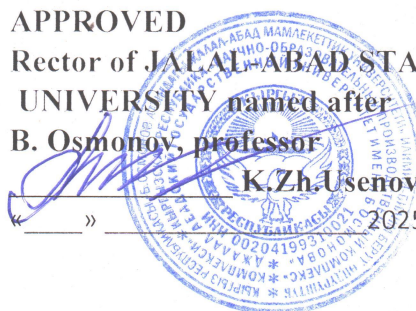


MINISTRY OF SCIENCE, HIGHER EDUCATION, AND INNOVATION OF THE
KYRGYZ REPUBLIC

" JALAL-ABAD STATE UNIVERSITY NAMED AFTER B. OSMONOV "
INDUSTRIAL SCIENTIFIC EDUCATIONAL INSTITUTION

The Regulation was reviewed
and proposed for approval by
the Academic Council of JASU
Protocol No. 1
"01" 09 2025

APPROVED
Rector of JALAL-ABAD STATE
UNIVERSITY named after
B. Osmonov, professor
K.Zh. Usenov
» 2025



REGULATION
ON THE WORK PROGRAM OF THE DISCIPLINE (MODULE)
Amendments and additions introduced by Protocol No. 1 dated September 1,
2025, of the JASU Academic Council

1. General Provisions

1.1. This Regulation on the Work Program of the Discipline (Module) (here in after referred to as the Regulation) was developed in accordance with Resolutions of the Cabinet of Ministers of the Kyrgyz Republic No. 590 dated September 24, 2024, and No. 329 dated June 10, 2025; the "Regulation on the Module-Rating System for Assessing Student Performance and Quality of Knowledge" of JASU; the "Regulation on the Organization of the Educational Process in Higher and Secondary Professional Education Organizations using Academic Credits" of JASU; the "Standard Regulation on Current and Mid-term Assessment of Students and the Organization of the Educational Process in Secondary Professional Education Organizations using Academic Credits" of JASU; the Order of the Ministry of Education and Science of the Kyrgyz Republic No. 1419/1 dated 13.09.2024 "On the Implementation of Workplace Learning Programs in Primary, Secondary, and Higher Professional Education Organizations of the Kyrgyz Republic"; and based on the Charter of JASU.

This Regulation defines the general requirements for the content, structure, and design of the work program, as well as the procedures for its approval and storage at Jalal-Abad State University (here in after referred to as JASU).

1.2. The Regulation shall be applied by all departments, colleges, and other structural divisions of the university ensuring the implementation of the educational process corresponding to the educational programs (EP) of higher and secondary professional education (HPE, SPE).

1.3. The work program is one of the documents of the educational program of higher and secondary professional education.

1.4. The work program of the discipline is used as a document regulating the activities of teaching staff and students during the study of a specific discipline.

1.5. The work program is developed for the duration of the curriculum corresponding to the educational program of higher professional education.

2. Development of the Work Program

2.1. Work programs are developed for every discipline included in the curriculum of the educational program for higher and secondary professional education.

2.2. Responsibility for organizing the development of the work program is entrusted to the Subject-Cycle Commission (SCC) and the department to which the discipline is assigned. The responsible developer of the work programs is the instructor (lecturer), and the reviewer and approver is the Head of the Department.

2.3. The work program may be developed by a single instructor or a team of authors, following the instructions of the Head of the Department.

2.4. The work program of the discipline must comply with the State Educational Standard (SES), the content of the educational program for higher (secondary) professional education, the basic and working curricula, and the learning outcomes.

2.5. The following must be taken into account when developing the work program:

- The content of the educational program for the specialty, and the recommended textbooks and study guides;
- The requirements of stakeholders: students, their parents (legal representatives), teaching staff, potential employers, the state, etc.;
- The requirements of the graduating departments;
- Compliance with the content and program of workplace learning;
- The content of the work programs of disciplines studied in previous years and those scheduled for study in subsequent stages;
- The material and informational capabilities of the university.

3. Structure and Content of the Work Program of the Discipline (Module)

3.1. The structural framework of the Work Program should be as follows:

1. Title Page.

2. Goal and Objectives of the Discipline (Module).
3. Place of the Discipline (Module) in the Structure of the Basic Educational Program.
4. Requirements for the Mastering of the Discipline (Module).
5. Content of the Discipline (Module):
 - 5.1. Content of Lecture Sessions.
 - 5.2. Content of Practical (Seminar) Sessions, including workplace learning.
 - 5.3. Content of Laboratory Sessions, including workplace learning.
 - 5.4. Content of Students' Independent Work.
6. Educational-Methodological and Information Support of the Discipline (Module):
 - Primary literature.
 - Supplementary literature.
 - Software support.
 - Databases of information retrieval and search systems.
 - Material and technical support of the discipline.

3.2. The first page (Title Page) must fully indicate the complete name of the ministry, the educational institution (university, college, faculty, department, SCC), the name of the discipline, code, field of study (specialty), profile, normative duration of study, semester of study, volume in credit hours (taken from the curriculum), forms of mastery and control of the discipline, as well as the approval mark by the corresponding unit (Appendix 1).

3.3. Goal and Objectives of the Discipline (Module). In accordance with the general goals of the State Standard of HPE and the main educational program, the goal for mastering the discipline (module) is established (Appendix 2).

3.4. Place of the Discipline (Module) in the Structure of the Main Educational Program. The module's place in the curriculum and in the cycle of disciplines is indicated (Humanities and Socio-economic, Mathematical and Natural Science, General Professional, Special, Specialized disciplines, variable part, or elective). Prerequisites (preceding) and post-requisites (subsequent) for this discipline (module) are also defined.

3.5. Requirements for the Mastering of the Discipline (Module). In accordance with the State Standard of higher and secondary professional education, the educational program, and the work program, the teaching process of the discipline (module) is aimed at forming the competencies that students must possess. The competencies established in the SES must be defined in the educational program developed by the educational institution. In accordance with the State Educational Standard, the knowledge, skills, and abilities that the student must master are determined based on the results of studying the module.

3.6. In the Work Program, the corresponding **Learning Outcomes (LO)** are prescribed for each subject. Learning Outcomes are derived from the competencies formed in the SES. Each instructor develops the expected outcomes for their subject. The skills formed during the class must be steps towards achieving the expected result.

3.7. Content of the Discipline. The content of the discipline consists of the volume of lecture, practical, laboratory sessions, and students' independent work, and the procedure for their completion is determined. Lecture sessions of the discipline are divided into topics. The topics of the academic discipline are compiled in compliance with the sequence, based on the set goals and objectives, and follow one another. The hours allocated to the topics are indicated, the competencies to be formed are determined, and learning outcomes are taken into account. The topics for lecture, practical, and laboratory sessions should not be identical. It is necessary to formulate topics from the respective sections.

If practical sessions are planned for the module, they are divided into topics, taking into account their logical sequence. The practical session details the topics on which practical work will be conducted. Lecture topics are not repeated. After the topic, the hours are indicated, assignments to be performed in the practical session are developed (the number of assignments should be no less than three), and the expected results of the assignments are determined. 20-30% of the total number of hours for practical and laboratory sessions of the discipline is allocated for workplace learning.

If laboratory work is planned for the module, their hours are planned, and the content of the performed works and assignments is reflected. The competencies to be formed in students and the expected results upon completion of laboratory work are clearly prescribed and determined.

3.8. Content of Students' Independent Work. Students' independent work is defined during the study of each discipline. Topics for independent work for each section or topic are included in the work program. Assignments are planned. The volume and types of independently performed work are indicated, and the competencies that students must master are clearly defined. When planning students' independent work, it is necessary to distinguish between work performed under the guidance of the instructor and work performed by the student independently.

3.9. For the educational-methodological and informational support of the discipline (module), software support is planned, taking into account the lecture, practical, and laboratory types of sessions.

3.10. Used Literature.

3.10.1. When presenting the Primary literature list, sequential numbering is assigned, and fundamental (main) educational publications are offered. The list of literature is compiled considering its availability to students and its presence in the educational institution's library. When presenting the literature list, the year of publication must be considered. It is recommended to use study guides for the humanities and economic fields published no more than 5 years ago, and textbooks for general professional and specialized disciplines published no more than 10 years ago. The list of primary literature should not exceed 5 titles.

3.10.2. Supplementary literature differs from the primary literature and is presented under a separate heading. No restrictions are placed on the list of supplementary literature. However, its quantity in the library and accessibility for students must be considered.

3.11. Software Support of the Discipline. Software support is planned, considering the lecture, practical, and laboratory types of sessions for the module.

3.12. Databases of Information Retrieval and Search Systems. Based on the lecture, practical, and laboratory types of sessions for the discipline (module), the required databases, information retrieval, and search systems are offered.

3.13. For the **Material and Technical Support** of the module, the location of the classes and the provision of teaching aids are indicated. Information regarding the installation of computer and standard software, internet connection, and the presence of interactive whiteboards is included.

4. Forms of Control and Fund of Assessment Tools

4.1. The following are suggested as tools for the forms of student knowledge control during practical sessions:

Presentation, written summary (exposition), drawing or illustration, project, making a mock-up with one's own hands, writing a script for a dramatization, Venn diagram, cluster, mini-test, describing the experience of being in the main character's place, graphic dictation, writing a quatrain, composing a cinquain, creating a timeline (chronology), creating a picture book, inventing a dialogue between two people, creating non-cohesive text, creating cohesive text, knowledge pyramid, word placement, providing 3 or 4 arguments, drawing a story map, model making, summarizing the content, creating a table, writing an essay, creating slides, etc., as well as your own creative work.

4.2. When compiling the Work Program of the discipline, the instructor develops the **Fund of Assessment Tools (FAT)**.

- It is a collection of methodological materials that standardize the procedures for assessing learning outcomes.
- It establishes the correspondence between the planned learning outcomes and the requirements of the Work Program of the discipline and educational programs.
- Assessment tools are used to check student achievements in mastering the discipline.
- They provide methodological support for students' independent work and serve as a measure of the achievement of expected session outcomes.

- The assessment tools must include control works (tests), questions, topics for abstracts, and reports.
- The Fund of Assessment Tools for the discipline must enable the determination of the level of competence formation.

The assessment tools must necessarily include an assessed product, for which criteria are developed.

5.Review and Approval of the Work Program

5.1. The Work Program of the discipline (module) is compiled **annually** based on the State Educational Standard, curricula, and the main educational program for the specialty (field of study). At the beginning of the academic year, it is **reviewed and approved** by the department where it was developed. This is confirmed by the department meeting minutes and signed by the Head of the Department. The program is **reviewed** (agreed upon) by the Head of the graduating department and **approved** by the Department of Academic Policy. Separate programs are compiled for full-time and part-time forms of study, and the above procedure is repeated.

5.2. The Work Program is prepared in **two copies**. One copy is stored in the department/SCC, and the second serves as the guiding document for the instructor in their teaching and methodological work. The instructor must always have the Work Program, regardless of the form of study they are leading. Upon request from the graduating department, the instructor submits one copy of the Work Program.

5.3. Additions and changes are introduced to the Work Program annually and it is approved in the manner stated above. The approved work program, at the discretion of the authors-developers, is posted on the JASU website in its entirety or as an annotated version, as well as in full on the AVN portal, taking into account information security standards.

5.4. The work program must **approved** before the start of the academic year.

Ministry of Science, Higher Education, and Innovation of the Kyrgyz Republic

" Jalal-Abad State University named after B. Osmonov " Industrial Scientific Educational Institution

AGREED

Head of the Department of Professional Education

_____ 2025.

APPROVED

Director of the Department of Academic Policy of Jalal-Abad State University named after B. Osmonov.

_____ Turdubaeva B.M.

_____ 2025.

_____ Institute (College)

_____ College

_____ Department (Subject-Cyclic Commission - SCC)

_____ (Name of the discipline)

Work Program (Syllabus) for the Discipline (Course)

Level of the Basic Educational Program Bachelor's Degree

Area of study/specialty 710100 Informatics and Computer Technology

Profile / Specialization Automated Control and Information Processing Systems

Form of study Full-time Study (Daytime Department)

Course status Basic

Total hours according to the curriculum 120 hours

Lecture classes 30 hours

Practical classes 30 hours (incl. workplace learning — 20-30%, 6 hours)

Laboratory works

Students' independent work 60 hours

Number of modules 2 2

Examination (Final Exam) 4th semester

Credits (ECTS/Credit Units) 4 4

Language of teaching Russian Language

The Work Program (Syllabus) was developed on the base of State Standard for the area of study 710100 Informatics and Computer Engineering.

Compiled by senior lecturer _____ U. Asanov _____

(Signature)

The Work Program (Syllabus)
was reviewed at the Department meeting
Protocol No. _____ 2025
Head of the Department _____ G. Beknazarova
 (Signature)

1. Aim (Goal) and objectives of the discipline (Course)
2. Place of the discipline in the structure of the Basic Educational Program (BEP)

3. Requirements for the Course Learning Outcomes

The course instruction process is aimed at forming the following competencies:

(GC - General Competencies)

(PC - Professional Competencies)

As a result of studying the discipline, the student must:

know _____

be able to _____

master _____

4. Expected Learning Outcomes (taken from the formed competencies)
5. Content of the Discipline (Course Content).

5.1. Content of Lecture Classes

№	Lecture Topics	Number of Hours	Discussed Issues (Questions)	Topics of SIS (Students' Independent Study (Work))	Form of Assessment (or Form of Control)	SIS Hours (or Students' Independent Study (Work) Hours)	Competency Index	Expected Outcomes (or Expected Results)
1	Topic 1	2		Topic 1		2	GC-1, PC-2	
2								

SIS - Students' Independent Study (Work)

Content of Practical and Laboratory Classes (if available):

№	Topics of Practical Classes	Number of Hours	Assigned Tasks (Assignments to be Completed)	Form of Knowledge Verification (Assessment)	Competency Indicator	Expected Outcomes (Results)	Location of Workplace Learning	Hours
1	Topic 1	2			GC-1, PC-2			
2	Topic 2				GC-1, PC-2			
3								

For Colleges:

№	Topic of the Practical Class	Hours	Assigned Tasks (Assignments to be Completed)	Form of Knowledge Verification (Assessment)	SIS (Students' Independent Study) Topic/Task	Form of Verification (Assessment Method for SIS)	Hours (for SIS)	Competency Indicator	Expected Outcomes (Results)	Workplace Learning / On-the-Job Training	
										Tasks/Works to be Performed	Location

For universities (Higher Education Institutions), only those subjects that form **competencies** for each specialty must be selected. The volume of practical classes for the analyzed subject must constitute **not less than 20%** of the total number of hours for **workplace learning**.

6. Academic-Methodological and Information Support for the Discipline

6.1. Main Literature

- 1.
- 2.
- 3.
- 4.

6.2. Supplementary (Additional) Literature

- 1.
2. ...

6.3. Software

6.4. Databases of Information, Reference, and Search Systems

7. Material and Technical Support for the Discipline

Developers

Alibaev A.P.

Umetov T.E.

Turdubaeva B.M.