

Details of the educational program in English

1. **University:** University of International Business
2. **Field or Education:** 6B10 Health care (Medicine)
3. **Direction of preparation:** Health care
4. **Education Program:** 6B10 <Smart Medicine>
5. **Specificity (Highlights):** Educational program “ Smart-Medicine” (General Medicine- 5 years Duration) is only for foreign school graduates, which is equivalent to M.B.B.S. course in India. This program is implemented in English.
6. **Educational program Aim:** To train highly qualified specialist who are able to meet the needs of society in the provision of medical care. Apply and develop advanced innovative technologies in medicine, science and practice, use the achievements of IT technology and synthetic public health. Specialists should be prepared to adapt to the changing conditions or the health care system at the state and world community level, continue training throughout their lives, and contribute to the development of society.
7. **About the program (description):** The educational program prepares the future doctors to enter internship programs or will give the necessary medical and technical skills to provide emergency care and health care services under the supervision of a physician.
8. **Key information:**

-Awarded academic degree MBBS with the program «Smart Medicine»

-**Admission requirement** - NEET Qualified, 50% or Above Marks in 10+2 PCB aggregate in +2
Duration of study: 5 years

-**Number of credits:** 300 ECTS

9. Educational Structure, Syllabus, Compulsory and optional disciplines & assessments:

| No. | Name of the discipline | A brief description of discipline (purpose, main aspects, etc.) | Component (compulsory and optional disciplines) | Number of credits | Final grade |
|---------------|---------------------------------------|---|---|-------------------|-------------|
| I YEAR | | | | | |
| 1. | Human anatomy | Gross anatomy, Neuroanatomy and surgical anatomy. The composition of human body in interconnection of functions and topography of systems and organs Development and individual specifics | core | 7 | Exam |
| 2. | Molecular biology and Genetics | DNA, Transcription. Translation. Genetics. Pedigree Chart. Life genesis and development regularities in general. Anthropogenesis and ontogenesis of human being. Biosphere and ecology. Parasitism phenomena. Living systems, physiology and ecology of human being. Biologic and economic practicum. | core | 10 | Exam |
| 3. | Histology and Embryology | Basic regularities or development and vital functions Of organism and supported by structural organization of cells, tissues and organs. Histo-functional specifics of tissue elements. Their research methods. Tissue and organ development in embryo. Development of organ system. Respiratory system, cardiovascular system, gastrointestinal tract etc. germ cell production and formation and development of embryo. Maternal life of fetus. | core | 5 | Exam |
| 4. | ICT | The main purpose of the course is to teach students the basic and advanced computer technology, information technology, available in modern means, thereby creating a | core | 5 | Exam |

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| | | young generation of professionals available to solve various problems, using their knowledge and skills that they receive during the course. | | | |
| 5. | Foreign language (Latin): | Sounds articulation specifics, intonation, accentuation and rhythm of natural speech in the target language, major specifics of all style pronunciation typical or formal transcription. Vocabulary minimum or 4000 words. Speaking Basics of public speech. Auditing. Comprehension of dialogues and monologues in common and professional communication. Reading, Types of texts: simple pragmatic texts as well as general and specialty texts. | core | 10 | Exam |
| 6. | Kazakh (Russian) language: | Grammar skills to ensure regular communication with no distortion meaning in writing and speaking, common grammatical phenomena typical of professional speech. Basic rules of word formation. Speaking in dialogues and monologues. Basics at public speech (verbal message reporting). Reading. Types of texts: simple and pragmatic texts, small and large specially profile texts. Writing. Types of expression: annotation, abstracts, theses, messages, private letters, business letter, curriculum vitae. Curriculum vitae. | core | 10 | Exam |
| 7. | Modern history of Kazakhstan: | The discipline is aimed at the formation of historical consciousness of students, is designed to give objective knowledge about the main stages of the history of the country, to direct the attention of young people to the problems of formation | core | 5 | Exam |

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| | | and development of national statehood and socio-political, historical and cultural processes in Kazakhstan. | | | |
| 8. | Fundamental law and Anti-corruption culture | The discipline considers the main categories of law, legal relations and legal responsibility. The fundamentals of constitutional, administrative, labor, civil, criminal, financial law of the Republic of Kazakhstan, the basics of international law, the nature, causes and types of corruption; legal regulation of anti-corruption processes in the Republic of Kazakhstan ethics of behavior of Civil servants and anti-corruption programs, adaptation of foreign experience. | core | 3 | Exam |
| 9. | Physical Education | Physical education as an educational discipline is based on the theory and methodology of physical education, is closely interconnected and relies on such related sciences as: anatomy, human physiology, physiology of physical exercises, hygiene, medical supervision, valeology, private sports disciplines, pedagogy, psychology, biology. The subject of this discipline is the formation of a healthy lifestyle, the preservation and strengthening of students' health to realize their abilities in the process of everyday activities. | core | 4 | Exam |
| 10 | Internship (Nursing assistant) | Developing the basic nursing skills, methods of intravenous, intramuscular. Subcutaneous injections, catheterization (nasogastric, urinary), measuring | core | 1 | |

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| | | BP, pulse, temperature, techniques of taking blood and urine samples | | | |
| II YEAR | | | | | |
| 1. | Morphology and Physiology | General Physiology, Nerve-Muscle, Blood, Respiratory System, Cardiovascular System, Gastrointestinal System, Nutrition, Environmental Physiology, Reproduction, Kidney. Neurophysiology, Functional systems of human organism, their regulation and self-regulation when environmentally affected. Organs and systems functioning regularities. General morphology of organs and organ systems. | core | 14 | Exam |
| 2. | Human anatomy | Basic concepts or topographical anatomy [its scope, internal and external guiding points, projection of anatomic formations on coverlet, their Homotropy, skeletotopy, sinotopy. | core | 12 | Exam |
| 3. | Microbiology | Classification, morphology and physiology of microorganisms and their identification. Role and qualities or microorganisms. Their spread and impact on human health. Research methods. | elective | 10 | Exam |
| 4. | Biochemistry | Chemical nature of substances, chemical phenomena and active conditions in organism, Clinical biochemistry. Biological cells, biomolecules, Enzymes, Metabolic pathways, their regulation and metabolic interrelationships, Food assimilation and nutrition, Hormones, Molecular Biology, Molecular | elective | 4 | Exam |

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| | | Biology, immunology, Environmental biochemistry | | | |
| 5. | Philosophy | The subject, structure and functions of philosophy are studied. On the basis of the history of world and Kazakh philosophy the key problems of the main branches of philosophical knowledge — ontology and epistemology, social philosophy, philosophy of history and culture, ethics, philosophy of religion, philosophical anthropology are considered. A special place is occupied by topical issues of scientific knowledge and global problems or modernity, spiritual development or personality. | core | 5 | Exam |
| 6. | Sociology and Political science | The discipline introduces the basics of sociology, its history and current state, the main methods at sociological research. The course Includes current problems of social lives of the individual, personal identity; family sociology, behavioral sociology. The discipline also gives an idea of politics, history of political doctrines and actual problems of modern political theory and practice, political institutions and processes | Elective | 5 | Exam |
| 7. | Professionally oriented foreign language | The aim of the program is to ensure quality assimilation. Kazakh language as the means of social intercultural, professional communication through the formation of communicative competencies of all level of language uses for students of Kazakh language as a foreign language the level of elementary A1 and levels A2, at , B2. c1. | core | 3 | Exam |
| 8. | Physical education | Physical education as an educational discipline is based on the theory and | core | 4 | Exam |

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| | | methodology of physical education is closely interconnected and relies on such related sciences as: anatomy, human physiology, physiology of physical exercises, hygiene, medical supervision, valeology, private sports disciplines, pedagogy, psychology, biology. The subject of this discipline is the formation of a healthy lifestyle, the preservation and strengthening of students' health to realize their abilities in the process of everyday activities. | | | |
| 9. | Internship (procedural Nurse assistant) | Developing the basic nursing skills, methods of intravenous, intramuscular, subcutaneous injections, catheterization (nasogastric. urinary), measuring BP, pulse, temperature, techniques or taking blood and urine samples | core | 3 | |
| | | III YEAR | | | |
| 1. | General Pathology | General Pathology, general pathological processes, introduction of general pathology, Attitude disease cell, cell injury, inflammation, pathology of water and solute balance, acid base imbalance, reactivity pathology of oncotic diseases. Morphological changes in the situation. | Core | 12 | Exam |
| 2. | Preventive Social medicine (PSM) | Social and preventive medicine, behavioral Sciences, Health Education, Environment, Biostatistics, Epidemiology, Nutrition, Maternal and Child Health, Rehabilitation, Epidemiology of Communicable Diseases And Non communicable Diseases | Elective | 5 | Exam |
| 3. | Introduction to | Clinical Pharmacology, Nutritional and metabolic disorders, Water, | Elective | 5 | Exam |

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| | clinical medicine | electrolyte and acid- base imbalance. Critical care Medicine. Pain management and palliative care, Medical Psychiatry, Poisonings, Specific environmental and occupational hazards, immune response and Infections, Cardiovascular system, Occupational Health | | | |
| 4. | Biochemistry | Chemical nature of substances, chemical phenomena and active conditions in organism. Clinical biochemistry, Biological cell, biomolecules, Enzymes, Metabolic pathways, their regulation and metabolic interrelationships, Food assimilation and nutrition. Hormones, Molecular Biology, Molecular Biology, immunology, Environmental biochemistry | Elective | 5 | Exam |
| 5. | Psychology and culturology | The subject, the object and the methods of psychology. The branches of psychology. The place of psychology in the system of sciences and the psychology development history as a science. Basic fields of psychology. The composition functions and qualities or central nervous system. The brain and psychic principles and general mechanisms of communication | Elective | 3 | Exam |
| 6. | Pathology of organs and systems | Pathology of organs and systems, Systemic Pathology of human body, Structural basics of diseases and pathological active conditions. Morphologic changes of organs and tissues caused by pathological active Conditions. Individual pathological anatomy Causes, basic development mechanisms and outcomes of standard pathological active conditions. Regularize of organs and | Core | 14 | Exam |

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| | | system functioning abnormalities. | | | |
| 7. | Immunology | Human immune system, humeral and cell mediated immune system, Normal flora of our body, self-defense of our body to infection, Immunity to Infection Immunodiagnostic. Vaccines. Sterilization and disinfection, Bacteriology of water and air. Microorganisms associated with gastrointestinal infection, Gastrointestinal infections caused by parasites. Diseases of immune system, autoimmune, immunodeficiency diseases, hypersensitivity | Elective | 5 | Exam |
| 8. | Introduction to Pediatrics | Management of health care and promotion for sick children. Diagnostics of most common diseases. Primary and secondary prevention principles. Detection of risk factors. Urgent surgical assistance at hospitals. Vital statistics, Growth and development Nutrition, Immunization, infectious diseases Of children. | Elective | 4 | Exam |
| 9. | General medicine | Etiology and pathogenesis of internal diseases Clinical and functional-laboratory manifestations of typical diseases of internal organs. Skills of examination of therapeutic patients. Basic principles of pharmacological therapy and other methods of treatment and prevention of therapeutic diseases, Pleuritic, Cardiomyopathy. | Elective | 4 | Exam |
| 10 | Internship (Nursing practice) | Developing the basic nursing skills methods of intravenous, intramuscular, subcutaneous injections, catheterization | Core | 3 | |

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| | | (nasogastric, urinary) BP pulse, and temperature, techniques of taking blood and urine sample, disinfection aseptic and antiseptics. Management of immobility of traumatic patients | | | |
| | | IV YEAR | | | |
| 1. | pharmacology | The subject and objectives or pharmacology, its rank among other disciplines. Prescriptions, General pharmacology, Pharmacological kinetics and pharmacological dynamics at medicinal remedies, Classification, mechanism of action, pharmacological effects, indications and contraindications, Side effects of major groups of remedies. | Elective | 4 | Exam |
| 2. | Community medicine | Health promotion, social mobilization of population. Public relations on health protection and promotion. Health Education, Environment, Biostatics, Epidemiology, Nutrition, Maternal and Child Health, Rehabilitation, Epidemiology of Communicable Diseases Andon-communicable disease, Common nosologically forms of occupational disease. | Elective | 4 | Exam |
| 3. | Introduction to clinical medicine | Clinical anatomy and functions of organs at sight, Clinical refraction, Pathology of ocular front section. Pathology of vascular tract and lens, Glaucoma, Sight organs injuries. Diseases of orbit Microbiology in relation to eye. Pathology in relation to eye. Pharmacology in relation to eye, Disorders of the Lid, Disorders of the Lacrimal Apparatus Conjunctivitis and ophthamia Neonatorum. Trachoma & other chronic conjunctivitis Keratitis and corneal ulcers. Corneal ulcer. | Elective | 5 | Exam |

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| | | Scleritis & Episcleritis | | | |
| 4. | Introduction to surgery | Dressing. Types of bandages on the body different parts. Antiseptic preparations. Antisepsis - antibacterial preparing, Asepsis — sterilization, Asepsis - preparing of the surgeon's hands preparing for operation. | Elective | 4 | Exam |
| 5. | Implementation of Big Data on Medicine | Prediction of the development of diseases identification of genetic markers of oncology. Predicting the health status Of babies. Prediction of risk factors in surgery. Big data and medical data processing. Big data and pharmacy, Clinical patient data collection. Identification of side effects from drugs. | Elective | 3 | Exam |
| 6. | Dermatology | Ineffective dermatome, Infective dermatoses. Infestations. Melanin synthesis. Allergic disorders, Drug eruptions, urticaria, erythema multi-formed vascular- Bullous diseases, Epidermopoiesis. Psoriasis. Pathogenesis. Syphilis Gonococcal and Non-Gonococcal infections, HIV infection. Dermatological Emergencies | Elective | 4 | Exam |
| 7. | Gynecology | Basic Science, Gynecology. Contraception and Recent Advance Symptomatology of gynecologic diseases. Malfunction or uterine bleedings. Menstrual cycle disorders Amenorrhea. Neuro-endocrinal syndromes inflammatory diseases of uterus and adnexa, Purulent-adnexal formations. Sepsis. OPN in gynecology Active gynecology. Entopic pregnancy | Elective | 4 | Exam |

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| 8. | obstetrics | Basic Sciences. Obstetrics. Neonatology and Recent Advances, Introduction to obstetrics. | Elective | 4 | Exam |
| 9. | Neurology | Basic Science of Nervous System. Diagnosis and Recent Advances Topical diagnostics of emotional disorders. Central and peripheral paralysis. Vegetative nervous system, methods of examinations and syndromes of affection. Acute disorders of cerebral blood circulation Cerebral Cranial trauma, Brain inflammatory diseases. | Elective | 5 | Exam |
| 10 | Urology | Basic Science oi Genitourinary System (Pathology, Physiology. Anatomy, Surgery Urology as a subject. Laboratory, instrumental and x-ray methods of urological patients examinations. Urogenital system development abnormalities Trauma, tumors and inflammatory diseases of urogenital system. Nephrogenic hypertension Urolithiasis. OPN. HPN. | Elective | 4 | Exam |
| 11 | Pediatrics | Hematology, Respiratory system. Gastrointestinal Tract. Central Nervous System Cardiovascular system. Genito-Urinary system, Neonatology. Pediatrics Emergencies. Fluid-Electrolyte. Genetics. Behavioral Problems. Pediatrics Surgical Problems. Therapeutics. | Elective | 12 | Exam |
| 12 | Psychiatry | Behavioral Sciences. Emotion and its application to health. Cognitive process and memory, psychiatric | Elective | 4 | Exam |

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| | | disorders, personality disorders. Schizophrenia. Bipolar disorders. Basic goals and objectives of psychiatry. Mentally sick patient's examination methods. | | | |
| 13 | Infectious disease | Classification of infectious diseases, infectious disease development period, Clinical symptoms, syndromes of infectious diseases. Specifics of epidemiological active conditions during infectious diseases. V YEAR EXAM | Elective | 5 | Exam |
| 1. | Professional Kazakh (Russian) language | The purpose of the program is the formation of social-humanitarian outlook of the student in the context of the natural idea of spiritual modernization involving the development on the basis or national consciousness and cultural codes qualities of internationalism, tolerant attitude to the world cultural and languages as the translator of the world knowledge advanced modern technologies. The use arid transfer at which can ensure the modernization of the country and personal career development of future professionals | Core | 3 | Exam |
| 2. | Necrology | Addiction disorder, alcoholism, drug and toxic substances abuse. Depression, treatment skills for addicted people. Treatment of depression | Elective | 3 | Exam |
| 3. | Cardiovascular system | Cardiovascular disorder, water and electrolyte disorders vascular diseases including metabolic diseases, blood pressure and its disorders and treatment. | Elective | 12 | Exam |

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| | | Hypertension, hypotension, shock, diagnoses of cardiovascular diseases, ECG. Echocardiography, angiography etc. effects of cardiovascular diseases on the other organs and vice versa | | | |
| 4. | Anesthesiology | Basics of general and specific intensive care. Methods of comprehensive Elective intensive care measures: under terminal conditions, acute respiratory and blood Circulation disorders, and metabolic disorders. Functional disorders of liver, Kidneys and central nervous system | Elective | 6 | Exam |
| 5. | Health information system and E-health | Being considered the relevance of the e-health program. The current Situation in the country, both in the field of healthcare and in the field or its informatization is described. The main documents that were taken into account in the process of developing the concept, taking into account the best world practices in this area, are also considered. | Elective | 6 | Exam |
| 6. | Fundamental of general medical practice | General basic medicine practice, basic symptomatic, life history of a patients disease, skills of percussion, palpation, oscillation to differentiate different diseases, general diagnostic methods. | core | 14 | Exam |
| 7. | Surgery | Skin, head and neck region, arteries, veins breast, esophagus, stomach and duodenum, small intestine, colon and rectum, appendix, acute abdomen, appendicitis. Hernia, ulcer. Acute cholecystitis, pancreatitis. Diseases of rectum. Peritonitis. Diseases of vein and arteries. Breast diseases. Suppurative diseases of lungs. Purulent Pleuritic. Diseases of thyroid. Echinococcosis. | Elective | 14 | Exam |

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| 8. | State examination (specialty term) | The final examination of students in the form of a state exam in carried out in order to determine the theoretical and practical readiness of the graduate to perform social and professional tasks in accordance with the educational programs of higher education. | core | 2 | Exam |
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10. **Training license number:** No – 0137354

11. **Accreditation of the educational program** - FIBAA Institutional accreditation.

12. **The available advantages of the educational program** (specific cooperation with leading universities and research centers or joint projects within the framework of this program). As part of the implementation or the educational program we are cooperating with the leading **Indian Universities, like Amity University and Noida International University.**

13. **Faculty staff** -Leading professors who teach in this educational program, Scientists who have publications in the world, publications included in the databases Scopus, Web of science.

15. **Career (where you can work after the end of this program)** - Medical institutions. Medical Universities, Hospitals etc. (Around the Globe)

17. **Additional program at the university** - Healthcare Management.

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