# Tbilisi State Medical University



## Faculty- Dentistry

Doctoral Educational Program – "Dentistry"

Language of Instruction– Georgian

Date of Accreditation- 15.12.2020

Heads of PhD Program: Professor Marine Mamaladze

Associated Professor Lia Sanodze

Name of the	Doctoral Program In "Dentistry"
educational program	
Stage of higher	Third
Qualification/	Academic Dector of Deptistry/Dector of Deptal Medicine (DDM)
Acadomic dograa to ba	Academic Doctor of Dentistry/Doctor of Dental Medicine (DDM)
academic degree to be	
Program volume	45 credits/not less than 3 years
Language of	Georgian
Instruction:	
Program aims:	- to train competent and competitive academic
	staff/researchers/academic destors in the field of dentistry who will
	stan/researchers/academic doctors in the neuron dentistry who win
	be employed in universities, scientific research, and
	treatment/medical institutions and will have knowledge based on
	the latest information, technological and methodological
	achievements in dentistry and its "sub" disciplines. It will allow for
	expansion, creation of new knowledge and the independent
	application of innovative methods, which is fully in line with the
	Salzburg Principles of Dectoral Education
	Salzburg Frinciples of Doctoral Education.
	- The graduate of the doctoral program should develop the ability(s) to independently plan and implement research in dentistry with strict adherence to academic integrity and bioethical standards, use research and analytical methods/approaches focused on the generation of new knowledge, critical analysis, and synthesis, and independently make correct and effective decisions for problem-solving. Everything will contribute to the development of projects and programs for the treatment and prevention of dental diseases, as well as health promotion.
	To prepare the graduate of the doctoral program with responsibility and independence, which determines his ability to implement research projects based on the most recent information in dentistry, To present their research results in professional and non- professional situations, to participate in the work of scientific forums, their organization/preparation, to use research results in professional activities.

Prerequisites	<ol> <li>Having Diploma Doctor of Dental Medicine (DDM) or equivalent academic degree;</li> <li>Presence of a doctoral research program approved by the Academic Council of TSMU;</li> <li>B2 level knowledge of the English language, which is confirmed by:</li> <li>B2 or higher by presenting a certificate of English language proficiency (valid), or</li> <li>Passing the entrance exam in English language on at least at B2 level.</li> <li>By successfully passing the exam in the specialty, which includes the following: a) testing; b) oral interview.</li> <li>The procedure for enrolling in the doctoral program is determined by the regulation "On doctoral studies of the Faculty of Dentistry of Tbilisi State Medical University".</li> </ol>
Teaching Methods	The achievement of learning outcomes is ensured by the presence of <b>teaching and research components</b> of the doctoral program, which, on the one hand, are based on the accumulated knowledge and latest evidence in the field, and on the other hand, the experience gained as a result of the implementation of the previous programs, the results of interviewing of former PhD students (graduates) and current doctoral students, stakeholders, of the staff involved in the implementation of the doctoral program, their wishes and comments, and the opinions and advice of the academic staff involved in teaching.
	<ul> <li>nethods, which, in addition to the actual research work, involves the active involvement of the doctoral student in the learning process and includes the following methodologies, methods, principles, and forms of teaching adults:</li> <li>Determination of individual needs and independent learning;</li> <li>Interactive presentation, with question-and-answer sections and "Brainstorming", using remote, multimedia, and other resources,</li> <li>Teaching in small and task-focused groups,</li> <li>Case studies, case-based learning;</li> <li>Role-playing: for example, playing the role of a patient, a doctor, and a researcher,</li> </ul>

<ul> <li>Simulating /situational games: for example, simulating a decision-making process of ethical committee on research;</li> <li>problem-based learning, or using its key components.</li> <li>Analysis, Synthesis; Induction, Deduction;</li> <li>Project writing and presentation.</li> <li>Writing and presenting the analytical essay.</li> <li>Practice teaching under controlled conditions- taking part in teaching: conduct lectures/practical trainings/seminars and colloquiums independently, but under the supervision;</li> <li>Seminar, colloquium, debates, discussion.</li> </ul>
The research component is an important part for achieving learning outcomes. In particular, in the process of research activity, a doctoral student:
a) enhances the deepened knowledge and critical thinking in the chosen field as a result of participation in the teaching components;
<ul><li>b) strengthens the skills necessary for successful research by modern scientific, professional, and ethical principles;</li><li>c) will strengthen communication skills, which are necessary for him to present his vision and achievements to his colleagues and the general public;</li></ul>
d) Is becoming the researcher and teacher with highest sense of responsibility.
The research component of the doctoral program is determined by the individual doctoral research program, the implementation plan of this program, the mandatory scientific activities (publications, reports, etc.) for the completion of the program, and the defense of the thesis (publications, reports, etc.) and the thesis itself.
<ul> <li>All research programs are individual and one doctoral student participates in its implementation.</li> <li>Compulsory training courses:</li> <li>1. Doctoral study course I,</li> <li>2. Doctoral study course I</li> <li>3. Scientific research methodology and biostatistics.</li> </ul>
<ul> <li>4. Ethics of biomedical sciences,</li> <li>5. Pedagogy and psychology of higher education,</li> <li>6. Professional English (in academic writing),</li> </ul>

Elective courses:
1. Methodology of drawing up a scientific project,
2. Evidence-based medicine in practice,
3. Foreign language - French,
4. Foreign language - German,
5. Study course relevant to the content of doctoral research.
The curriculum is designed to ensure the gradual achievement
of the doctoral student's target competencies. In the first stage, the
doctoral student will acquire knowledge and skills, which are
necessary for adequately planning and carrying out research work,
as well as for continuing to the next stages of study.
Compulsory Doctoral Courses I and II are defined by "sub-
fields" of dentistry that thematically and contextually are an
umbrella for any potential dissertations (ie, "fields of research")
completed under the "hood" of this doctoral program and are
represented by blocks of specializations. Their list is as follows:
- odontology,
- periodontology and diseases of the mucous membrane.
- Therapeutic dentistry for children and adolescents.
- Maxillofacial surgery and surgical dentistry for children and
adolescents.
- Oral surgery and implantology
- orthopedic dentistry
- orthodontics
- Oral cavity head and neck oncology
Oral cavity, ficad and ficer offeology.
Mandatory doctoral study courses I and II by the content and needs
of the doctoral research plan, are determined by the supervisor of
the doctoral research according to the established procedure when
presenting the research plan. After the enrollment of a person in
the doctoral program (that is after the determination of the main
newformer of the given recearch work the mein recearcher)
performer of the given research work - the main researcher),
during the research, and during the interim analysis of its results, it
is possible to change the doctoral study courses initially selected by
the doctoral program supervisor (within the list defined by the
doctoral program), to change the doctoral research plan with
arguments (if it happens). Content of the doctoral study course(s),
teaching concept, evaluation methodology, etc. Defined by the
syllabus of the relevant study course and known for the staff
involved in the implementation of the doctoral program, also, for
doctoral students.

	Elective courses (10 credits) are chosen by the doctoral candidate after enrollment in the doctoral program. In the case of selecting a course relevant to the content of the doctoral research as an elective course outside the list established by the doctoral program, the syllabus of this course/its compliance with the essence of the research and the requirements of the educational component of the doctoral program will be evaluated by the head of the doctoral program and the coordination of scientific work of TSMU, master and doctoral studies. Will be evaluated by the TSMU in quality assurance service.
	<b>The scientific component of</b> the program is a research program, which the doctoral student completes under the direct supervision of the research supervisor and completes it for three years.
	The doctoral student participates in local and international scientific forums, where he presents the results of his research and publishes publications.
	The research component includes the performance of a scientific paper (dissertation) and defense of the thesis. The phasing of the implementation of the research component is determined by the scientific supervisor, which is reflected in detail in the doctoral program implementation plan.
	The learning outcomes of a doctoral program in dentistry are measurable and realistic. It corresponds to the specifics of the field of dentistry, and the requirements of employers, and takes into account professional industry standards, which is ensured by the involvement of academic and visiting staff, doctoral students, graduates, and stakeholders and of all interested parties in the development of the program, and by introducing the learning results.
Learning outcomes	<b>Knowledge and understanding</b> Knowledge-based on the latest achievements in the field of study and/or activity, which allows the expansion of existing knowledge or the use of innovative methods, including in a multi- and/or interdisciplinary context. Systematic and critical understanding of the field of study or activity.

	Ability
	planning and conducting research by the principles of academic
	integrity; Development of new research or analytical methods
	and/or approaches, which is focused on the creation of new
	knowledge (at the level of the standard required for an
	international refereed publication);
	Critical analysis, synthesis, and evaluation of new, complex, and
	conflicting ideas and approaches, thereby making correct and
	effective decisions independently for solving complex problems
	(in research and/or innovation).
	The ability to present and convey new knowledge about existing
	knowledge to both colleagues and the general public. Ability to
	participate in local and international thematic discussions.
	Responsibility and autonomy
	Carrying out cutting-edge research projects and/or development-
	oriented activities in an academic and/or professional context,
	while adhering to the principles of managerial, academic, and/or
	professional integrity, as well as demonstrating innovation and
	independence.
Areas of Employment	• Scientific and research institutions,
	• Educational institutions,
	• Medical/healing facilities.

			S	hours				
Ν	Study course	Status	ECT	Contact hours	Indepen dent work	Total		
1.	Doctoral Program I (Study Course I)	Mandatory	5	50	100	150		
2.	Doctoral Program II (Study Course II)	-,,-	5	50	100	150		
3.	Biostatistics and Scientific Research methodology	-,,-	7	70	140	210		
4.	Ethical aspects of biomedical Research	-,,-	4	40	80	120		
5.	Psychology and Pedagogy in Higher Education	-,,-	5	50	100	150		
6.	Professional English (academic writing)	-,,-	9	100	170	270		
7.	Methodology of Scientific Project writing	Elective	3	30	60	90		
8.	Evidence based medicine in Practice	-,,-	4	20	70	90		
9.	Foreign language- German/French	-,,-	2/2	20/20	40/40	60/60		
10.	Study course relevant to study Program	-,,-	5	50	100	150		

#### PhD program in "Dentistry" / curriculum

#### PhD program "Dentistry"

### Structure of educational components - 45 credits

				ECTS							
Ν	Study course	Status	Prerequisites	I Semester	II Semester	III Semester	IV Semester	V Semester	VI Semester	Total ECTS	
1.	Doctoral Program I (Study Course I)	Mandatory	None		5					5	
2.	Doctoral Program II (Study Course II)	Mandatory	Study Course			5				5	
3.	Biostatistics and Scientific Research methodology	Mandatory	Nona	7						7	
4.	Ethical aspects of biomedical Research	Mandatory	None		4					4	

5.	Psychology and Pedagogy in Higher Education	Mandatory	None			5				5
6.	Professional English (academic writing)	Mandatory	B2 level	9						9
7.	Methodology of Scientific Project writing	Elective	None			3				3
8.	Evidence based medicine in Practice	Elective	None			4				4
9.	Foreign language- French	Elective	None			2				2
10.	Foreign Language- German	Elective	None			2				2
11.	Study course relevant to study Program	Elective	(Study Course II)			5				5
					To	tal lea	rning	compo	onents	45
						Ν	Ianda	tory		35
							Electi	ves		10