PRIVATE HIGHER EDUCATION INSTITUTION
"INTERNATIONAL ACADEMY OF ECOLOGY AND MEDICINE"

EDUCATIONAL AND PROFESSIONAL PROGRAM
"MEDICINE"

Second (Master's) level of higher education
Specialty I2 "Medicine"
Field of knowledge I "Healthcare and Social Welfare"
Educational qualification: Master of Medicine
Professional qualification: Doctor

APPROVED
Decisions of the Academic Council
International Academy of Ecology and Medicine
(Protocol No. 1 dated May 28, 2026)

ENACTED
by order of the Acting Rector
of International Academy of Ecology and Medicine
No. 1/01-OD dated May 28, 2026

_____ **Ivan SAVYTSKYI**___

Kyiv – 2026

1. GENERAL INFORMATION ABOUT THE EDUCATIONAL PROGRAM

1 – GENERAL INFORMATION	
Full Name of the Higher Education Institution and Structural Units Providing the Program	PRIVATE HIGHER EDUCATION INSTITUTION "INTERNATIONAL ACADEMY OF ECOLOGY AND MEDICINE"
Higher Education Level	Second (Master's) Level
Higher Education Degree	Master
Field of Knowledge	I Healthcare and Social Welfare
Specialty	I2 Medicine
Mode of Study	Full-time
Educational Qualification	Master of Medicine
Qualification Stated in the Diploma	Higher Education Degree – Master Specialty – I2 Medicine Professional Qualification – Doctor
Official Title of the Educational and Professional Program	Educational and Professional Program "Medicine"
Diploma Type and Volume of the Educational and Professional Program	Master's Diploma, single. 360 ECTS credits. Duration of study: 5 years and 10 months.
Accreditation	Certificate of accreditation of the educational program issued by the National Agency for Quality Assurance of Higher Education, No19620 of 13.01.2026
Cycle/Level	NQF of Ukraine – Level 7; QF-EHEA – Second Cycle; EQF-LLL – Level 7
Admission Requirements	Individuals with a full general secondary education, on the basis of the educational qualification level of a junior specialist, an educational professional degree of a professional junior bachelor, a bachelor's degree of education on the results of external independent assessment (OIE) and entrance examinations to a higher education institution in subjects (disciplines) from which no external independent assessment (OIE) is conducted may apply for the education degree.
Language of Study and Instruction	Ukrainian, English
Validity Period of the Educational Program	Until 30 June 2032 (with the possibility of annual updates, if necessary)
Permanent URL of the Educational Program Description	https://maem.edu.ua/en/educational-and-professional-programs/
2 – PURPOSE OF THE EDUCATIONAL PROGRAM	
Training of highly qualified specialists capable of organizing and carrying out professional activities in the field of medicine, solving complex tasks and problems of a research and innovation nature, critically considering the challenges of the medical field. The program aims to form the ability to work effectively in modern conditions, providing a high level of autonomy in training and further professional activities.	
3 – CHARACTERISTICS OF THE EDUCATIONAL PROGRAM	
Description of the Subject Area	Field of knowledge: I Healthcare and Social Welfare Specialty: I2 Medicine

	Object of study and/or activity in medicine: the prevention, diagnosis and treatment of human diseases, the assessment of the impact of health problems on patients, their families and populations, health maintenance. ***Objectives of the training:*** the ability to address the complex challenges and challenges of a research and innovation nature in medicine; the development of competencies for further training with a high degree of autonomy, the introduction of modern medical technologies and healthcare management. ***Theoretical content of the subject area*** covers the concepts, principles and theories of the prevention, diagnosis and treatment of human diseases; the lawfulness of the functioning of organs and systems of the body, pathophysiological processes, the foundations of medical genetics, public health and social aspects of health, ethical and legal foundations of professional activity. ***Methods, methodologies and technologies:*** anamnesic, clinical, laboratory and instrumental methods of conducting the diagnostic process; modern technologies for diagnosis, treatment and prevention, management and organization of medical care. ***Tools and equipment:*** modern diagnostic, medical and other devices, objects and devices used in professional activities.
Orientation of the Educational Program	The educational and professional program focuses on training highly qualified physicians through the study of fundamental medical disciplines, the development of clinical skills and ethical standards, as well as scientific training. The program includes opportunities for international mobility, collaboration, and practice in various medical systems, contributing to the development of students in a global context.
Main Focus of the Educational Program and Specialization	Training of specialists for professional, organisational, administrative and research activities in the field of health. Higher education in the field of knowledge and Healthcare and Social Welfare, specialty I2 Medicine.
Program Features	Use in the educational process of the experience of European scientific and pedagogical workers by involving them in the implementation of the educational process. The possibility of teaching on the basis of leading private healthcare institutions of Ukraine, where modern medical technologies are applied. Application of innovative technologies; passing teaching and production practices on the basis of domestic and foreign healthcare institutions and higher education institutions. Student-centered learning.
4 – GRADUATES' EMPLOYABILITY AND FURTHER STUDY	
Graduates' Employability	Upon completion of the educational and professional program for the Master's degree I2 Medicine, the specialist is able to perform professional work: medical internship (CP code 3229); medical trainee (CP code 3221); resident physician (CP code is specified in accordance with the current classifier).
Graduates' Academic Rights	Acquisition of additional qualifications and medical specializations in the adult education system, in particular through an internship.
5 – TEACHING AND ASSESSMENT	
Teaching and Learning	Lectures, practical classes, practical training (introductory and clinical placements), and assessment activities. Acquisition of skills in anamnestic, clinical, laboratory, and instrumental methods of the diagnostic process; identification of leading symptoms and syndromes; establishment of preliminary and clinical diagnoses; and application of diagnostic, treatment, prevention, healthcare management, and organizational technologies. Research activities. Competency-based, student-centered, problem-based learning and self-directed study.
Assessment	Achievement of program learning outcomes is assessed in accordance with the Regulations on the Assessment of the Learning Activities of Higher Education

	Students at the International Academy of Ecology and Medicine. Assessment uses the ECTS grading system, a 200-point scale, and the national grading scale. All types of classroom and extracurricular learning activities are assessed. Appropriate grades are awarded for examinations, differentiated credits, credits, and practical training; the result "Pass" is awarded for the Unified State Qualification Examination.
6 – PROGRAM COMPETENCIES	
Integral Competency (IC)	The ability to solve complex problems, including the research and innovation nature of medicine. The ability to continue studying with a high degree of autonomy.
General Competencies (GC)	GC 1. Ability to think abstractly, analyze and synthesize. GC 2. Ability to learn and master modern knowledge. GC 3. Ability to apply knowledge in practical situations. GC 4. Knowledge and understanding of the subject area and understanding of professional activity. GC 5. Ability to adapt and act in a new situation. GC 6. Ability to make informed decisions. GC 7. Ability to work as a team. GC 8. Ability to interact with others. GC 9. Ability to communicate in a foreign language. GC 10. Ability to use information and communication technologies. GC 11. Ability to search, process and analyze information from various sources. GC 12. Determination and persistence in the tasks and commitments undertaken. GC 13. Awareness of equal opportunities and gender issues. GC 14. Ability to exercise its rights and duties as a member of society, to become aware of the values of civil (free democratic) society and the need for its sustainable development, the rule of law, human rights and freedoms and citizenship in Ukraine. GC 15. The ability to preserve and reproduce the moral, cultural, scientific values and achievements of society based on an understanding of the history and patterns of development of the subject area, its place in the general system of knowledge about nature and society and in the development of society, technology and technology, and the use of various forms and forms of motor activity for active recreation and healthy living. GC 16. Ability to make decisions and act in accordance with the principle of unacceptability of corruption and any other manifestations of dishonesty.
Special (Professional, Subject-Specific) Competencies (PC)	PC 1. The ability to collect medical information about the patient and analyze clinical data. PC 2. Ability to identify the required list of laboratory and instrumental studies and evaluate their results. PC 3. Ability to establish a prior and clinical diagnosis of disease. PC 4. Ability to determine the necessary work and rest regimen for the treatment and prevention of disease. PC 5. Ability to determine the nature of nutrition in the treatment and prevention of diseases. PC 6. Ability to define the principles and nature of disease treatment and prevention. PC 7. Ability to diagnose emergencies. PC 8. Ability to identify tactics and provide emergency medical care. PC 9. Ability to conduct medical evacuation activities. PC 10. Ability to perform medical manipulations. PC 11. Ability to solve medical problems in new or unfamiliar environments in the presence of incomplete or limited information, taking into account aspects of social and ethical responsibility. PC 12. Ability to determine the tactics of physiological pregnancy, physiological birth and postpartum. PC 13. Ability to carry out sanitary and hygienic and preventive measures. PC 14. Ability to plan and implement preventive and anti-epidemic measures for infectious diseases. PC 15. Ability to carry out a assessment of capacity for work.

	PC 16. Ability to keep medical records, including electronic forms. PC 17. Ability to assess the impact of environmental, socio-economic and biological determinants on the health status of an individual, family, population. PC 18. Ability to analyse the activities of a doctor, unit, healthcare institution, ensure the quality of medical care and improve the efficiency of the use of medical resources. PC 19. Ability to organise and integrate the delivery of healthcare to the population and the marketing of health services. PC 20. Ability to conduct epidemiological and medical statistical studies of population health; processing of social, economic and medical information. PC 21. It is clear and ambiguous to communicate your knowledge, conclusions and arguments on health issues and relevant issues to professionals and non-professionals, in particular to learners. PC 22. Ability to manage health work processes that are complex, unpredictable and require new strategic approaches. PC 23. Ability to develop and implement scientific and applied health projects. PC 24. Compliance with ethical principles in working with patients, laboratory animals. PC 25. To maintain professional and academic integrity, to be responsible for the accuracy of the scientific results obtained.

7 – PROGRAM LEARNING OUTCOMES

PLO 1. Have an in-depth knowledge of the structure of professional activity. Be able to carry out professional activities that require updating and integration of knowledge. Be responsible for professional development, be able to pursue further professional training with a high degree of autonomy.
PLO 2. Understanding and knowledge of the fundamental and clinical biomedical sciences at a level sufficient to address professional health challenges.
PLO 3. Specialized conceptual knowledge encompassing scientific achievements in the field of health and providing a basis for research, critical thinking on medical issues and related interdisciplinary issues.
PLO 4. Identify and identify leading clinical symptoms and syndromes (list 1); use standard methods, using prior patient history data, patient examination data, knowledge of the person, his organs and systems, establish a prior clinical diagnosis of the disease (list 2).
PLO 5. Collect complaints, life and disease histories, assess the psychomotor and physical development of the patient, the state of organs and systems of the body, on the basis of the results of laboratory and instrumental studies evaluate the information on diagnosis (list 4), taking into account the age of the patient.
PLO 6. Establish a final clinical diagnosis by making an informed decision and analyzing the subjective and objective data obtained from the clinical, additional examination, differential diagnosis, in compliance with relevant ethical and legal standards, under the supervision of the supervising physician in the healthcare setting (listed 2).
PLO 7. To designate and analyse additional (compulsory and optional) examination methods (laboratory, functional and/or instrumental) (list 4), for patients with diseases of organs and systems of the body, for the differential diagnosis of diseases (list 2).
PLO 8. Determine the main clinical syndrome or what causes the severity of the victim/suffer (listed 3) condition by making an informed decision and evaluating the human condition under any circumstances (in the context of a healthcare facility, outside of a healthcare facility), including emergency and combat situations, in the field, in information scarcity and time constraints.
PLO 9. Determine the nature and principles of the treatment of patients (conservative, surgical) with disease (listed 2), taking into account the patient's age, in healthcare settings, outside of healthcare settings and at medical evacuation stages, including in the field, on the basis of a prior clinical diagnosis, in compliance with relevant ethical and legal norms, by making an informed decision based on existing algorithms and standard schemes.
PLO 10. Determine the necessary work, rest and nutrition regimen based on a final clinical diagnosis, in compliance with relevant ethical and legal standards, by making an informed decision based on existing algorithms and standard schemes.
PLO 11. Determine the approach, plan and tactics for conducting physiological pregnancy, physiological birth and postpartum by making an informed decision based on existing algorithms and standard schemes.
PLO 12. Assess the general condition of the newborn child by making an informed decision based on existing algorithms and standard schemes, in compliance with relevant ethical and legal standards.
PLO 13. Evaluate and monitor the development of the child, make recommendations on age-related nutrition and nutritional features, and schedule preventive vaccinations.
PLO 14. To designate tactics and provide emergency medical care (listed 3) for a limited time in accordance with existing clinical protocols and treatment standards.
PLO 15. Organise medical care and medical evacuation to civilians and military personnel in emergency and combat situations, including in the field.
PLO 16. Form rational patient medical routes; organize interactions with colleagues in their own and other institutions, organizations and institutions; apply tools to market health services based on population needs analysis.

PLO 17. Perform medical manipulations (listed 5) in a medical facility, at home or in production on the basis of a prior clinical diagnosis and/or indicators of the patient's condition by making an informed decision, in compliance with relevant ethical and legal standards.
PLO 18. Determine the state of functioning and limitations of a person's vitality and the length of incapacity for work with appropriate documentation; maintain medical documentation of the patient and contingent population on the basis of normative documentation.
PLO 19. Planning and implementing a system of anti-epidemic and preventive measures for the emergence and spread of diseases among the population.
PLO 20. Analyze epidemiological status and carry out measures for the prevention of infectious diseases on a mass and individual basis, as well as on a general and local basis.
PLO 21. Find the necessary information in professional literature and databases, other sources, analyze, evaluate and apply this information.
PLO 22. Apply modern digital technologies, specialized software, statistical data analysis methods to solve complex health problems.
PLO 23. Assess the impact of the environment on human health to assess population morbidity.
PLO 24. Organise the necessary level of individual safety (of owners and dependents) in the event of typical hazardous situations in the individual field of activity.
PLO 25. Clearly and unequivocally report your knowledge, conclusions and arguments on health issues and relevant issues to professionals and non-professionals.
PLO 26. Manage health work processes that are complex, unpredictable and require new strategic approaches, organise work and professional development of staff with due regard to the quality, availability and fairness of integrated health care delivery.
PLO 27. To communicate freely in the official and English languages, both orally and in writing, to discuss professional activities, research and projects.
PLO 28. To make effective decisions on health issues, evaluate the resources needed, and take into account the social, economic and ethical implications.
Planning, organizing and conducting specific infectious disease prevention measures, including in accordance with the National Vaccination Calendar; administering vaccine residues, organizing additional vaccination campaigns, including immunoprevention measures.

8 – RESOURCES FOR PROGRAM IMPLEMENTATION	
Staffing	The educational and professional program is delivered by academic staff who possess the appropriate qualifications, academic degrees and/or academic titles, and a demonstrated level of scholarly and professional activity.
Facilities and Equipment	The International Academy of Ecology and Medicine has the facilities and equipment required to provide educational activities in specialty I2 Medicine. All classrooms are equipped with multimedia equipment. Dedicated rooms and facilities have been established and equipped for anatomy and physiology, chemistry, histology, simulation-based learning, computer studies, and language instruction. Practical skills are developed at clinical training sites. The Academy has a library with a reading room and printed and electronic resources, a catering facility, sports grounds, and a student residence.
Information and Teaching and Learning Resources	Information and teaching and learning resources for the educational program include modern educational technologies, online resources, electronic textbooks, scholarly databases, and multimedia tools. The program provides access to clinical cases and interactive platforms for simulation and distance learning. All participants in the educational process receive the information and teaching and learning materials required under the Licensing Conditions. Educational activities are delivered in accordance with the curriculum, and each component is supported by a course syllabus and methodological guidelines. The library maintains the necessary collection of scholarly and educational literature in Ukrainian and English and provides access to electronic periodicals and the institutional repository.
9 – ACADEMIC MOBILITY	
National Credit Mobility	National credit mobility is implemented pursuant to the Law of Ukraine “On Higher Education” and agreements between the International Academy of Ecology and Medicine and higher education institutions (research institutions) of Ukraine. The national academic mobility program focuses, among other areas, on introductory and clinical placements for higher education students.

International Credit Mobility	International academic mobility and recognition of learning outcomes are implemented in accordance with Ukrainian legislation, the Academy's internal regulations, and agreements between IAEM and higher education institutions and healthcare institutions in other countries. The unit for international programs and strategic development supports and promotes academic mobility.
Education of International Students	International students are educated in accordance with legal requirements, within the licensed capacity of the accredited educational programs.

2.1. LIST OF EDUCATIONAL PROGRAM COMPONENTS

Component Code	Components of the educational program (educational discipline, practice)	Number of ECTS Credits	Form of Final Assessment
Compulsory components of the educational program			
Social and Humanitarian and Fundamental Training			
CC 1	History of Ukraine with a Course in the History of Medicine	3	Pass/Fail Test
CC 2	Medical and Biological Physics. Medical Informatics	5	Graded Test
CC 2.1	Medical and Biological Physics	3	
CC 2.2	Medical Informatics	2	
CC 3	English for Professional Purposes	6	Exam
CC 4	Ukrainian for Professional Purposes*	3	Exam
CC 5	Latin Language and Medical Terminology	3	Graded Test
CC 6	Medical Biology	5	Exam
CC 7	Medical Chemistry	3	Graded Test
CC 8	Biological and Bioorganic Chemistry	8	Exam
CC 9	Human Anatomy	14	Exam
CC 10	Histology, Cytology and Embryology	9	Exam
CC 11	Physiology	9	Exam
CC 12	Microbiology, Virology and Immunology	9	Exam
	All for General Training	**77**	
Professional Training			
CC 13	Occupational Safety in Healthcare	3	Pass/Fail Test
CC 14	Bioethics and Medical Communication	3	Pass/Fail Test
CC 15	Pathomorphology	6	Exam
CC 16	Pathophysiology	6	Exam
CC 17	Pharmacology	6	Exam
CC 18	Hygiene and Ecology	3	Pass/Fail Test
CC 19	Propaedeutics of Internal Medicine	6	Exam
CC 20	Propaedeutics of Pediatrics	6	Exam
CC 21	General Surgery	3	Exam
CC 22	Radiology	3	Graded Test
CC 23	Principles of Evidence-Based Medicine and Research Methodology	5	Graded Test
CC 24	Internal Medicine	21	Exam
CC 25	Pediatrics	11	Exam
CC 26	Pediatric Infectious Diseases	3	Graded Test

Component Code	Components of the educational program (educational discipline, practice)	Number of ECTS Credits	Form of Final Assessment
CC 27	Surgery	12	Exam
CC 28	Obstetrics and Gynecology	9	Exam
CC 29	Social Medicine and Public Health	3	Pass/Fail Test
CC 30	Hygiene and Occupational Diseases; Healthcare Organization	5	Exam
CC 31	Urology	3	Graded Test
CC 32	Otorhinolaryngology	3	Graded Test
CC 33	Ophthalmology	3	Graded Test
CC 34	Dermatology and Venereology	3	Graded Test
CC 35	Neurology	3	Graded Test
CC 36	Psychiatry and Addiction Medicine	3	Graded Test
CC 37	Infectious Diseases and Epidemiology	7	Exam
CC 38	Oncology and Radiation Medicine	3	Graded Test
CC 39	Traumatology and Orthopedics	3	Graded Test
CC 40	Clinical Immunology	3	Exam
CC 41	Patient Care (Practical Training)	4	Graded Test
CC 42	Nursing Practice	3	Graded Test
CC 43	Clinical Clerkship	6	Graded Test
CC 44	Clinical Clerkship with Functional Diagnostics Practicum	10	Graded Test
CC 45	Integrated Clinical Practice with a Clinical Simulation Practicum	8	Graded Test
CC 46	Anesthesiology and Intensive Care	3	Graded Test
CC 47	Emergency and Urgent Medical Care	3	Graded Test
CC 48	Medical Law	3	Pass/Fail Test
CC 49	General Practice – Family Medicine	5	Graded Test
Total Professional Training		**193**	
Training in the Fundamentals of National Resistance			
CC 50	Fundamentals of National Resistance**	5,0	Graded Test
TOTAL VOLUME OF COMPULSORY COMPONENTS		**275**	
Elective Components of the Educational Program – 85 Credits (23.6%)			
TOTAL VOLUME OF THE EDUCATIONAL PROGRAM		**360 (100%)**	

* For international students, the course “Ukrainian for Professional Purposes” is studied as “Ukrainian as a Foreign Language”.
** CC 50 “Fundamentals of National Resistance” is studied by citizens of Ukraine in accordance with the legal requirements governing the organization of such training. For international students, the corresponding study load is provided through the alternative educational component “Life Safety, Occupational Safety and Civil Protection with a Tactical Medicine Course”, amounting to 5 ECTS credits, while retaining the same form of final assessment and focus on achieving the relevant program learning outcomes.

3. FORMS OF CERTIFICATION OF HIGHER EDUCATION STUDENTS

Certification for the educational and vocational training program in the specialty I2 Medicine is carried out in the form of a Unified State Qualification Examination.

The Unified State Qualification Examination is conducted in accordance with the Procedure for Conducting the Unified State Qualification Examination for students pursuing a Master's degree in healthcare specialties and consists of the following components:

- an integrated test exam Step 1 and an English language professional orientation exam covering the content of fundamental disciplines and carried out by the Centre for Testing Professional Competence of Professionals with Higher Education in the Training Directions Medicine and Pharmacy at the Ministry of Health of Ukraine;
- an integrated test exam Step 2 and an international examination on the fundamentals of medicine (clinical disciplines) covering the content of clinical disciplines and carried out by the DO Center for Testing Professional Competence of Professionals with Higher Education in the Training Directions Medicine and Pharmacy under the Ministry of Health of Ukraine;
- an objective structured practical (clinical) examination (OSCE) that assesses the acquisition of general and special competences in conditions close to professional activity and is conducted on the basis of the International Academy of Ecology and Medicine.

4. STRUCTURAL AND LOGICAL SCHEME OF THE EDUCATIONAL AND PROFESSIONAL PROGRAM

SEMESTER 1	SEMESTER 2	SEMESTER 3	SEMESTER 4
CC 1 History of Ukraine with a Course in the History of Medicine **CC 2** Medical and Biological Physics. Medical Informatics **CC 3** English for Professional Purposes **CC 4** Ukrainian language (with professional orientation) **CC 5** Latin Language and Medical Terminology **CC 6** Medical Biology **CC 7** Medical Chemistry **CC 9** Human Anatomy	**CC 3** English for Professional Purposes **CC 8** Biological and Bioorganic Chemistry **CC 9** Human Anatomy **CC 50** Fundamentals of National Resistance* **EC 1** Elective Discipline 1 **EC 2** Elective Discipline 2 **EC 3** Elective Discipline 3 **EC 4** Elective Discipline 4	**CC 8** Biological and Bioorganic Chemistry **CC 10** Histology, Cytology and Embryology **CC 11** Physiology **CC 12** Microbiology, Virology and Immunology **CC 13** Occupational Safety in Healthcare **EC 5** Elective Discipline 5 **EC 6** Elective Discipline 6	**CC 10** Histology, Cytology and Embryology **CC 11** Physiology **CC 12** Microbiology, Virology and Immunology **CC 14** Bioethics and Medical Communication **CC 18** Hygiene and Ecology **CC 41** Patient Care (Practical Training) **EC 7** Elective Discipline 7 **EC 8** Elective Discipline 8 **EC 9** Elective Discipline 9
SEMESTER 5	**SEMESTER 6**	**SEMESTER 7**	**SEMESTER 8**
CC 15 Pathomorphology **CC 16** Pathophysiology **CC 17** Pharmacology **CC 19** Propaedeutics of Internal Medicine **CC 21** General Surgery **CC 22** Radiology **CC 23** Principles of Evidence-Based Medicine and Research Methodology **EC 10** Elective Discipline 10 **EC 11** Elective Discipline 11	**CC 15** Pathomorphology **CC 16** Pathophysiology **CC 19** Propaedeutics of Internal Medicine **CC 20** Propaedeutics of Pediatrics **CC 29** Social Medicine and Public Health **CC 42** Nursing Practice **EC 12** Elective Discipline 12 **EC 13** Elective Discipline 13 **EC 14** Elective Discipline 14	**CC 20** Propaedeutics of Pediatrics **CC 24** Internal Medicine **CC 27** Surgery **CC 32** Otorhinolaryngology **CC 33** Ophthalmology **CC 34** Dermatology and Venereology **EC 15** Elective Discipline 15 **EC 16** Elective Discipline 16	**CC 24** Internal Medicine **CC 25** Pediatrics **CC 28** Obstetrics and Gynecology **CC 31** Urology **CC 35** Neurology **CC 40** Clinical Immunology **CC 43** Clinical Practice **EC 17** Elective Discipline 17 **EC 18** Elective Discipline 18 **EC 19** Elective Discipline 19
SEMESTER 9	**SEMESTER 10**	**SEMESTER 11**	**SEMESTER 12**
CC 27 Surgery **CC 36** Psychiatry and Addiction Medicine **CC 37** Infectious Diseases and Epidemiology **CC 39** Traumatology and Orthopedics **CC 44** Clinical Practice with Functional Diagnostics Practicum **CC 46** Anesthesiology and Intensive Care **EC 20** Elective Discipline 20 **EC 21** Elective Discipline 21	**CC 24** Internal Medicine **CC 25** Pediatrics **CC 26** Pediatric Infectious Diseases **CC 28** Obstetrics and Gynecology **CC 38** Oncology and Radiation Medicine **CC 44** Clinical Practice with Functional Diagnostics Practicum **EC 22** Elective Discipline 22 **EC 23** Elective Discipline 23 **EC 24** Elective Discipline 24	**CC 24** Internal Medicine **CC 27** Surgery **CC 45** Integrated Clinical Practice with a Clinical Simulation Practicum **CC 47** Emergency and Urgent Medical Care **CC 48** Medical Law **CC 49** General Practice – Family Medicine **EC 25** Elective Discipline 25 **EC 26** Elective Discipline 26	**CC 24** Internal Medicine **CC 25** Pediatrics **CC 28** Obstetrics and Gynecology **CC 30** Hygiene and Occupational Diseases; Healthcare Organization **CC 45** Integrated Clinical Practice with a Clinical Simulation Practicum **EC 27** Elective Discipline 27 **EC 28** Elective Discipline 28 **EC 29** Elective Discipline 29

APPENDICES

List 1 (syndromes and symptoms)

1 Amenorrhea;
2. Acromegaly;
3. Anemia syndrome;
4. Anuria and oliguria;
5. Asphyxiation;
6. High blood pressure;
7. Arterial hypotension;
8. chest pain;
9. Pain in the abdomen;
10. Pain in the limbs and back;
11. Pain in the middle;
12. sore throat;
13. Snoring;
14. Broncho-obstructive syndrome;
15. Bulbar syndrome;
16. Drinking in the pleural cavity;
17. hallucinatory and paranoid syndrome;
18. The hot one;
19. Hemorrhagic syndrome;
20. Hypoglycemia;
21. Hyperglycemia;
22. The exanthemum, the enanthemum;
23. Hepatomegaly and hepatoleal syndrome;
24. Headache;
25. Discourse;
26. dysmenorrhea;
27. Dispensation;
28. Disphagia;
29. diarrhea;
30 yellow;
31. Breathing;
32. Strengthen;
33. The blackout;
34. Child growth retardation;
35. Cardiomegaly;
36. Cough;
37. Pocket impermeability;
38th comma;
39. External bleeding;
40 Internal bleeding;
41. Bloodthirsty;
42 Lactory;
43 lymphadenopathy;
44 Meningeal syndrome;
45. Uterine bleeding;
46. Headache syndrome;
47. Obesity (+ body weight)
48. Paralysis and paralysis.
49. Premature sexual development;
50. Fractures of the tubular bones;
51. Pneumothorax is strained (closed)
52. Pneumothorax unstressed (open)
53. Pneumothorax is valved;
54 Polyurethane;
55. portal hypertension;
56. Disturbance of language (aphasia)
57. Disruption of heart rhythm and conduction;
58. Sudden cardiac arrest;
59. Disorders of consciousness;
60. Sweating of the skin;
61. Urinary syndrome;
62. Dementia syndrome;
63. Dehydration syndrome;
64. indigestion syndrome;
65 Trying;
66 Strydor;
67. Joint syndrome;
68. Courts;
69 Weight loss;
70 Cyanide;
71. Partial or complete vision loss;
Partial or complete hearing loss;
73. gastrointestinal bleeding;

List 2 (diseases)

1) Diseases of the blood and blood vessels, disorders involving the immune system

1. Anemia;
2. Haemolytic disease of newborns;
3. hemophilia;
4. Leukemia;
5. lymphoma;
6. Inborn (Bruton's disease, Viscote's syndrome) and acquired immunodeficiency states;
7. Sepsis of newborns;
8. Sepsis is surgical;
9. Idiopathic thrombocytopenic purple;
10. Chronic radiation exposure;

2) Mental and behavioral disorders:

11. bipolar affective disorder;
12. Acute psychosis including alcoholic delirium;
13. Epilepsy;
14. Neurotic disorders;
15. Personality disorders;
16. schizophrenia;

3) Diseases of the nervous system

17. Intracranial injury;
18. meningitis and encephalitis;
19. Migraines and other forms of headache;
20. perinatal encephalopathy;
21. Disruption of the vegetative nervous system;
22. impaired cerebral circulation;
23. Vertebrogenic diseases of the nervous system, neuropathy and polyneuropathy;
24. Multiple sclerosis;
25. Chronic occupational disorders (vibrational illness, occupational dyskinesia)
26. Stroke (ischaemic, haemorrhagic)

Illness of the Eye

27 Blepharitis;
28th glaucoma;
29. the conjunctivitis;
30. the external body of the visual organ;
31. Injury to the visual organ;
32. Retinopathy;
33 Exophtalm;

Diseases of the throat, ear, nose

34. Laryngitis;
35 to leave;
36. peritoneal abscess;
37 to sink;
38 Tonsillites;
Injuries to the throat, ear, nose;

4) Diseases of the cardiovascular system

40. Aneurysms of the aorta;
41. atherosclerosis;
42. Varicose veins of the lower extremities;
43. Congenital heart defects;
44. Secondary arterial hypertension;
45. Acute occlusion of the major and peripheral arteries;
46. The endocarditis;
47. Essential and secondary arterial hypertension;
48. Ischemic heart disease;
49. Rage;
50. Cardiomyopathy;
51 The Legenda heart;
52. Treat heart defects;
53. Obliterating endarteritis;
54. Repeat;
55. impaired heart rhythm and conduction;
56. Heart failure;
57. Heart and blood vessel injuries;
58. pulmonary artery thromboembolism;
Flebite, thromboflebite;

5) Diseases of the respiratory and digestive organs:

60. Asphyxiation;
61. bronchial asthma;
62. The Bronchites;
63. Bronchoectatic disease;
64 Broncho-Legan dysplasia;
65. Inborn developmental defects of the respiratory organs;
66. acute respiratory distress syndrome;
67. shortness of breath;
68. Infectious and destructive diseases of the lungs;
69 Legene deficiency;
70 mediastinitis;
71. cystic fibrosis;
72. Remodeling of the lungs and intestines;
73. Spit;
74. Pneumoconiosis;
75. Pneumonia;
76. Pneumothorax;
77. Respiratory distress syndrome and pneumonia of newborns;
78. The external body in the airways;
79. Chest injuries (surface, open)
80. Chronic obstructive pulmonary disease;

6) Diseases of the digestive system:

81. The fall of the rectum;
82. Extreme illness;
83. Inborn defects in the development of the digestive organs;
84 Gastroesophageal reflux disease, isophagitis;
85. The gastrites, the duodenates;
86. Acute and chronic hepatitis;
87 - Acute intestinal imperfection;
88. Acute and chronic appendicitis;
89. Acute and chronic pancreatitis;
90 Beneficial diseases of the gastrointestinal tract;
91. Enterites, colites;
92. Inflammatory diseases of the rectum and perineal region;
93. Infested and uninfested abdominal muscles;
Reformation of the gastrointestinal tract, stomach, large intestine, liver and pancreas;
95 Peptic manifestations of the stomach and the small intestine;
96. Peritonite;
Perforation of the hollow organ;
98. Liver failure;

99. Malabsorption syndrome;
100 stenosis of the pelvis;
101. Abdominal injuries (surface, open)
102. Functional gastrointestinal disorders
103. Surgical stomach disease;
104. cholecystitis, cholangitis, gallstones, and cholecolitis;
Cirrhosis of the liver;
106. gastric hemorrhaging;

7) Diseases of the urinary system:

107. Renal amyloidosis;
108. Balanite, balanopostite;
Inborn defects in the development of the urinary system;
110. Glomerulonephritis;
111. Dismetabolic nephropathy;
112. Nephrotic syndrome;
113. Reformation of the kidneys, urinary tract and pancreas;
114. Pielonephrite;
115. The prostate;
116. Sexually transmitted diseases;
117. Tubuleous interstitial nephrite;
118. The urethra;
119. Chronic kidney disease; and
One hundred and twenty.

8) Skin and subcutaneous disease:

121. Allergothermatosis (dermatitis, toxicoderma, eczema)
122. Bacterial diseases of the skin and subcutaneous cells, pyoderma;
123. Inflammatory diseases of the fingers and toenails;
124. Inflammatory bowel disease in children and newborns;
125. Mycosis;
126. Burning and freezing;
127. Parasitic skin diseases such as wrinkles and dandruff
128. The psoriasis;
129. Skin rashes;
130. Specific surgical infection (inaerobic and non-clostridal)

9) Musculoskeletal and connective tissue disorders:

131. Ankylosing spondyloarthritis;
132. Inborn and acquired defects in the development of the bone marrow system;
133. Acute rheumatic fever;
134. Dermatomyositis and polymyositis;
135. Reconstruction of the bone marrow system;
136. Osteoarthritis;
137. Osteomyelitis;
138. The prize;
139. Polytrauma;
140. Reactive arthritis;
141. Rheumatoid arthritis;
142. systemic scleroderma;
143. The systemic red wolf;
144. Systemic vasculitis (swelling polyarthritis, haemorrhagic vasculitis, hypersensitive vasculitis)
Typical fractures of the shoulder, forearm, ribs, thighs, ankles, feet;
146. Chest injury;
147. A spinal injury;
148. Damage to large joints (thigh, knee, femur-step, elbow)
149. Chronic rheumatic disease; and
150. Juvenile rheumatoid arthritis;

10) Diseases of the endocrine system, malnutrition and metabolic disorders:

151. Acromegaly and pituitary giganticism;
152. hypothyroidism;
153. Hypotrophy, protein and energy deficiency;
154. Hypotheticism;
155. Thyroid toxicosis;
156. Endemic tooth;
157. Non-sugar diabetes; and
Nodules, tumors of the thyroid gland;
159. Obesity;
160. Injury to the cortex of the adrenal glands;
161. Disruption of calcium phosphorus exchange, vitamin D exchange;
162. Genetic syndromes with endocrine complications: Turner syndrome, Russell-Silver syndrome, Prader-Willi, and Laron syndrome, and so on)
163. the thyroid;
164. Cushing's disease and syndrome;
165. Chronic insufficiency of the adrenal glands;
166. Diabetes mellitus; and
167. Hypoparathyroidism;
168. hyperparathyroidism;
169. Tumors of the adrenal glands;
170. Organic (including innate) hyperinsulinism;
171. Neuroendocrine tumors;
172. Tumors of the pituitary gland;
173. Early sexual development;
174. Hypogonadism;
175. Cryptocurrency;
176. Breaches of gender discrimination;
177. Klinefelter's syndrome;
178. Nanism in a child born SGA;

11) Infectious and parasitic diseases:

Bacterial food poisoning;
180. the Beech.
181. Botulism;
182. Viral hepatitis;
183. The windpipe;
184. Native infections of the newborn;
185. Helminthosis;
186. Herpes viruses;
187. Flu and other acute respiratory viral infections;
188. Diphtheria;
Infectious mononucleosis;
190 candidates;
191. Coughing;
192. intestinal bacterial infections;
193. Viral intestinal infections;
194. Cyrus;
195. Key viral encephalitis;
196. the redhead;
197. Leptospirosis;
198. Malaria;
199. Meningococcal infection;
200 particularly dangerous viral infections;
201. Parotid infection;
202. Polyamide;
203. The right-hand man;
204. Protozoic infections;
205. Rickettsia;
206. The Siberian;
207. The story;

208. Scarlet;
209. Tuberculosis of various locations;
210. Lyme disease;
211. Disease caused by human immunodeficiency virus (HIV)
212. Chlamydial infections;
213. cholera;
214. Plague is an infectious disease transmitted mainly through sexual contact:
215. Goncoccal infection;
216. Syphilis;

12) Diseases of the female reproductive system of pathology of pregnancy:

217. Multiple pregnancy;
218. Burning of pregnant women;
219. Pregnancy in extragenital pathology;
220. Fetal distress during pregnancy;
221. Inhibition of fetal growth;
222. Immunological conflict during pregnancy;
223. Fibrous matter;
224. Dependence on payment;
225. Temporary discharge of the placenta;
226. Premature pregnancies and delayed pregnancies;
227. Pregnancy after conception;
228. Preeclampsia and eclampsia;
229. Self-imposed abortion pathology of childbirth and postpartum period:
230. Abnormalities in sexual activity;
231. abnormalities of the pelvis, including clinically narrow pelvis;
232. Fertility distress during childbirth;
233. Sexual and post-sexual bleeding;
234. Misplacement and placement of the fetus;
235. Post-sexual septic diseases;
Injuries to the uterus and genitals Gynecological diseases:
237. Abnormal uterine bleeding;
238. Ovarian apoplexy;
239. Infertility;
240. Inborn defects in the development of the female reproductive organs;
241. benign malformation of the mammary glands;
242. Benevolent and precancerous regeneration of female genitalia;
243. Endometriosis;
244. Inflammatory diseases of the female genitalia;
245. Male reproduction of female genitalia;
246. The masthead;
247. The re-formation of the mammary gland;

List 3 (state of emergency)

1. Asphyxia (including neonatal)
2. a hypertensive crisis;
3. Hypoglycemia (comes)
4. Acute shortness of breath;
5. acute urinary retention;
6. Acute adrenal insufficiency;
7. acute kidney damage;
8. acute liver failure;
9. Acute heart failure;
10. Acute poisoning, including combat poisons;
11. Acute psychosis;
12. Acute coronary syndrome;
13. Acute radiation and chemical impacts, including in field conditions and in emergency situations;
14. acute cerebral impairment;
15. Diabetic coma, including ketoacidosis, hypermuscular, lactaseidemic;
16. Electrocution;
17. Epilepsy status;
18. Severe bleeding;
19. Acute bleeding syndrome, including in field conditions and in emergency situations;
20. Sudden cardiac arrest;
21. The collapse;
22. Disorders of consciousness and comatose states;
23. the kidney canal;
24. the jaw ring;
25. acute anaphylactic reactions;
26. Acute heart rhythm disturbance;
27. Cold injury, including in the field;
28. Heat injury, including in the field;
29. venous and arterial thromboembolism;
30. Court syndrome;
31. Irrigation;
32. Strangulation asphyxiation;
33. Normal beds;
34. Shocks;
35. Bites of snakes, insects, animals;
36. Penetrating wounds, including in combat;
37. Care, including in field conditions;
38. The external bodies of the respiratory tract, gastrointestinal tract, LOR organs and eye;

List 4 (laboratory and instrumental studies)

1. Analysis of the pleural fluid;
2. Analysis of ascitic fluid;
3. Analysis of synovial fluid;
4. Analysis of the urine by Wintersky;
5. Urine analysis by Nechiporenko;
Alpha-amylase activity in blood and urine, fecal elastase 1;
7. Blood proteins and their fractions, C-reactive protein;
8. Blood glucose, glycosylated hemoglobin,
9. an oral glucose tolerance test;
10. Blood lipids and lipoproteins and their fractions;
11. Blood hormones;
12. Ferritin, iron and copper of blood ores;
13. Creatine, urine from blood and urine, rate of bladder filtration;
14. Blood electrolytes;
15. blood amino transfer;
16. General blood bilirubin and its fractions;
17. Coagulogram;
18. Uric acid in the blood;
19. False blood phosphate;
20. the histomorphological study of the bioptase of lymph nodes;
21. Histomorphological study of biopathology of the parenchymatous organs;
22. the histomorphological study of mucous membrane bioptase;
23. histomorphological study of the biotope of muscles and skin;
24. histomorphology of the placenta;
25. Study of indoor environments (indicators of microclimate, natural and artificial lighting, bacteriological and chemical air pollution).
26. The study of the function of external respiration;
27. Standard ECG (with 12 abstracts)
28. Endoscopic examination of the bronchi;
29. endoscopic study of the digestive tract;
30. echocardiography and doppelrography;
31. General analysis of the feces;
32. a general blood test;
33. General urine analysis;
34. sugars and acetone in the urine;
35. General analysis of spinal fluid;
36. General analysis of the sternal point;
37. General analysis of narcotics;
38. General immunological profile of the blood;
Serological reactions to infectious diseases;
40 Express tests for viral diseases;
41 Amplification methods for infectious diseases (PLR, LLR)
Serological reactions in autoimmune diseases;
43. Chemical and bacteriological studies of the human environment (atmospheric air, water, soil).
44. Microbiological study of biological fluids and discharges;
45. Measurement of radiation (sound, vibrational, ionizing), individual radiometry.
46. Methods of instrumental visualization of the thyroid gland;
47. X-ray contrast angiography;
48. Methods of instrumental visualization of the organs of the pelvic cavity;
49. Methods of instrumental visualization of the organs of the chest cavity;
50. Methods of instrumental visualization of the network system;
51. Methods of instrumental visualization of the fetus;
52. Methods of instrumental visualization of the skull, spine, spinal cord, bones and joints;
53. Methods of instrumental visualization of the thorax;
54. the diagnosis of TB;
55. Multi-moment fractional study of bile and pH of the stomach and esophagus;
56. Chemical, organoleptic and bacteriological studies of food and drinking water;
57. Cytological examination of the cervix;
58. Measurement of ergonomic indicators of difficulty and workload.

List 5 (medical manipulations)

1. Perform an indirect heart massage;
2. Perform artificial breathing;
3. Carry out defibrillation by means of a manual automatic defibrillator-cardioverter;
4. Conduct the registration of the standard EKG in 12 denominations;
5. Provision of temporary cessation of external bleeding;
6. To perform primary surgical treatment of wounds, ligaments, skin sutures, including in the field;
7. Put on bloodsucking toys and use bloodsucking devices, including in field conditions;
8. Install an over- and over-the-air probe;
9. Carry out transport immobilization;
10. Conduct the administration of medicinal products (intravenous and capillary, intestinal), including under field conditions;
11. Provide peripheral venous access;
12. Measuring blood pressure;
13. Restore the passage of airways;
14. Catheterize the bladder with a soft probe;
15. Conduct a frontal nasal tamponade, perform a clinical examination of the visual and auditory organs;
16. Perform the techniques of skin-to-skin contact and early application to the breast;
17. Perform finger examinations of the rectum and rectal mirror;
18. Conduct a finger test of the prostate;
19. Conduct a clinical examination of the mammary glands;
20. Perform a pleural puncture;
21. Perform a puncture of the pelvic cavity through the posterior cavity;
22. Identify blood groups, Rhesus affiliation;
23. transfusion of blood components and blood substitutes;
24. Conduct bi-manual examination and examination of a woman in mirrors;
25. Perform pelviometry;
26. Conduct external (Leopold's case) and internal obstetrics research;
27. Perform the auscultation of the fetus;
28. Conduct sampling of ointments for bacterioscopic, bacteriological and cytological examination;
29. Conduct palpation of the thyroid gland;
30. Conduct examination and evaluation of the external genital organs of boys;
31. Assess the state of sexual development of children;

Matrix of conformity of program competencies to compulsory components of the educational program

Lighting components/competencies	CC 1	CC 2	CC 3	CC 4	CC 5	CC 6	CC 7	CC 8	CC 9	CC 10	CC 11	CC 12	CC 13	CC 14	CC 15	CC 16	CC 17	CC 18	CC 19	CC 20	CC 21	CC 22	CC 23	CC 24	CC 25	CC 26	CC 27	CC 28	CC 29	CC 30	CC 31	CC 32	CC 33	CC 34	CC 35	CC 36	CC 37	CC 38	CC 39	CC 40	CC 41	CC 42	CC 43	CC 44	CC 45	CC 46	CC 47	CC 48	CC 49	CC 50
GC 1	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		+	+	+	+	
GC 2	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		+	+	+	+	
GC 3	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		+	+	+	+	
GC 4	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		+	+	+	+	
GC 5	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
GC 6	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
GC 7	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
GC 8	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
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GC 10	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
GC 11	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
GC 12	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
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PC 2		+						+		+		+			+	+			+	+	+	+	+	+	+	+	+	+		+	+	+	+	+	+	+	+	+	+	+	+		+	+		+	
PC 3																+			+	+	+	+	+	+	+		+	+		+	+	+	+	+	+	+	+	+	+	+	+	+		+	+		+	
PC 4																				+	+	+	+	+	+			+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+				+	+	
PC 5																	+			+	+	+	+	+	+			+	+		+	+	+	+	+	+	+	+	+	+	+	+	+		+				
PC 6																+	+			+	+	+	+	+	+		+	+	+		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+				

Matrix of conformity of program competencies to compulsory components of the educational program (continuation)

Lighting components/competencies	CC 1	CC 2	CC 3	CC 4	CC 5	CC 6	CC 7	CC 8	CC 9	CC 10	CC 11	CC 12	CC 13	CC 14	CC 15	CC 16	CC 17	CC 18	CC 19	CC 20	CC 21	CC 22	CC 23	CC 24	CC 25	CC 26	CC 27	CC 28	CC 29	CC 30	CC 31	CC 32	CC 33	CC 34	CC 35	CC 36	CC 37	CC 38	CC 39	CC 40	CC 41	CC 42	CC 43	CC 44	CC 45	CC 46	CC 47	CC 48	CC 49	CC 50
PC 7												+			+	+	+		+	+	+	+		+	+	+	+	+			+	+	+	+	+	+	+	+	+	+	+	+	+	+		+	
PC 8																+	+		+	+	+			+	+	+	+	+			+	+	+	+	+	+	+	+	+	+	+	+	+	+		+	+
PC 9																		+												+								+								+			+
PC 10		+																	+	+	+	+		+	+	+	+	+			+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		+	+
PC 11						+			+	+	+	+		+	+		+	+	+	+	+	+		+	+	+	+	+		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		+	
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PC 22														+															+	+																					
PC 23						+	+	+			+	+		+			+						+	+	+				+	+																					
PC 24		+				+	+	+	+	+	+	+		+	+	+	+		+	+	+	+		+	+	+	+	+		+	+	+	+	+	+	+	+		+	+	+	+	+	+	+	+	+	+	
PC 25	+	+	+	+		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		+	+	+	+	+	+	+	+	+	+	

The matrix for ensuring curriculum outcomes as compulsory components of the educational program

Lighting components/competencies	CC 1	CC 2	CC 3	CC 4	CC 5	CC 6	CC 7	CC 8	CC 9	CC 10	CC 11	CC 12	CC 13	CC 14	CC 15	CC 16	CC 17	CC 18	CC 19	CC 20	CC 21	CC 22	CC 23	CC 24	CC 25	CC 26	CC 27	CC 28	CC 29	CC 30	CC 31	CC 32	CC 33	CC 34	CC 35	CC 36	CC 37	CC 38	CC 39	CC 40	CC 41	CC 42	CC 43	CC 44	CC 45	CC 46	CC 47	CC 48	CC 49	CC 50
PLO 1								+	+	+	+	+		+	+	+	+	+	+	+	+					+					+	+	+	+	+	+	+		+	+	+	+	+	+	+	+	+	
PLO 2						+		+	+	+	+																												+										
PLO 3							+			+	+	+			+	+		+		+													+	+	+	+	+	+	+	+	+	+	+	+	+		+	
PLO 4										+	+	+				+		+		+												+		+				+		+		+	+			+		+	
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PLO 7		+			+				+		+													+						+		+	+		+	+	+	+	+			+	+	+	+	+		+	
PLO 8					+		+	+	+		+													+	+	+				+		+	+	+	+	+		+	+	+		+	+	+		+	+
PLO 9					+	+				+	+		+						+	+	+	+	+	+	+	+						+		+	+			+		+	+		+	+	+		+	
PLO 10	+							+						+			+	+	+	+	+	+		+	+	+	+	+			+	+		+	+	+		+			+	+	+	+			+	
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PLO 14				+													+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		+	+
PLO 15	+																+		+	+	+			+	+	+	+	+	+	+		+		+	+			+	+						+			+
PLO 16			+								+				+									+	+	+		+	+	+	+	+	+	+	+	+	+	+		+		+	+	+	+		+	
PLO 17											+								+		+			+	+		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		+	
PLO 18											+						+		+		+	+		+	+	+	+	+		+	+	+	+	+	+	+	+	+			+	+		+			+	
PLO 19																			+		+			+	+	+	+	+		+	+						+			+		+		+					+	
PLO 20																										+	+	+		+	+		+				+			+									
PLO 21																										+	+				+	+							+										

Matrix ensuring curriculum outcomes as compulsory components of the educational program (continuation)

Lighting components/competencies	CC 1	CC 2	CC 3	CC 4	CC 5	CC 6	CC 7	CC 8	CC 9	CC 10	CC 11	CC 12	CC 13	CC 14	CC 15	CC 16	CC 17	CC 18	CC 19	CC 20	CC 21	CC 22	CC 23	CC 24	CC 25	CC 26	CC 27	CC 28	CC 29	CC 30	CC 31	CC 32	CC 33	CC 34	CC 35	CC 36	CC 37	CC 38	CC 39	CC 40	CC 41	CC 42	CC 43	CC 44	CC 45	CC 46	CC 47	CC 48	CC 49	CC 50
PLO 22												+	+						+	+	+			+		+		+	+	+										+	+				+	+	+	+	+	
PLO 23								+		+		+		+				+				+	+	+	+	+	+	+	+	+		+		+	+	+	+		+	+			+	+		+	
PLO 24			+						+				+	+		+			+					+	+	+	+		+	+	+	+	+		+		+	+	+	+			+		+		+	+
PLO 25		+	+	+		+	+		+			+	+	+	+			+	+	+	+		+	+	+	+	+	+	+	+	+		+		+	+	+	+	+	+	+	+	+	+		+	
PLO 26		+										+			+	+	+			+	+	+		+	+	+	+	+	+				+		+	+	+	+		+	+	+		+	+	+	
PLO 27	+						+							+						+	+	+	+	+		+	+	+	+		+	+	+	+		+	+	+	+	+	+	+			+	+	+	
PLO 28	+			+				+			+	+	+		+		+	+			+	+	+	+				+	+	+	+	+	+	+	+	+	+		+	+		+			+	
PLO 29						+						+	+						+			+	+		+	+	+	+	+	+		+	+	+	+		+			+				+				+	