

## **Medical Biochemistry and Biotechnology**

Training for the specialty **30.05.01 "Medical Biochemistry"** is conducted exclusively in a full-time format, with a standard duration of six years. Study plans and the entire educational process are organized in accordance with the Federal State Educational Standards of Higher Education (FSSES HE) of the Ministry of Education and Science of the Russian Federation. Education is available on both state-funded and self-financed bases. Upon completion, graduates are awarded the qualification of **"Medical Biochemist"**.

A certified specialist may continue their education in a clinical residency, which is a mandatory form of postgraduate education determined by the governments of Armenia and the Russian Federation. In Armenia, this specialty is offered exclusively at the Russian-Armenian University.

During the educational process, students receive in-depth training in:

- **Fundamental disciplines:** Biology, Mathematics, Physics, Chemistry.
- **Medical-biological disciplines:** Morphology, Physiology, General Pathology, Microbiology, Virology, Immunology, Pharmacology, Pharmacognosy, Medical Genetics, Medical Biotechnology, Biochemistry, Biophysics.
- **Clinical disciplines:** Clinical Laboratory Diagnostics, Surgery, Therapy, Pediatrics, Dermatology-Cosmetology.
- **Applied disciplines:** Computing Technology, Medical Electronics.

The department aims to prepare highly qualified specialists capable of utilizing advances in modern biochemistry, biotechnology, genetics, molecular-cellular, and physical-chemical biology, as well as employing modern analytical and diagnostic methods in medicine. Since this specialty prepares physician-researchers, the educational system requires students to actively participate in scientific research, and the curriculum includes a significant amount of laboratory work aimed at equipping students with practical skills.

The training utilizes the technical resources and expertise of highly qualified professionals from leading scientific, educational, and clinical centers in Armenia.

### **Career Opportunities:**

Graduates can work in healthcare institutions, clinical-diagnostic centers, research institutes, and educational organizations under the Ministry of Health and the Academy of Sciences.

### **Program Regulations:**

- **FSSES HE Specialist Program 30.05.01 Medical Biochemistry**

### **Program Objectives**

To provide students with general and specialized knowledge in the relevant field.

## Acquired Skills

- Conducting biochemical, clinical, immunological, and medical-genetic research to diagnose diseases of therapeutic, surgical, and neurological profiles.

## Employment Prospects

Graduates can work in sectoral research institutes of medical and biological profiles, research centers, and laboratories.

## Further Studies

Graduates may continue their education in postgraduate programs or clinical residencies.

## Entrance Examinations:

Physics, Chemistry, Biology, Mathematics (2 of these subjects).

## Program Details

- **Qualification:** Specialist
- **Start of Academic Year:** September 1
- **Duration (Full-Time):** 6 years
- **Credits:** 360
- **Graduating Department:** Department of Medical Biochemistry and Biotechnology

## Program Structure

<b>Block</b>	<b>Credits</b>
Core Courses	267
Elective Courses	36
Optional Courses	6
Practical Training	51
Final State Certification (Thesis Defense)	6
<b>Total</b>	<b>362</b>