

**The title of the program:**Medicine

**Awarded qualification:**Medical Doctor

**Capacity of the Program:** 6 years (12 semesters - 360 ECTS)

**Language of Education:**English

**Aims of the Program:**

The program aim at providing students with the knowledge, relevant to the international medical standards and developing appropriate skills.

The educational program provides students with knowledge and skills in the following areas:

- Scientific Basis of Medicine;
- Clinical knowledge and skills;
- Population Health and Health Systems;
- Professional Values , Ethics and Behaviour;
- Communications skills;
- Critical thinking and scientific research;
- Information management.

**Prerequisites for the admission to the Program:**

The program admits international applicants in full compliance with Georgian Legislation.

Prerequisites: Biology, Chemistry and English language courses studied at school.

**Learning Outcomes:** After completing the education program, the graduate will have the following skills and abilities:

***Knowledge and understanding***

After completing the educational program, the graduate will have the ability to use knowledge of natural sciences in practice, deep and systematic knowledge of behavioral, social and clinical sciences; knowledge of the main groups of drugs, principles of their prescription according to the pathologies and diseases; deep knowledge of the public health system and realize the doctor's role in this system; deep knowledge of ethical and legal principles; understanding of the ways of solving complex clinical problems.

***Skills of using the knowledge in practice***

After completing the educational program, the graduate will be able: to evaluate clinical cases, including urgent medical conditions, plan diagnostic tests, link the relevant drugs and treatments to the clinical context, assess the potential benefits and risks of treatment for the patient; to carry out actual procedures, relevant to the acquired knowledge; to work in a multidisciplinary group as an ordinary member as well as the leader of the team; to identify the tasks clearly, agree them with the group members,

coordinate their activities and assess adequately the abilities of the team members, manage conflicts and force majeure situations; to use of biomedical scientific principles, methods and knowledge in medical practice and research.

### ***Skills of making judgments***

After completing the educational program, the graduate will have the comprehensive clinical thinking, critical analysis of the incomplete and contradictory data of the examinations, to conduct differential diagnoses, diagnose and reason the diagnosis by means of evidence-based principles, skills and knowledge.

### ***Communication skill***

After completing the educational program, the graduate will be able to maintain effective oral and written communication in native and foreign languages in terms of medical context, the ability to put questions, as well as non-verbal communication skills.

### ***Learning skills***

After completing the educational program, the graduate will be able to use full range of educational and informational resources, manage his/her learning process; will have time organizing, prioritizing skills, the ability to meet deadlines and perform the agreed work; the ability to obtain information from various sources, critical thinking skills; realize the necessity of constant knowledge renewal and continuous professional development; the ability to evaluate the own knowledge and skills.

### ***Values***

After completing the educational program, the graduate will have knowledge of ethical and legal principles in the context of medical practice.

## **Sectoral competences**

### **Sectoral Knowledge**

1. Knowledge of basic natural sciences
2. Knowledge of behavioral and social sciences
3. Knowledge of clinical sciences
4. Knowledge of medicines/drugs and principles of their prescription
5. Knowledge of the public health system and understanding the role of the doctor in this system
6. Knowledge of ethical and legal principles

### **Sectoral Skills**

Graduates should be able to:

1. Consult a patient

Gather the patient intake (collect anamnesis)

Carry out physical examination

Have clinical thinking and decision making skills

Give explanations and advice

Encourage the patient and protect his/her rights

Assess the patient's psychological status

2. Evaluate clinical cases, plan the diagnostic examinations, conduct differential diagnoses, and discuss the disease management plan,

Understand and assess the complexity of clinical report

Appoint of relevant diagnostic tests and interpret its results

Conduct Differential diagnosis

Discuss the disease management plan with patients and their caregivers

Care for terminally ill patient and his/her family

Manage the chronic diseases

3. Assist during the medical emergencies (First aid and resuscitation measures)

Identification and assessment of medical emergency

Treatment of medical emergency cases

Render basic first-aid measures

Take basic life-care and cardiopulmonary resuscitation measures in line with guidelines

Take the advanced life-saving measures in line with guidelines

Treatment of injuries (trauma) according to guidelines

4. Knowledge of prescription of the medicines/drugs

Prescribe the medicines/drugs accurately and comprehensively

Link the medicines/drugs and other medical measures with the clinical context

Review the compliance of the medication and other types of treatment and the evaluation of the potential benefits and risks for the patient

The treatment of pain and distress

Consider the compliance of the medications while prescribing the treatment

5. Perform the practical procedures

Pressure measurement

Vein puncture

Lumbar puncture

Catheter insertion in vein

Insert medications into a vein and use of infusion device

SC and IM injections  
Oxygen supply  
Transportation and related treatment of the patients  
Surgical stitches  
Blood transfusion  
Bladder catheterization  
Perform the urine test  
recording electrocardiogram  
Functional testing of respiratory system  
6. Maintain effective communication in terms of medical contexts  
Communicate with the patients  
Communicate with colleagues  
Communication while telling bad news  
Communicate with relatives  
Communicate with disabled people  
Communicate for getting informed consent  
Written communication (including medical records)  
Communication in case of conflict  
Communicate with the help of the third person  
Communicate with law enforcement agencies and mass media  
Communicate effectively with any person irrespective of his/her social, cultural, religious or ethnic background.  
7. Apply the ethical and legal principles in medical practice  
Respect confidentiality  
Apply the principles of ethics and skills of making analysis during treatment  
Obtain the informed consent and make the relevant record  
Issue the death certificate  
Request the autopsies (in the cases prescribed by law of Georgia)  
Use of Georgian and International law during the treatment  
Performing the medical activities in a multicultural society  
8. Evaluate psychological and social aspects of the patient, associated with the disease  
Evaluation of influence of psychological factors on the patient and disease manifestation  
Evaluation of influence of social factors on the patient and disease manifestation  
Determination of illness-related stress  
Determination of dependence on the alcohol and medication

9. Use of Evidence-based principles, skills and knowledge

Use of evidence in practice

Define properly and conduct relevant literary research

Critical evaluation of published literature, make conclusions and use in practice.

10. Use effectively the information and information technologies in medical context

Keep clinical records accurately and comprehensively

Use of modern information technology in practice

Search for specific information resources

Save information and use it later

Skills of keeping personal record (portfolio)

11. Use of the principles, methods and knowledge of biomedical science in medical practice and research

Knowledge of the methodology of scientific research

The skills of research designing, detailed planning, processing the obtained results and making conclusions

The ability to use the achievements of the biomedical sciences in practice

Ability to write a report/review based on critical analysis of biomedical scientific literature

Knowledge of the principles of ethics for scientific research

12. Implement health promotion activities, be involved in public health issues, and work effectively in the healthcare system

Provide such treatment, which minimizes the risk of harm to the patient

Taking measures preventing the spread of infections

Understand the own health problems and assess the own health in terms professional responsibilities

Participation in health care promoting activities, both as individual as well as on the population levels

**After completing the educational program, the graduate will acquire the following**

**general competences:**

1. The skills of analysis and synthesis - The graduate is able to assess critically difficult, incomplete and contradictory data, conducts their independent analysis, State the results of the analysis in an understandable manner and then apply them in practice, has a critical approach to new information, can analyze, summarize, integrate, make conclusions from various data, provide evidences and/or contradictional arguments while analysing the results

2. Management of information – The graduate is able to obtain information from various sources, processing large amounts of information and assess it critically. The graduate has the ability to use the gathered information in professional activities.

3. Problem solving / decision making–The graduate is able to identify the complex problems, formulate them, determine of ways of solving, analyze the expected results and make the final decision independently. He/she is familiar and in case of necessity able to use additional resources effectively, within the own specialty.

4. Ability of oral and written communicate in native language - On the native language the graduate is able to communicate freely, to participate in the discussion on a professional level, to participate in dialogue with non-professionals in the understandable for them manner.
5. Knowledge of the second language - Knowledge of one of the European languages at B2 level.
6. Ability to use information and communication technologies - The graduate is familiar and able to use the modern information and communication technologies (ICT) and search for the information; is able to use multimedia and interactive electronic applications, including sectoral field; is able to use new information technologies independently; is able to use computer and office software applications; is able to find sources of information, store and apply the information, has the skills of communication in the electronic format.
7. Team work - The graduate has the ability to work in a team as an ordinary member, as well as the leader. He/she is able to identify the tasks clearly, agree them with the group members, coordinate their activities and assess adequately the abilities of the team members, manage conflicts and force majeure situations
8. Communication skills – The graduate has skills of observation, listening, putting questions, as well as the skills of the non-verbal communication. He/she is able to participate in the meetings and giving own opinions through the oral and written communication. He/she is able to lead the negotiations professionally and participate in conflict resolution.
9. Ability to observe ethical principles – The graduate observes the principles of ethics with colleagues, patients and non-specialists. Can analyze and solve the ethical dilemma.
10. Permanent renewal of learning / knowledge  
The ability to use full range of educational and informational resources, manage his/her own learning process. He/she realizes the need for continuous renewal of the knowledge; the medical doctor has the ability to assess his/her knowledge and skills objectively.
11. Ability to adapt to a new environment – The graduate has the practical skill for working with the staff, professional subordination/adaptation skills, ability to use new technologies.
12. Research skills - The graduate has the ability to participate in the research work, can analyze critically the scientific papers, the ability of planning the research, using research methods and scientific knowledge; The graduate is able to collect documentary material, review the literature on the subject of research, process the received data, make the presentation of the research results and participate in the debates. He/she knows the principles of legislation and bioethics in relation to studies.
13. Ability to work independently - The graduate has the skills of time management, prioritizing, meeting the deadlines and performing the agreed works. He/she is able to plan properly resources, related to its activities. Is responsible for performed work and able to evaluate and criticize it.

**Methods of achieving learning outcomes:**

The following forms of teaching will be used in the teaching process:

- ) Interactive lectures, seminars, colloquiums
- ) Bedside teaching

- ) Use of simulators and training models
- ) Roleplays of the patients and doctors
- ) Laboratory training
- ) Presentations
- ) Participation in scientific research
- ) Practice

**Evaluation system of the Student's Knowledge:**

Evaluation of the student’s knowledge is determined by the following system: “Excellent”, “Very good”, “Good”, "Average", "Satisfactory/Passing", "Marginal Fail", "Fail".

Evaluation of the student is based on the following principles:

Maximum score	Evaluation	Classification of Evaluation	Evaluation
91 -100	Excelent	Positive	(A) Excelent
81 – 90	Very good	Positive	(B) Very good
71 – 80	Good	Positive	(C) Good
61 – 70	Average	Positive	(D) Satisfactory
51 – 60	Satisfactory	Positive	(E) Sufficient
41 – 50	Close Fail	Negative	(FX) (has the right to resit an exam)
0 – 40	Failure	Negative	(F) Failure (Has to retake the course)

The student’s final grade in a specific discipline is determined by the amount of scores collected by him/her through the interim and final evaluation (examination) in the respective type of studies (lecture, seminar, practical studies, performance of the laboratory based work).

**Curriculum:**

(See Annex N.1; page 7);

**Program Director (Directors, Coordinator):**

Professor Alexander Tsiskaridze and Professor Dimitri Kordzaia, Dean of the Faculty of Medicine

**Staff:** (See Annex N.2, page 415);

**Fields of the Employment:**

- Practice– junior doctor ( The junior doctor shall perform the duties of a doctor according to the instructions and under the responsibility of an independent medical practitioner (Law of Georgia on Medical Practice, Article 5));
- Pedagogical (teaching) and research activities (A person with an academic degree of the medical doctor is entitled to continue studying on the doctoral (PhD) program or take the residency course and receive the right of independent medical practice after passing the uniform state certification examination);
- Prerequisite for admission to the doctoral (PhD) program (The academic degree of Medical Doctor, being the degree equalised to Master's academic degree (Law of Georgia on Higher Education Article 48), grants the right of taking the Doctoral Program)
- Prerequisite for admission to the residency course;
- Work in theoretical medicine.



**MD Curriculum  
2018-2019 Teaching Year**



**I Year      I semester**

№	Subjects	ECTS Credits	Contact	Duration	Lecture	Seminar
			Hours	Days	Hours	Hours
1	Introduction to Clinical Anatomy 1	2	30	10	5	25
2.	Medical Chemistry	4	60	15	15	15
3.	Basics of Medical Biophysics	4	60	15	30	30
4.	Cytology	3	45	15	15	30
5.	Environmental Health	5	75	15	30	45
6	Medical Ethics	1	15	5	3	12
7.	Health Promotion	2	30	10	3	27
8.	Medical Informatics	2	30	15	-	30
9.	Clinical Skills 1	2	30	10	-	30
10.	Foreign Language 1	5	75	15	-	75
Total		30	450			

**I Year II semester**

№	Subjects	ECTS Credits	Contact	Duration	Lecture	Seminar
			Hours	Days	Hours	Hours
1	Introduction to Clinical Anatomy 2	4	60	20	10	50
2.	Embryology, Basic Hystology	3	45	15	15	30
3.	Human Physiology	4	60	20	20	40
4.	Basics of Biochemistry	4	60	20	20	40
5.	Basic Microbiology	3	45	15	15	30
6.	Genetics	3	45	15	15	30
7.	Clinical skills 2	2	30	15	-	30
8	Research skills 1	2	30	15	15	15
9	Foreign Language 2	5	75	15	-	75
Total		30	450			

## II Year I semester

№	Subjects	ECTS Credits	Contact	Duration	Lecture	Seminar
			Hours	Days	Hours	Hours
1	Nervous System (Clinical Anatomy, Histology/ Embryology, Physiology, Biochemistry)	15 (5/4/4/2)	225 (75/60/60/30)	(25/20/20/10)	70 (10/20/30/10)	155 (65/40/30/20)
2.	Respiratory System (Clinical Anatomy, Histology/ Embryology, Biochemistry, Physiology)	6 (3/1/1/1)	105 (45/15/15/15)	(15/5/5/5)	22 (6/5/6/5)	68 (39/10/9/10)
3.	Molecular Biology	3	45	15	15	30
4.	Medical Microbiology	3	45	15	15	30
5.	Behavioral Science	3	45	15	15	30
<b>Total</b>		<b>30</b>	<b>450</b>			

## II Year II semester

№	Subjects	ECTS Credits	Contact	Duration	Lecture	Seminar
			Hours	Days	Hours	Hours
1	Cardiovascular System (Clinical Anatomy, Histology/ Embryology, Physiology, Biochemistry)	6 (1/1/2/2)	90 (15/15/30/30)	(5/5/10/10)	29 (2/5/12/10)	61 (13/10/18/20)
2	Digestive System (Clinical Anatomy, Histology/ Embryology, Physiology, Biochemistry)	9 (3/2/2/2)	135 (45/30/30/30)	(15/10/10/10)	38 (6/10/12/10)	97 (39/20/18/20)
3.	Urogenital System (Clinical Anatomy, Histology/ Embryology, Physiology, Biochemistry)	4 (1/1/1/1)	60 (15/15/15/15)	(5/5/5/5)	18 (2/5/6/5)	42 (13/10/9/10)
4.	Endocrine System and Skin (Clinical Anatomy, Histology/ Embryology, Physiology, Biochemistry)	6 (1/1/2/2)	105 (60/15/15/15)	(5/5/10/10)	29 (2/5/12/10)	61 (13/10/18/20)
5.	Immunology	3	45	15	15	30
6.	Virology	2	30	15	15	15
<b>Total</b>		<b>30</b>	<b>450</b>			

### III Year I semester

№	Subjects	ECTS Credits	Contact	Duration	Lecture	Seminar
			Hours	Days	Hours	Hours
1.	Pathology 1	10	150	22	42	108
2.	Physical Diagnostics – Propedeutics 1	2	30	10	10	20
3.	Pharmacology 1	4	60	20	20	40
4.	Roentgenology, Medical Radiology 1	5	75	18	18	57
5.	General Surgery	7	105	26	26	79
6.	Research Skills 2	2	30	10	5	25
<b>Total</b>		<b>30</b>	<b>450</b>			

### III Year II semester

№	Subjects	ECTS Credits	Contact	Duration	Lecture	Seminar
			Hours	Days	Hours	Hours
1.	Physical Diagnostics – Propedeutics 2	8	120	30	30	90
2.	Roentgenology, Medical Radiology 2	3	45	12	12	33
3.	Pharmacology 2	7	105	35	35	70
4.	Pathology 2	8	120	18	33	87
5.	Basics of Clinical Reasoning	2	30	8	3	27
6.	Clinical Skills 3	2	30	10	-	30
<b>Total</b>		<b>30</b>	<b>450</b>			

**IV course I-II semesters**

№	Subjects	ECTS Credits	Contact	Duration	Lecture	Seminar
			Hours	Days	Hours	Hours
1.	Surgery 1	10	150	37	37	113
2.	Pediatrics	6	90	30	18	72
3.	Phtisiatry	2	30	10	6	24
4.	Obstetrics	6	90	30	18	72
5.	Clinical Skills 4	2	30	10	4	26
6.	Research Skills 3	2	30	10	3	27
7.	Elective Course	2	30	10	6	24
<b>Total</b>		<b>30</b>	<b>450</b>			

№	Subjects	ECTS Credits	Contact	Duration	Lecture	Seminar
			Hours	Days	Hours	Hours
1.	Internal Medicine 1	11	165	41	41	124
2.	Neurology	8	120	40	14	106
3.	Medical Psychology	2	30	10	6	24
4.	Traumatology, Orthopedics	4	60	20	12	48
5.	Urology	5	75	25	18	57
<b>Total</b>		<b>30</b>	<b>450</b>			

V course I-II semesters

№	Subjects	ECTS Credits	Contact	Duration	Lecture	Seminar
			Hours	Days	Hours	Hours
1.	Surgery 2	7	105	26	25	80
2.	Internal Medicine 2	8	120	30	20	100
3.	Dermato-Venereology	5	75	25	15	60
4.	Epidemiology	4	60	20	12	48
5.	Hematology, Transfusiology	4	60	20	12	48
6.	Elective Course	2	30	10	6	24
	<b>Total</b>	<b>30</b>	<b>450</b>			

№	Subjects	ECTS Credits	Contact	Duration	Lecture	Seminar
			Hours	Days	Hours	Hours
1.	Family Medicine	5	75	25	15	60
2.	Gynecology	5	75	25	15	60
3.	Infectious Diseases	9	135	33	27	108
4.	Allergology and Clinical Immunology	3	45	15	9	36
5.	Endocrinology	3	45	15	9	36
6.	Oncology	3	45	15	9	36
7.	Elective Course	2	30	10	6	24
	<b>Total</b>	<b>30</b>	<b>450</b>			

VI course I-II semesters

№	Subjects	ECTS Credits	Contact	Duration	Lecture	Seminar
			Hours	Days	Hours	Hours
1.	Clinical Pharmacology	4	60	20	12	48
2.	Anesthesiology, Intensive Care	4	60	20	12	48
3.	Psychiatry	4	60	20	10	50

4.	Public Health	4	60	20	12	48
5.	Clinical Skills 5	2	30	10	6	24
6.	Research Skills 4	2	30	10	4	26
7.	Endoscopy	3	45	15	9	36
8.	Laboratory Medicine	1	15	5	-	15
9.	Occupational Medicine	2	30	10	6	24
10.	Clinical Toxicology	2	30	10	6	24
11.	Elective Course	2	30	10	6	24
<b>Total</b>		<b>30</b>	<b>450</b>			

№	Subjects	ECTS Credits	Contact	Duration	Lecture	Seminar
			Hours	Days	Hours	Hours
1.	Emergency Conditions in Surgery	4	60	20	12	48
2.	Reproductology	3	45	15	9	36
3.	Pediatric Surgery	3	45	15	9	36
4.	Oto-Rhyno-Laryngology	3	45	15	9	36
5.	Ophthalmology	3	45	15	9	36
6.	Palliative Care	1	15	5	3	12
7.	Neurosurgery	2	30	10	6	24
8.	Forensic Medicine	3	45	15	9	36
9.	Geriatrics	2	30	10	6	24
10.	Research Skills 5	2	30	10	4	26
11.	Elective Course	2	30	10	6	24
12.	Elective Course	2	30	10	6	24
<b>Total</b>		<b>30</b>	<b>450</b>			