

# ILIA STATE UNIVERSITY

## Faculty of Natural Sciences and Medicine

### One Cycle Undergraduate Medical Education (Equivalent to the II stage)

#### MEDICINE

Academic Unit	Faculty of Natural Sciences and Medicine
Programme	MEDICINE
Qualification Awarded	Medical Doctor (MD)
Programme duration/scope (semester, number of credits)	6 years (12 semesters, 360 ECTS)
Language of instruction	English
Programme development date and revision regulations	The program was developed in 2019 and can be revised at the beginning of each academic year for further improvements.
<b>Programme admission prerequisites (requirements)</b>	
<p>An individual who has state approved certificate of full secondary or an equivalent education and who will gain right to study through Unified National Exam, is eligible to apply to the single-step medical program.</p> <ul style="list-style-type: none"><li>For enrollment to the program through Unified National Exam, the minimum competence for “Basic skills” exam is no less than 75%</li><li>From the elective disciplines of the Unified National Examinations, enrollee is entitled to take the following subjects (defined by legislation): Chemistry or Biology - threshold-85%</li><li>Enrollee must choose English language from foreign languages of Unified National Examinations.</li><li>For the enrollment to the program the minimum competence threshold in English language at Unified National Examinations is – 90%</li></ul> <p>Candidates eligible to enroll to this single-step medical program without passing the Unified National Examinations are as follows:</p> <ol style="list-style-type: none"><li>Foreign citizens and stateless persons who have completed secondary or equivalent education in a foreign country;</li><li>Georgian citizens, who received full secondary or equivalent education abroad and have studied the last two years of full secondary education in a foreign country;</li><li>Individuals (except joint educational and exchange programs students) who have lived abroad for the last one year or more, currently study / have studied and have received credits / qualification at an academic higher educational institution recognized under the laws of that country.</li><li>Georgian citizens (except joint educational and exchange programs students) who have lived abroad for time defined by Ministry of Education and Science of Georgia, currently study / have studied and have received credits / qualification at an academic higher educational institution recognized under the laws of that country.</li></ol> <p>Individuals who enroll without passing the Unified National Examinations must confirm knowledge of English language (Minimum B2 level), and take exam in chemistry or biology.</p> <p>The English language requirement may be waived if the applicant is a native English speaker or graduated from an English medium high school / university in countries, official language of which is English.</p> <p>For other applicants, there are fixed English-language requirements to fulfill. A candidate must have a recognized English qualification aligned with CEFR level B2 to successfully apply. To prove the English qualification either one of the following must be submitted:</p> <ol style="list-style-type: none"><li>an official international language certificate (the main certificates and minimum scores accepted are given below)</li><li>an English Proficiency Statement from the university, high school or college, confirming that English was the language of instruction</li><li>a certificate issued by a local or international English language instruction provider (e.g. language school), confirming the acquisition of B2 level as a result of a language course attended</li></ol>	

- TOEFL paper based PBT 513
- internet based iBT 65
- computer based CBT 183
- IELTS Academic (Band 5.5)
- Cambridge ESOL (English for Speakers of Other Languages)
- Certificate of Advanced English (CAE): 160/Level B2 (also grades A/B/C)
- First Certificate in English (FCE): 160/Grade C (also grades A/B)
- Business English Certificate (Higher) BEC: 45/Level B2 (also grades A/B/C)
- Business English Certificate (Vantage) BEC: 60/Grade C (also grades A/B)
- Business Language Testing Service BULATS: 60 overall
- PTE (General level 3)
- PTE Academic (59-75 points)
- TELC (The European Language Certificates)
- telc English B2: Pass
- Michigan (Cambridge Michigan)
- Examination for the Certificate of Proficiency in English ECPE: Low Pass
- Examination for the Certificate of Competency in English ECCE: Pass
- MELAB: B2

### Program objectives

Program "Medicine" at Ilia State University aims to prepare qualified and competent Medical Doctors, open to modern approaches and equipped with appropriate knowledge, skills and competencies to respond tomorrow's global challenges of the field. Furthermore, to be competitive at both - national and international levels. Graduates of the program are eligible to continue further medical education, work as junior doctors and teachers.

### Objectives of the program:

- Provide students with deep and practice based knowledge which will consider trends of the field, modern challenges, technological advancement and international medical standards;
- Generate skills and roles characterized for modern physician, based on the practical teaching. Herewith, prepare students to understand the meaning of social responsibility, values and principles of ethics which are utmost important for physicians employed in this field;
- Equip students to understand principles and methods of social and behavioral sciences in the wider context of the medical field. Moreover, to realize the importance of public healthcare and the role of physician in this system;
- Generate skills which will support students to work and develop themselves individually. Furthermore, equip students to analyze necessity of improvement their knowledge and skills.

### Learning Outcomes and Competencies

- Student will define pathological processes and its expected outcomes using the fundamental knowledge of biomedical science.
- Student will evaluate clinical case, consult patient, define diagnosis and manage the state of patient based on the knowledge of clinical sciences and fundamental principles of the field.
- Student will evaluate disease-related social and psychological aspects by use of the basic knowledge of behavioral and psychosocial sciences.
- Student will use evidence-based principles, up-to-date scientific information and research methods in medical practice and scientific research.
- Student will define and conduct disease preventive measures and promote health considering public healthcare principles for effective work in healthcare system.
- Student will use ethical and legal principles in scientific and clinical practice.
- Students will effectively communicate with patient, family member of patient, colleagues and other persons concerned.
- Student will obtain, analyze and distribute medical information by effective use of informational technologies.

- Student will perform particular laboratory and medical manipulations.
- Student will demonstrate professionalism.

### General Competencies

- Analysis and synthesis
- Management of information
- Problem solving and decision-making
- Ability to work in the group and new environment
- Communication skill, including in foreign language
- Ability to renew learning / knowledge permanently
- Ability to work independently

### Teaching methods

- Lecture
- Seminar
- Practical workshop
- Clinical work
- Flipped learning method
- Case based learning (CBL)
- Bedside teaching
- Problem based learning (PBL)
- Research project
- Presentation
- Consultation with the supervisor

### Programme structure

MD educational program consists of two stages: 1. Basic Medical Teaching (I – III years) – preclinical stage of medical program comprised of disciplines of life sciences and body systems (1st phase – Normal structure and function) which are vertically linked to pathology courses (2nd phase – Abnormal structure and function) and accompanied by teaching core values of medicine, professionalism, communication, clinical and research skills. Students exiting this stage acquire knowledge of the fundamental sciences and basic clinical skills. 2. Early Clinical Activity – stage with increased focus on development of advanced clinical competencies and skills (IV – VI years). This stage includes rotations of different clinical disciplines (3rd phase – Clinical teaching) and clinical internship/workplace practice (4th phase / XII semester) accompanied by teaching of advanced basic science disciplines, core values of medicine as well as development of professionalism, communication and research skills.

Integrated learning is the essential condition for modern medical education. This program includes vertically integrated curriculum, which implies incorporation of clinical competence training and practical skills developing courses in the first year of study in parallel with natural science disciplines. In particular, the program involves integration of clinical (practical) training courses (course "Clinical Skills I") already in the second semester, which in the following semesters becomes more intensive and on the second stage of teaching (Early Clinical Activity) transfers into subjective clinical rotation format and ends with the clinical workplace practice. In parallel at this stage decreases volume of basic science disciplines. At the preclinical phase of teaching program uses elements of horizontal integration. In particular, topics of study courses are synchronized according to organ systems and pathologies (e.g. cardio-vascular system is taught synchronously in Anatomy, Physiology, Histology, etc.; Diseases of cardiovascular system are discussed in integrated module of Pathology, Pharmacology, and Clinical diagnostics). In parallel program envisages Problem Based Learning (PBL) seminars, which provides "the correlation integration" of basic medical disciplines and prevent knowledge fragmentation. This format enables the student to develop basic, clinical and communication skills at the earliest stage of learning, which will later facilitate cognitive process of clinical subjects. Furthermore, each of the four phases of educational program ensures deepening and development of medical doctor's competence related knowledge, skills and attitudes, which enables spiral integration of the curriculum.

Program is not only knowledge based but is focused on development of physician's core competencies. During the stage of Early Clinical Activity (VII-XII semester) student advances in roles defined by CanMEDS 2015 Physicians Competency Framework. Student's activities are accumulates in Medical Portfolio, which is student centered and incorporates feedbacks, self-reflection and Life Long Learning principles.

From the first semester program provides the necessary skills for scientific research (course "Academic skills"). The following semesters include courses of Bioethics, Epidemiology, Evidence-based Medicine and Bio-Medical Research, which enables students to learn scientific research methods, perform scientific work and gradually improve skills required for research activities.

It is important that the students learn not only critical assessment of scientific information but also basic principles for research planning, conducting, analyzing, paper drafting and results presentation. At the end of the studies, in 12th semester, student must conduct, write and defend research work. Students will be able to regularly take part and attend the scientific activities organized by the Faculty and Research Institutes of the Ilia State University and the partner medical profile organizations.

Within first year, program provides elective courses of languages, including communicative Georgian language course for foreign students. Among medical students, popular destination countries for postgraduate education are Germany and USA. Program provides basic courses of German language, as well as advanced English language courses for those who want to deepen their skills.

Additionally, program envisages students access to university general courses (in the field of business, management, etc.), that gives interdisciplinary knowledge, expands their awareness and generates no-sectoral, potentially useful theoretical and practical skills for future professional career.

The academic load of the program consists of 360 ECTS credits. 1 credit = 25 hours, covering both contact and independent work hours. Students must accumulate 60 credits per year (1500 hours) - an average of 30 credits (750 hours) during an academic semester.

The program is considered complete when at least 360 ECTS credits have been accumulated, which implies the completion of all the compulsory components provided by the program and collection of credits from minimum required amount of elective components, and passes portfolio.

In total more than 1300 (contact) hours are dedicated to the development of clinical skills (Clinical Work) (including 13 credits at the simulation training center/clinical skills lab) and 22 credits to the development of scientific research skills.

### Program Structure

Total 360 ECTS Credits (including 346 ECTS credits of sectoral courses)		
Mandatory: 332 ECTS Credits		Elective: 28 ECTS Credits
Including:		
Clinical skills: 13 ECTS Credits (Simulation center)	Scientific-research skills: 22 ECTS Credits	

### Assessment

For the assessment of knowledge and skills, oral and written exams are used. Program includes formative and summative assessment systems. Program components contains lecturer/mentor assessment, self-assessment and peer-assessment forms. Methods used are portfolio, objective structured clinical exam (OSCE), Mini clinical evaluation exercise (Mini-CEX), directly observed procedural skills (DOPS), presentations, essay / research paper, etc.

This is the grading scale excepted on the National level:

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

(FX) 41-50 Unsatisfactory - meaning a student needs more effort to pass an examination and is given an extra chance to pass an additional examination through independent work;

(F) Failure - 40 and less of the maximum of grades, meaning the student's effort is not enough and he/she has to retake the course.

### Employment Opportunities

Program graduates can:

- be employed as Junior Doctors in any organization related to the public health care and medical service.

- implement the research and pedagogical activities in the theoretical field of medicine, and/or health care field, which does not imply independent medical practice (at scientific-research institutions, hospitals, etc.).
- receive permission of independent clinical practice - after graduation of residency and passing unified certification examination, according to the relevant state requirements.
- be employed in national and international pharmaceutical industry and forensic expertise centers.
- be employed in management units of medical and healthcare institutions.

#### Necessary complementary conditions/resources for learning

University owns well-equipped auditoriums and computer classes, computer study programs, teaching laboratories, university library and scientific facilities, student and lecturer electronic system – ARGUS, electronic teaching portal “Moodle”. Research institutes of university (Institute of Medical Research) and facilities of partner organizations ensure development and strengthening of clinical-practical and scientific-research skills.

Elaboration of research and clinical skills, research planning and conducting, work on medical simulators and manikins can be conducted at University’s Clinical Skills Center and Research institutes (Institute of Medical Research, Institute of Chemical Biology, Institute of Biophysics, Institute of Ecology, Lab of Applied Genetics, etc.) as well as at partner clinical facilities.

For the provision of research and clinical practice, University has cooperation agreements/liaises with partner organizations, including:

- Medi Club Georgia;
- Medical Center “Innova”;
- “Aversi” Clinic;
- S. Khechinashvili University Clinic;
- G. Chapidze Emergency Cardiology Clinic;
- Medical Corporation “EVEX”;
- D. Gagua Clinic;
- Tbilisi Heart and Vascular Clinic;
- Pineo Medical Ecosystems
- National Educational Center for Family Medicine;
- St. Michael Archangel Multi-profile Clinical Hospital;
- Scientific-Practical Center for Infectious Pathology, AIDS and Clinical Immunology;
- Multiprofile Clinic Consilium Medulla;
- National Center of Tuberculosis and Lung diseases;
- Scientific-Practical Center for Infectious Pathology, AIDS and Clinical Immunology;
- Multiprofile Clinic Consilium Medulla;
- National Center of Tuberculosis and Lung diseases;
- Rustavi Mental Health Centre;
- Center for City Mental Health;
- Tbilisi Oncology Dispansary;
- “Aversi” Polyclinic;
- Clinic “Curatio”;
- Clinic “Neolab”;
- Clinic “Neogen”;