should be focused on ensuring that the programme achieves the set goals and expected learning outcomes.

Educational programme evaluation criteria are:

- The results of students' attendance-activity monitoring;

- · The results of monitoring students' academic performance;
- · Dropout rate of from the programme and programme completion rate;
- · Employment rate of programme graduates and their survey results;
- · Survey results of employers;
- · Student survey results;
- · The results of the survey of professors and teachers involved in the programme.

The programme may need to be modified due to the following issues:

- · Change in the requirements for graduates of the programme;
- · The necessity of changing the name of the programme;
- · Changes implemented in legislation;
- · The necessity of changing the system of assessing students' knowledge;
- · The necessity of changing the credits of the main components of the programme;
- · Changes in the resources needed for the development of the programme;
- · Changes in the content of the programmes and syllabi of academic courses.

According to the regulations presented by the institution and the information provided by the persons participating in the accreditation visit (students, graduates, academic staff):

- There is an electronic system for monitoring students' academic performance in GTU, which allows students to constantly monitor the results of their assessments. In case of a complaint, the student can contact the dean of the faculty or the quality assurance service, as well as the university's quality assurance service or management. In addition, the system allows statistical processing and analysis of the information. The results obtained are used for monitoring as well as for the improvement of the educational process.

- The results of the evaluation of the learning outcomes of the programme are used for monitoring and development of the programme.

- Periodic evaluation of the academic and invited personnel involved in the implementation of the programme is carried out by the faculty. Both their teaching and research activities are evaluated.

GTU faculty commissions, which, among other core functions are also responsible for evaluating the quality of courses taught by faculty and their relevance to educational programmes. The process of evaluating the quality of classes will be conducted through physical presence in the classroom.

The Faculty Commission submits evaluations to the Faculty Quality Assurance Service in the prescribed form, on the basis of which the Head of Quality Assurance Service draws up a protocol, which is passed to the University Quality Assurance Service for further response.

During the visit, the results of staff evaluation performed according to regulations: "Rules For evaluating the educational and Scientific-research work of the GTU" and "On the evaluation system and the response of professors and teachers of the GTU" for any related programme were requested from the institution. Instead, we got a comprehensive description of faculty performance evaluation feedback.

- Students participate in surveys and meetings. Through electronic questionnaires, they evaluate the programme, courses, and lecturers. The survey is anonymous. If there is a problem, it is possible to

share information about it through the electronic system, which is also seen by the department's management.

- The University takes into account students' opinions and recommendations collected from the questionnaires. Students confirmed that they have the opportunity to receive counseling that is being used.

**Evidences/Indicators**

- Resolution No.531 of the Academic Council of the Georgian Technical University dated September 27, 2011 "on the evaluation system of professors and teachers of the Georgian Technical University and on response"
- Internal mechanisms of quality assurance approved by the Resolution No. 01-05-04/108 of the Academic Council of the Georgian Technical University on April 17, 2018;
- Order of the Rector of the GTU No. 01-09-10/273 of November 19, 2019 on the establishment of commissions at faculties and approval of their regulations";
- Rules for evaluating the educational and scientific-research work of the Georgian Technical University" - Resolution No. 450 of the Academic Council of the GTU dated May 6, 2011; <http://gtu.ge/quality/Files/Pdf/450cesi.pdf>;
- Resolution No. 531 of the Academic Council of the Georgian Technical University "On the evaluation system and response of professors and teachers of the Georgian Technical University" dated September 27, 2011; <https://gtu.ge/pdf/dadgenilebebi/dadg531.pdf>
- Student, Employer, alumni, Staff questionnaires and survey results;
- Mechanism for evaluating learning outcomes.
- "Regulations on the Quality Assurance Service of the Georgian Technical University ", approved by the Resolution of the Representative Council (Senate) of the Georgian Technical University No. 01-06-02/05 dated January 17, 2020;

**Recommendations:**

- It is also important to more comprehensively use the mechanisms prescribed by the regulations in order to develop the quality of the programme - evaluation of material resources, programme prerequisites/a reader in the Georgian language, programme sustainability, evaluation of academic personnel, etc.

**Suggestions for the programme development**

- In order to obtain more objective and reliable information for decision-making, the institution should consider increasing the number of respondents involved in the surveys - especially students and graduates.

**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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5.3. Programme monitoring and periodic review	<input type="checkbox"/>	X	<input type="checkbox"/>	<input type="checkbox"/>
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Compliance with the programme standards

5. Teaching Quality Enhancement Opportunities	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"/>

Attached documentation (if applicable):

Name of the Higher Education Institution:

Name of Higher Education Programme, Level:

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"/>	<input type="checkbox"/>	X	<input type="checkbox"/>
3. Student Achievements, Individual Work with them	X	<input type="checkbox"/>	<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 type="checkbox"/>	X	<input type="checkbox"/>	<input type="checkbox"/>

Signatures:

Chair of Accreditation Expert Panel

Toomas Tiirats

Chair and international exper



Accreditation Expert Panel Members

Giorgi Melashvili,



Nino Milashvili



Nino Jojua



Giorgi Mgvdeladze

