

## School of Medicine and Dentistry

### Doctoral Education Programme - Medicine

**Higher Academic Education Level** Doctoral Degree (III level)

**Language** Georgian

**Direction** Health Care

**Specialty** Medicine

**Awarded qualification** Medical Doctor (Ph.D. in Medicine)

**Duration** 3 years (6 semesters)

**Credit value of the programme** 180 ECTS

**Programme Admission Precondition:** Doctoral Programme in Medicine can be applied by Certified Doctors, Certified Doctor of Dental Medicine or a person with an equivalent degree meeting the competition requirements stated by the School of Medicine and Dentistry Dissertation Council and Doctoral Statute.

**Supervisors of the programme**

*Doctor of Medicine Noe Jorbenadze*

*Associated Professor David Gviniashvili*

#### **Purpose of the Programme**

Doctoral Programme in Medicine aims at preparing specialists with the Doctor of Medicine degree ready to carry out pedagogical activities at highly-qualified scientific and higher educational institutions, who will be equipped with knowledge based on recent developments in the field of medicine; who will understand the needs of re-evaluation of knowledge in the conditions of rapid developments in the field; who will be motivated to research and develop innovative methods for establishing important ethical and legal values for the medical profession and will be ready to develop new ideas in the process of education, activity and research.

The Programme also aims to develop important skills to be in compliance with standards required by international peer-reviewed publications; to be ready for independent innovative research and supervision; to enhance and develop important clinical skills for the medical profession; to develop the ability to carry out scientific research, to integrate knowledge, to present publicly own conclusions and prove them adequately and logically; to enhance skills of critical analysis,

synthesis and evaluation; to take independent and effective measures for the solution of the problem; to develop foreign language skills necessary for the engagement in scientific discussions.

### **Programme Structure**

Doctoral Programme in Medicine includes educational and research components - teaching and scientific research. The educational component aims at providing doctoral student with the field and methodological skills; creating a solid theoretical prerequisite for independent studies, preparing for future pedagogical and scientific activities. The educational component includes compulsory and elective elements. The obligatory element of the educational component is Assisting Professor, whereby the doctoral student acts as pedagogical assistant to his/her own scientific supervisor or other professor. The credits are awarded in accordance with the School of Medicine and Dentistry's Dissertation Council and Doctoral Statuates. The compulsory part of the educational component also involves reserch methods, which include modern field related techniques and give doctoral student the knowledge to carry out an independent experiment or research work, to recognize the reliability of results and etc.

The programme's research component aims at forming professional skills of doctorate student as an independent researcher. The research component includes preparation and defence of the dissertation thesis.

The prerequisite of dissertation submission is the publication of four scientific articles related to the subject of dissertation in the peer-reviewed scientific periodicals, among them one in the international impact factor journal or in the International Scientific Conference Materials (so called Proceedings); or in Georgian publications which are registered in International Classification of refereed/peer-reviewed electronic/or print journals and equals with foreign refereed/peer-reviewed publications.

The educational and scientific-research components aim to achieve the goals and results set out in the programme, namely to develop competences relevant to the academic degree of doctor and to enhance skills required for scientific research and pedagogical activity at higher educational institutions.

**Doctoral Education Programme - Medicine 180 ECTS**

<b>I Education Component -</b>	<b>45 ECTS</b>
<b>1) Compalsory Components</b>	<b>40 ECTS</b>
Specific Field Related Courses	10 ECTS
Research Methods Educational Course	10 ECTS
Foreign Language (English/German)	

for Medical Professionals	5 ECTS
Modern Teaching Methods (Educational Course)	5 ECTS
Assisting Professor (Pedagogical Practice)	10 ECTS

**2) Elective Component** **5 ECTS**

- Science Management
- Modern Methods of Curriculum Formation
- Use of ICTs in Research and Teaching
- Educational Course Related to the Dissertation

**II Research Component** **135 ECTS**

- Dissertation Preparation and Defence

**Learning Outcomes**

The sequential implementation of stated objectives of the doctoral programme provides the achievement of the third cycle (Doctoral Degree) learning outcomes according to the Higher Education Qualifications Framework.

<b>Knowledge and understanding</b>	<p><b><i>A Graduate has:</i></b></p> <ul style="list-style-type: none"> <li>▪ Knowledge based on the latest achievements in medicine;</li> <li>▪ Deep knowledge of fundamental principles, basic theories and concepts of Medical science;</li> <li>▪ Possibility to enhance knowledge and use innovative methods at the standard level required by peer-reviewed scientific publications;</li> <li>▪ Understanding of renewed scopes of knowledge through rethinking and re-evaluating of knowledge in the circumstances of the rapid developments in the field;</li> <li>▪ Deep knowledge of research/doctoral thesis topic issues, research object peculiarities, innovative aspects of the research, research methods and methodologies, the latest scientific literature, ideas and achievements, which give possibilities to enhance given knowledge and use innovative methods (required by the peer-reviewed publication standards).</li> </ul>
<b>Applied knowledge</b>	<p><b><i>A Graduate is able:</i></b></p> <ul style="list-style-type: none"> <li>▪ To plan, implement and supervise innovative research;</li> <li>▪ To perform practical activity in medical field at highly qualified level;</li> </ul>

	<ul style="list-style-type: none"> <li>▪ To develop a specific (theoretical and research) methodology based on the in-depth knowledge of medical and biological methods, and further reflect in international peer-reviewed publications;</li> <li>▪ To work at the standard required by international peer-reviewed publications;</li> <li>▪ To use in-depth knowledge of the issues related to the research/ doctoral thesis in order to analyse research objective, to define innovative aspects, latest methods and methodologies of research, to select scientific literature, and to state expected outcomes of the research.</li> </ul>
<b>Making judgements</b>	<p><i>A Graduate is able:</i></p> <ul style="list-style-type: none"> <li>▪ To analyse experiment results in accordance with modern standards;</li> <li>▪ To formulate publicly own conclusions, with clear knowledge and logic;</li> <li>▪ To critically analyse, synthesise and evaluate new, complex and contradictory ideas and approaches;</li> <li>▪ To have interdisciplinary approach, theoretical analysis, complex vision of events and objective assessment of processes;</li> <li>▪ To think independently, to integrate scientific research and knowledge;</li> <li>▪ To take correct and effective decisions to solve problems independently.</li> </ul>
<b>Communication skills</b>	<p><i>A Graduate is able:</i></p> <ul style="list-style-type: none"> <li>▪ In the context of rapid development of the field, to present new knowledge in relation with existing knowledge clearly and reasonably, as well as to carry out scientific communication in foreign language with international scientific community.</li> </ul>
<b>Learning skills</b>	<p><i>A Graduate is able:</i></p> <ul style="list-style-type: none"> <li>▪ Develop/deepen own creative potential;</li> <li>▪ To develop new ideas in the process of learning, activity and research based on the latest achievements in medicine and biology;</li> <li>▪ To plan and manage someone others learning process.</li> </ul>
<b>Values</b>	<p><i>A Graduate is able:</i></p> <ul style="list-style-type: none"> <li>▪ To research the ways of establishing values in the field of medicine and develop innovative methods to establish them.</li> </ul>

## Students' Knowledge Assessment System

The level of student learning results is assessed with the 100-point (maximum 100 points) system. The assessment of study component includes two forms - mid-term assessment and final assessment. The minimum grade of mid-term is 21 points. The minimum grade of final exam is 50 percent of a final exam.

It is not allowed to give a credit with the use of only one form (midterm or final assessment). The final assessment (points) of the study component is the sum of the points of midterm and final exams.

Besides the theoretical course assessment methods, there is a practical course - the element of the study component – the assessment rule of Professor's assistance, which is written in the Regulation of School Dissertation Council and Doctoral Department; the information on assessment systems and components is available for Doctoral students.

The study component assessment system of Doctoral education programme includes five types of positive and two - negative assessment.

### **Five types of positive assessment:**

- (A) Excellent - 91-100 points of maximum grade;
- (B) Very good - 81-90 points of maximum grade;
- (C) Good - 71-80 points of maximum grade;
- (D) Satisfactory - 61-70 points of maximum grade;
- (E) Sufficient - 51-60 points of maximum grade.

### **Two types of negative assessment:**

- (FX) Insufficient – 41-50 points means that a student needs more work to pass and is given the right to pass an additional exam with independent work;
- (F) Fail – 40 points or less means that the work carried out by a student is not enough and he/she has to learn the subject from the beginning.

The Doctoral program research component includes the preparation and defence of the dissertation thesis. The dissertation work should be assessed at one time (final assessment) in the same or following semester, when a student completes the work. The dissertation is considered as defended if the final assessment of the Dissertation Commission is 51% or more.

In the case of assessment of the dissertation work, the following system of assessment is used:

Point	Evaluation	
91-100 point	<b>summa cum laude</b>	<b>Excellent</b> (excellent work)
81-90 point	<b>magna cum laude</b>	<b>Very good</b> (The result, which is above all the requirements)
71-80 point	<b>cum laude</b>	<b>Good</b> (The result that exceeds the requirements)
61-70 point	<b>Bene</b>	<b>Average</b> (The result that meets all the basic requirements)
51-60 Point	<b>Rite</b>	<b>Satisfactory</b> (The result of which, despite the shortcomings, still satisfies the requirements)
41-50 point	<b>Insufficenter</b>	<b>Unsatisfactory</b> (Unsatisfactory work that fails to satisfy the requirements due to significant shortcomings)
0-40 point	<b>sub omni canone</b>	<b>Absolutely unsatisfactory</b> (The result that does not satisfy the requirements at all)

If the dissertation is "unsatisfactory" (41-50 points), the doctorate is given the right to submit the dissertation work in 1-year time.

If the dissertation is "completely unsatisfactory" (less than 41 points), the doctor will lose the right to present the same dissertation work.

The assessment criteria and grading of dissertation thesis are given in the Regulation of Defence Council and Doctorate Degree, and the information on the assessment system and components is available for Doctorate students.