# AHERS <br> Agency for Higher Education 

of Republic of srpska

STANDARDS FOR ACCREDITATION OF STUDY PROGRAMS FIRST AND SECOND CYCLE OF STUDIES

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## STANDARD 1: Quality assurance policy of study programs

This standard is aligned with criterion 1. of the Criteria for accreditation of first and second cycle study programs in Bosnia and Herzegovina and standard 1.1 of the Standards and Guidelines for Quality Assurance in the European Higher Education Area (ESG)

Ensuring and controlling the quality of the study program is carried out regularly and systematically through self-evaluation and external quality control.

## Guidelines for the application of Standard 1:

1.1. Ensuring and controlling the quality of the study program is an integral part of the strategy/of the institution's internal quality assurance policy and includes regular and systematic monitoring of its implementation and taking measures to improve quality in terms of the curriculum, teaching, teaching staff, student evaluation, textbooks and literature.
1.2. Quality assurance and control of the study program supports the development of a quality culture in which all internal participants contribute to the quality of study programs, with prescribed procedures for the inclusion of all interested parties in the processes of quality assurance and control of the study program ( BiH sub-criterion 1.3).
1.3. In the quality control of the study program, the active role of students and their assessment of satisfaction with the quality of the study program is ensured.
1.4. Improvement measures defined on the basis of the analysis of student surveys are implemented at the level of the study program.
1.5. Ensuring and controlling the quality of the study program is aimed at promoting: research work, learning and teaching, mobility and internationalization in study programs, as well as preventing plagiarism and other forms of unethical academic behavior.
1.6. The quality control of the study program is carried out in predetermined time periods, which for self-evaluation is a maximum of two years, and for external quality control in accordance with the accreditation plan of study programs of the Agency and higher education institutions.

## STANDARD 2: Creation and adoption of study programs

This standard is aligned with criterion 2 of the Criteria for accreditation of first and second cycle study programs in Bosnia and Herzegovina and standard 1.2 of the Standards and Guidelines for Quality Assurance in the European Higher Education Area (ESG).

The higher education institution has established procedures for the creation and adoption of study programs that include students and all stakeholders. The study program has clearly defined goals and purpose with elements established by law. By mastering the study program, the student acquires competencies that are the function of quality performance of professional, scientific and artistic activities.

## Requirement 2.1: Structure of the study program

The study program contains all the elements necessary for the implementation of the teaching process.

## Guidelines for the application of requirement 2.1:

2.1.1. Study programs are aligned with scientific and educational standards and achievements of a certain scientific/artistic field, requirements of related scientific fields in order to acquire multidisciplinary knowledge, requirements of the labor market and international standards, and professional standards where applicable.
2.1.2. Each first and second cycle study program must have the following elements:

- name and objectives of the study program,
- the field of education to which the study program belongs,
- type and level of study,
- scope of study,
- learning outcomes, - professional, i.e. academic title,
- conditions for enrollment in the study program for students from the Republic and Bosnia and Herzegovina, i.e. abroad,
- a list of compulsory and optional courses with an outline content,
- a list of basic literature for the study,
- the method of administering studies and passing exams for all forms of higher education,
- teaching locations,
- the time required to carry out certain forms of studies,
- the expected number of classes for individual courses and their schedule by year,
- the credit value of each course expressed in accordance with ESTS credits,
- the credit value of the final paper expressed in accordance with ESTS credits,
- conditions for enrolling a student in the next semester, i.e. the next year of study, and prerequisites for enrolling individual courses and groups of courses,
- method of choosing courses from other study programs,
- the possibility of teaching in foreign languages,
- conditions for transferring from other study programs,
- syllabus of teaching courses,
- other issues of importance for the execution of the study program.
2.1.3. A joint study program (JS-program) means a study program for the acquisition of all forms of joint diplomas organized and implemented by several higher education institutions with the status of a legal entity. Joint study programs lead to the acquisition of a joint diploma, a double (two) diploma, or a single diploma issued by an institution determined by mutual agreement of the participating institutions.
JS-programs can be organized from one or more fields (IM-interdisciplinary and multidisciplinary study programs) at all levels and for both types of higher education studies. The joint study program can be carried out by accredited higher education institutions.
If any of the higher education institutions is registered in another country, it must be recognized by the educational authority in that country.
The higher education institutions that organize and implement the JS-program conclude a contract that regulates all the elements necessary for the realization of the study program. The competent authorities of the higher education institution adopt a document on the implementation of the joint study program or IM program, which defines all the elements that ensure the fulfillment of the appropriate standards for the implementation of the JSstudy program.
The basic elements of the content of the document on the implementation of the joint study program or IM program are:
- Data on the study program proving the fulfillment of the standards i
- Specifics

Specifics include:

- Engagement of personnel, material and spatial resources of each higher education institution separately.
- Location of the study program, in time and by parts of the study program.
- Obligations of each higher education institution in the process of carrying out the study program (from the competition to the issuing of the diploma).
- Sources of financing and method of covering costs.
2.1.4. Under interdisciplinary and multidisciplinary study programs (IM-study programs) are meant study programs that include material from two or more scientific fields/fields of education from the same or different scientific fields/fields of education. IM-study programs can be organized within the studies of both study cycles and both types of higher education.
2.1.5. A higher education institution can organize a study program or parts of a study program in a world language if it has human and material resources that enable the teaching content to be realized in accordance with the standards. A study program in a world language is considered a
new study program if it is administered only in that language (unless the same study program in the Serbian language was previously accredited).
2.1.6. The study program based on the methods and technologies of distance education is supported by resources that ensure quality execution of the study program. A higher education institution can organize a study program or parts of a study program at a distance if the teaching content, supported by available resources, can be adopted through distance studies and if it provides the same learning outcomes, the same level of knowledge of graduated students, the same efficiency of study and the same level of qualification as in the case of the usual way of realization of the study program. A distance learning program can only be organized if the higher education institution has an accredited study program under the same name, which is realized in the classic way at the institution's headquarters. The course content of the study program is modernly designed and adapted to distance learning with the indicated necessary time for consultations (according to the established schedule). Distance learning takes place in defined terms according to the established and published schedule.
2.1.7. A higher education institution can organize a study program in a department outside the institution's headquarters, if it is supported by available resources and if the same level of knowledge of graduated students, the same study efficiency and the same rank (quality) of the diploma as in the case of the implementation of the study program at the headquarters are provided. Study programs that are accredited for implementation only in that department can be implemented in a department outside the headquarters. The establishment of a department outside the headquarters of a higher education institution is carried out in the manner and according to the procedure prescribed for the establishment of a higher education institution. All standards related to the higher education institution and study programs are also applied to the department outside the headquarters.
2.1.8. All other requirements of the standard apply to study programs defined in points 2.1.3 to 2.1.7, as well as to regular study programs.
- The scope of studies is expressed by the number of ECTS credits, in accordance with the law that regulates the field of higher education:
-     - First cycle studies last three or four years and are evaluated with at least 180 ESTS points, or at least 240 ESTS points, except for the short study program that lasts from one to two years and is evaluated with at least 60 ESTS points to at least 120 ESTS points.
-     - A short study program is part of the first cycle studies and can be organized if it provides appropriate knowledge, skills and competences for the field of work or profession, personal development of the student or further studies to complete the first cycle. For the short study program, the higher education institution issues a certificate on the completion of the short study program and acquired competencies.
-     - Second cycle studies are carried out after the first cycle studies, last one or two years and are evaluated with at least 60 ESTS points, or at least 120 ESTS points, so that in total with the first cycle of studies they amount to at least 300 ESTS points. The exception is integrated studies that are carried out as a single study program that includes the first and second cycle and are evaluated with at least 300 ECTS points, that is, integrated studies in medicine and dentistry that are evaluated with at least 360 ECTS points.
2.1.9. Changes to the study program, changes in the form and method of teaching are made according to the procedure established for its adoption. Amendments and additions to the study program for which the higher education institution has received a work permit, which are carried out in order to harmonize it with the organization of work and the achievements of science and art in accordance with the prescribed standards for the accreditation of study programs, are not considered a new study program. These changes and additions to the study program cannot include a change in the field of education to which the study program belongs, the name of the study program, or the title that is acquired upon its completion. All changes to the study program must comply with the requirements of the accreditation standards.


## Requirement 2.2: Purpose and objectives of the study program

## The study program has clearly defined goals, purpose and role in the educational system.

## Guidelines for applying requirement 2.2:

2.2.1. The purpose and goals of the study program must be in accordance with the basic tasks and goals of the higher education institution where the program is administered.
2.2.2. The purpose and goals of the study program must be clearly and unambiguously formulated and publicly available on the official website of the higher education institution.
2.2.3. The objectives of the study program are harmonized with the requirements of a certain field and the labor market, economic development and the framework of qualifications.
2.2.4. The purpose of the study program is to educate students for recognizable and clear professions and occupations. The study program ensures the acquisition of competencies that are socially justifiable and useful.
2.2.5. The objectives of the study program include the achievement of competencies and academic skills, as well as methods for their acquisition. Goals may also include developing creative abilities and mastering specific practical skills needed to perform the profession.
2.2.6. The objectives of the study program and learning outcomes are comparable to the same and/or similar programs at higher education institutions in Bosnia and Herzegovina and abroad.
2.2.7. The higher education institution provides interdisciplinarity, multidisciplinarity, and internationalization of the curriculum, interaction with professional practice, realization of practical teaching and active participation of students in scientific/artistic research within the study program.

## Requirement 2.3: Curriculum

The curriculum of the study program contains the list and structure of compulsory and optional courses and modules and their description.

## Guidelines for applying requirement 2.3:

2.3.1. The structure of the curriculum and program includes the schedule of courses and modules by semester, the number of classes for the performance of certain forms of teaching (active teaching) and ECTS points.
2.3.2. One semester is evaluated with at least 30 ESTS points.
2.3.3. The course description contains the name, course group, year and semester of study, number of ESTS points, teacher's name, course objective with expected outcomes, knowledge and competences, prerequisites for attending the course, course content, recommended literature, methods of teaching, method of knowledge verification and assessment and other data.
2.3.4. Courses are divided into the following groups:

- basic, which represent the base of the scientific field to which the study program belongs,
- professional, which make up the very essence of the qualification,
- narrow-professional and professional-applicative, which represent the specialized study of a narrow professional discipline or the application of acquired knowledge and skills in a narrow field,
- complementary, which belong to other areas, but are connected to the home area and contribute to the achievement of learning outcomes in the home area and
- general - who develop the so-called "transferable" skills necessary to achieve learning outcomes at the level of the study program.
- art courses that provide knowledge and understanding of art, development of abilities and skills necessary for creative involvement in selected areas of art, as well as development of specific skills for an artistic career,
- theoretical-art courses that provide knowledge about the essence of art, creation and creativity, as the roots from which the diverse world of art develops;
2.3.5. In the structure of the study program in the first cycle of academic studies, except for the field of art, the following groups of courses are represented in relation to the total number of ECTS points:
- basic - about $35 \%$,
- professional - about $25 \%$,
- narrow-professional and professional-applicative - about 30\%,
- complementary - about $5 \%$ i
- general - about 5\%.
2.3.6. In the structure of the study program in the first cycle of applied studies, except for the field of art, the following groups of courses are represented in relation to the total number of ECTS points:
- basic - about $15 \%$,
- professional - about 40\%,
- narrow-professional and professional-applicative - about $40 \%$ i
- complementary and general - about 5\%.
2.3.7. In the structure of the study program in the second cycle of academic studies, except for the field of art, the following groups of courses are represented in relation to the total number of ECTS points:
- basic - about 30\%,
- professional, narrow-specialist and professional-applicative - about 65\% i
- complementary and general - about 5\%.
2.3.8. In the structure of the study program in the second cycle of professional studies, except for the field of art, the following groups of courses are represented in relation to the total number of ECTS points:
- basic - about $10 \%$,
- professional, narrow-professional and professional-applicative - about 85\% i
- complementary and general - about 5\%.
2.3.9. In the structure of the study program at integrated academic studies, except for the field of art, the following groups of courses are represented in relation to the total number of ECTS points:
- basic - about 35\%,
- professional - about 25\% i
- narrow-professional and professional-applicative - about 30\%,
- complementary - about 5\% i
- general - about 5\%.
2.3.10. In study programs where there is a smaller share of complementary courses, that percentage increases proportionally in favor of professional, narrow-professional or professional-applied courses.
2.3.11. It is recommended that the list of optional courses contains at least twice the number of courses compared to the number of courses being chosen.
2.3.12. An integral part of the curriculum of the study program of the second cycle of applied studies is a professional practice lasting at least 70 working hours per year, which is realized in economic organizations or public institutions.
2.3.13. The study plan of the first and second cycles determines a minimum of 20 and a maximum of 25 hours of teaching per week, i.e. a minimum of 600 and a maximum of 750 hours per year, of which:
- in the first cycle of study, of the 600 hours, $50 \%$ to $60 \%$ are lectures, and the rest are exercises and other forms of active teaching.
- in the second cycle of studies that last more than one year, in the first year of study of 600 hours, $50 \%$ to $60 \%$ are lectures, and the rest are exercises and other forms of active teaching,
- in the final year of the second cycle of studies and integrated studies, a maximum of $50 \%$ is study research work, i.e. applied research work, and the rest is lectures, exercises and other forms of active teaching.
Study programs for which international comparability requires a greater number of teaching hours may have more than 25 teaching hours per week.
2.3.14. In integrated studies, students have professional practice that is evaluated with at least 3 ECTS points in the fourth and fifth year of study.
2.3.15. An integral part of the curriculum of study programs for the first and second cycle of studies in the field of engineering and technology is professional practice and practical work, which are evaluated with at least 3 ECTS points, and which are carried out in appropriate scientific research institutions, in organizations for carrying out innovation activities, in organizations for providing infrastructural support to innovation activities, in companies and public institutions.
2.3.16. In the field of agricultural sciences, in the field of agriculture and forestry, during the first cycle of studies, students carry out field teaching and professional practice, which is evaluated with at least 3 ECTS points.
2.3.17. In the last year of the first and second cycle of studies in natural, social and human sciences, students have a professional practice that is evaluated with at least 3 ESTS points.
2.3.18. The curriculum of the study program for academic studies in the relevant scientific fields within the medical sciences must contain mandatory common foundations and opportunities for special study modules, if the curriculum is intended to contain them. Special study modules should be from courses directly related to medicine, whether laboratory or clinical, biological or behavioral, research-oriented or descriptive. The curriculum of the study program should contain at least $10 \%$ of optional courses.
2.3.19. In the structure of the study program in the first cycle of academic studies in the field of art, the following groups of courses are represented in relation to the total number of ECTS points:
- artistic and theoretical-artistic groups of courses - about $80 \%$, whereby artistic groups of courses are represented by at least 50\%,
- other groups of courses - about $20 \%$.
2.3.20. In the structure of the study program in the first cycle of professional studies in the field of art, the following groups of courses are represented in relation to the total number of ECTS points:
- artistic and theoretical-artistic groups of courses - about 50\%,
- narrow-professional and professional-applicative groups of courses - about 30\%,
- other course groups - about $20 \%$.
2.3.21. In the structure of the study program in the second cycle of academic studies in the field of art, the following groups of courses are represented in relation to the total number of ECTS points:
- artistic and theoretical-artistic groups of courses - about 70\%, whereby artistic groups of courses are represented by at least 50\%,
- other groups of courses - about $30 \%$.
2.3.22. In the structure of the study program for the second cycle of professional studies in the field of art, the following groups of courses are represented in relation to the total number of ECTS points:
- artistic and theoretical-artistic groups of courses - about 45\%,
- narrow-professional and professional-applicative groups of courses - about 45\%,
- other groups of courses - about 10\%.
2.3.23. In the structure of the study program, elective courses, in relation to the total number of ESTS points, are represented:
- at least $20 \%$ in the first cycle of studies,
- at least $30 \%$ in the second cycle of studies,
- at least $25 \%$ on integrated studies.
2.3.24. Higher education institutions that implement pedagogic study programs must provide pedagogic practice in the II, III and IV year of studies of a minimum of 80 working hours per year. In the final year of study, pedagogical practice is 180 hours and 6 ECTS points. Pedagogical practice is carried out in pedagogical institutions. For higher education institutions that do not have pedagogical education as part of their study programs, and whose graduates should be teachers of professional courses in secondary schools, they must have education in psychological, pedagogical and methodical disciplines acquired at a higher education institution during their studies or after graduation, of at least 30 EC
2.3.25. TS points and 6 ECTS points of practice in pedagogical institutions.
2.3.26. Integrated academic studies of medicine for the acquisition of the academic and professional title "Doctor of Medicine", last 6 years or 5,500 hours of theoretical and practical teaching, independent student work and practice within the teaching bases of the higher education institution in accordance with Directive 2005/36/EC of the European Parliament and the Council of Europe from September 7, 2005 on the recognition of professional qualifications in the part that refers to doctors of medicine.
2.3.27. Training for a general care nurse, in accordance with the same directive, consists of at least 4,600 hours of theoretical and clinical training in full time during at least three years of professional education or professional studies, which can be expressed in the appropriate number of ECTS points. The duration of theoretical training represents at least one third, and the duration of clinical training at least one half of the minimum duration of training. The purpose of Directive 93/16 of the European Council is to facilitate the free movement of medical professionals through the mutual recognition of primary and specialist qualifications of EEA (European Economic Area) nationals.


## Request 2.4. Competences of graduate students

By mastering the study program, the student acquires general and course-specific abilities, which are the function of quality performance of professional, scientific and artistic activities. The description of the
qualification resulting from the study program must correspond to a certain level of the European Qualifications Framework and be related to the qualification standards.

## Guidelines for applying requirement 2.4:

2.4.1. By mastering the study program, the student acquires the following general abilities:

- analysis, synthesis and prediction of solutions and consequences:
- mastering research methods, procedures and processes;
- development of critical and self-critical thinking and approach;
- application of knowledge in practice;
- development of communication skills and dexterity, as well as cooperation with the wider social and international environment;
- professional ethics.
2.4.2. By mastering the study program, the student acquires the following course-specific abilities:
- thorough knowledge and understanding of the discipline of the relevant profession;
- solving concrete problems with the use of scientific methods and procedures;
- connection of basic knowledge from different fields and their application;
- monitoring and application of new achievements in the profession;
- development of skills and dexterity in the use of knowledge in the appropriate area;
- the use of information and communication technologies in mastering the knowledge of the appropriate field.
2.4.3. At the level of the study program, it is necessary to create a matrix of learning outcomes that allows insight into the mutual compatibility of learning outcomes at the level of the study program and at the level of all courses studied during the course of study in such a way that the learning outcomes of each course must contribute to the learning outcomes at the level of the study cycle, and that all learning outcomes at the cycle level must be achieved through different courses. Student competencies and learning outcomes must be logically connected in such a way that the learning outcomes are statements of what competencies the student should acquire after successfully completing the study process, with the fact that the acquired competencies may exceed the learning outcomes. Learning outcomes must be logically linked to ECTS points, where learning outcomes represent the content, and ECTS points represent the amount of working hours necessary to master the teaching content. In the context of linking learning outcomes and ECTS credits, it is necessary to take into account the available time that the student must devote to the duties within the given course and the student's ability to achieve the planned outcomes in that time.
2.4.4. It is recommended that learning outcomes be defined in accordance with one of the existing methodologies using different hierarchical levels of learning (factual knowledge, understanding, application, analysis/synthesis, evaluation and creation).
2.4.5. When formulating professional, academic and scientific titles that are acquired upon completion of interdisciplinary and multidisciplinary study programs, a combination of the whole or parts of
the two most important areas that make up a given interdisciplinary or multidisciplinary study program is used. The two most important areas and their order in the name are determined:
- based on the relative size of the teaching material of the given areas
- based on the number of ECTS points that the given areas have in the study program.

In addition to the diploma, the higher education institution, if necessary, can add - after dash - an additional designation of the given title to the interdisciplinary and multidisciplinary professional, academic and scientific titles.

## STANDARD 3. Student-centred learning, teaching and assessment

This standard is aligned with criterion 3 of the Criteria for accreditation of first and second cycle study programs in Bosnia and Herzegovina and standard 1.3 of the Standards and Guidelines for Quality Assurance in the European Higher Education Area (ESG).

A higher education institution encourages and provides student-centred learning, teaching and assessment.

## Guidelines for the application of Standard 3:

3.1. The study program uses modern strategies of active learning and teaching, which put the student in the focus of the education process.
3.2. The implementation of teaching content is interactive, stimulating and expedient.
3.3. The study program uses active teaching methods (dialogic, research, simulations, content analysis, projects, learning through problem solving, games, case studies, etc.). Teachers are encouraged to adapt work methods to the needs of students.
3.4. The planned learning outcomes at the level of the study program and at the course level are aligned with teaching methods and methods of evaluating the achievement of learning outcomes.
3.5. Teaching and non-teaching staff encourage students' motivation to play an active role in their own learning process. The student is expected to be involved, engaged and responsible in acquiring the knowledge and skills necessary for successfully mastering the studies.
3.6. As part of mastering the study program, in addition to factual, conceptual and procedural knowledge, the acquisition of metacognitive knowledge among students is especially encouraged with the aim of being ready for successful lifelong learning in modern society.
3.7. The academic staff who teach in the study program are previously prepared and motivated for that activity, and take into account the results of surveys evaluating the quality of learning and teaching by students.
3.8. The academic staff motivates and involves students to take an active role in the research, scientific-research and teaching-educational process of the study program with appropriate guidance, consultation and support.
3.9. Students are evaluated through publicly available procedures for fair, transparent and consistent evaluation, as well as through various forms of knowledge and skills testing in accordance with the specifics and set goals of the study program.
3.10. Assessment procedures regulate the organization of tests and exams, criteria and methods of assessment by examiners and commissions, transparency of assessment and the possibility of student appeals regarding assessment.
3.11. The higher education institution has a procedure that defines the preparation process, the structure and evaluation of the final work of students of a certain study cycle, as well as the rights and obligations of the student and mentor and the conditions for mentoring, taking into account the specifics of the study program.
3.12. Student representatives are involved in the work of the body of the higher education institution whose competence is management and making certain decisions about study programs.
3.13. The higher education institution has an established mechanism and procedures to support students for counseling on future career development.
3.14. In the study program in the field of natural and agricultural sciences, classes are organized so that there are up to 50 students in the lecture group in the first cycle of study, up to 15 students in the exercises group and up to 10 students in the laboratory exercises group, with a tolerance of $10 \%$. There are up to 25 students in the group for lectures on the second cycle of studies, up to 15 students in the group for exercises and up to 10 students in the group for laboratory exercises, with a tolerance of $10 \%$.
3.15. For the quality performance of study programs in the fields of social sciences and humanities, it is necessary to fulfill the norms regarding the number of students per teaching group, so that:

- group size for lectures in the first cycle of studies for general education and theoretical-methodological courses is up to 100 students with a tolerance of $10 \%$, and for scientific-professional and professional-applied courses up to 80 students with a tolerance of $10 \%$;
- group size for exercises in the first cycle of studies for general education and theoretical-methodological courses is up to 50 students with a tolerance of $10 \%$, and for scientific-professional, professional and professional-applicative courses up to 30 students with a tolerance of $10 \%$;
- group size for lectures on the second cycle of studies is up to 50 students with a tolerance of $10 \%$;
- group size for exercises in the second cycle of studies is up to 20 students with a tolerance of $10 \%$.
3.16. For the quality performance of study programs in the first cycle of academic studies in the field of engineering and technology, it is necessary for the higher education institution to meet the standards regarding the number of students per teaching group. For the first cycle of studies, the size of the group for lectures is up to 50 students, the group for exercises up to 15 students and the group for laboratory exercises up to 10 students, all with a tolerance of $10 \%$. For the quality performance of study programs in the second cycle of studies, the size of the lecture group is up to 32 students, the exercise group up to 16 students and the laboratory exercise group up to 8 students, all with a tolerance of $10 \%$.
3.17. The maximum number of students in the group for theoretical teaching in study programs in medical and health sciences is 50 , with a tolerance of $10 \%$. The maximum number of students in the group for exercises and practical teaching in pre-clinical courses is 15 , and 7 in clinical courses.
3.18. Teaching in study programs in the field of art is carried out as: individual, group and collective. The organization of teaching is based on all three methods of teaching, depending on the type and nature of the course. The size of the group in group classes, depending on the type and nature of the course, is from 2 to 15 students. Collective classes are organized for groups of up to 100 students.


## STANDARD 4. Enrollment and advancement of students, recognition and certification

This standard is aligned with criterion 4 of the Criteria for accreditation of first and second cycle study programs in Bosnia and Herzegovina and standard 1.4 of the Standards and Guidelines for Quality Assurance in the European Higher Education Area (ESG).

Enrollment of students in the study program is carried out in accordance with the law and clear and transparent criteria that include checks of knowledge, aptitudes and abilities of candidates and success in previous schooling, and in accordance with social needs and resources provided for the implementation of the program. Grading of students is done by continuous monitoring of students' work.

## Request 4.1. Enrollment of students

The higher education institution, in accordance with social needs and its resources, enrolls students in the appropriate study program on the basis of success in previous schooling and verification of their knowledge, aptitudes and abilities. The enrollment competition is publicly announced on the institution's website and in the media.

## Guidelines for applying requirement 4.1:

4.1.1. The number of students enrolled in the corresponding study program is determined based on the available space and staffing capabilities of the higher education institution.
4.1.2. The type of knowledge, aptitudes and abilities that are checked during enrollment correspond to the nature of the study program and the method of this check corresponds to the character of the study program and are published in the competition.
4.1.3. Procedures for the recognition of higher education qualifications, periods of study and previous learning, which also includes the recognition of non-formal and informal learning, have been established. Recognition procedures are in accordance with the Lisbon Recognition Convention.
4.1.4. If the teaching is conducted in a world language, students must possess satisfactory language competence in the world language in which the teaching is conducted.
4.1.5. Enrollment of students for distance studies

- Enrollment of students in study programs that are implemented at a distance is done according to the same criteria that apply to study programs that are implemented in the classic way.
- A higher education institution can enroll a maximum of $40 \%$ of students for distance learning from the total number of students enrolled in that study program.
- Students enrolled in distance learning are eligible to continue their studies in the appropriate program that is administered in the classical way and vice versa, in the manner and under the conditions defined by the acts of the higher education institution.


## Requirement 4.2: Student assessment and progression

Grading of students is done by continuous monitoring of students' work and on the basis of points gained in fulfilling pre-examination obligations and taking exams.

## Guidelines for applying requirement 4.2:

4.2.1. The student masters the study program by passing the exam, which earns a certain number of ECTS points, in accordance with the study program.
4.2.2. Each individual course in the program has a certain number of ECTS points that the student earns when he successfully passes the exam.
4.2.3. The number of ECTS points is determined on the basis of the student's workload in mastering a specific course with the aim of achieving learning outcomes, whereby one ECTS point represents, as a rule, 30 hours of total average engagement of the student.
4.2.4. The success of students in mastering a particular course is continuously monitored during classes and is expressed in points. The maximum number of points that a student can achieve in the course is 100.
4.2.5. The student earns points in the course by working in class and by fulfilling pre-exam obligations and passing the exam. The minimum number of points that a student can acquire by fulfilling pre-examination obligations during classes is 30 , and the maximum is 70 .
4.2.6. Each course from the study program has a clear and published method of acquiring points. The method of acquiring points during the teaching includes the number of points that the student acquires based on each individual type of activity during the lesson or by completing the preexam obligation and passing the exam.
4.2.7. The overall success of the student in the course is expressed by a grade from 5 (failed) to 10 (outstanding), and for some forms of teaching, a non-numerical grading method can be determined. The student's grade is based on the total number of points the student earned by fulfilling the pre-examination requirements and taking the exam, and according to the quality of acquired knowledge and skills.
4.2.8. Graduate students are awarded a document that clarifies the acquired qualification, including the achieved learning outcomes, and the context, level, content and status of the studies they attended and successfully completed.
4.2.9. Grading and progression of distance learning students:

- The subsystem for checking students' knowledge is integrated into the system for managing the distance learning process and supports the security function for identifying students, teachers and associates, as well as different forms of learning and checking knowledge (consultations, self-testing, testing, reports, exams), with which they acquire appropriate competencies.
- The security of determining the identity of students during testing is ensured.
- The control and evaluation of students' knowledge is carried out through various forms of pre-exam checks and through the final exam, under the same conditions as for classical studies.
- The exam is taken at the headquarters of the higher education institution, that is, in the facilities specified in the higher education institution's operating permit.


## STANDARD 5. Human resources

This standard is aligned with criterion 5 of the Criteria for accreditation of first and second cycle study programs in Bosnia and Herzegovina and standard 1.5 of the Standards and Guidelines for Quality Assurance in the European Higher Education Area (ESG).

Teaching staff with the necessary scientific, artistic and professional qualifications are provided for the realization of the study program.

## Guidelines for the application of Standard 5:

5.1.1. For the implementation of the study program, the higher education institution provides teachers and associates who meet the conditions for election to the appropriate title, in accordance with the law and the act that regulates the conditions for election to the title. Teachers and associates must have a valid election to a scientific-teaching, artistic-teaching, teaching or scientific title at one of the accredited higher education institutions or scientific research organizations that have a competent electoral body in the field for which the election is made, in accordance with the law.
5.1.2. For the implementation of the study program, the higher education institution provides teaching staff whose scientific, artistic and professional qualifications correspond to the scientific field of the study program. Qualifications are proven by diplomas, published works in scientific journals and peer-reviewed collections, representative references in artistic work, as well as records of pedagogical qualities and appropriate professional experience. In assessing the fulfillment of this standard and scientific, artistic and professional qualifications, the conditions and criteria prescribed by the law and the act regulating the conditions for election to the scientific-teaching title are applied.
5.1.3. The total number of teachers is sufficient to cover the total number of teaching hours in the study program, in accordance with the prescribed teacher workload and the guidelines that regulate the maximum workload of full-time and part-time teachers.
5.1.4. The total number of teachers and associates corresponds to the needs of the study program and must be sufficient to cover the total number of teaching hours in the study program. In the study program of the first or second cycle of study, the number of full-time teachers must provide at least $70 \%$ of the teaching hours in the study program, and for study programs in the field of art, this percentage cannot be less than $50 \%$. When determining the number of full-time teachers on study programs in the field of medical and health sciences, teachers of clinical branches of medical sciences, who are part-time at a higher education institution, and have a full-time employment contract with a health institution that is the teaching base of a higher education institution, will be considered full-time teachers.
5.1.5. For full-time teachers, the higher education institution submits evidence of meeting the requirements for election to the appropriate title in accordance with the law, evidence of election to the appropriate scientific-teaching or teaching title, and a concluded employment contract. The mentioned persons must have the citizenship of the Republic of Srpska/B\&H or a residence permit. A teacher and associate who has an established full-time employment relationship with another employer in the country or abroad cannot have an established fulltime employment relationship at a higher education institution.
5.1.6. Teachers with the title of assistant professor, associate professor and full professor can teach in all types of academic and professional studies. Teachers in the teaching profession (college lecturer and college professor) can teach at applied studies.
5.1.7. A teacher completes an average of 180 hours ( 240 hours in the field of art), i.e. 6 hours ( 8 hours of teaching per week in the field of art), whereby engagement per teacher cannot exceed 10 hours ( 14 hours of teaching per week in the field of art) at all higher education institutions in the Republic of Srpska/B\&H. The total workload of teachers includes all forms of teaching.
5.1.8. If the institution hires a part-time teacher, who is already employed at several higher education institutions, he teaches in each institution in proportion to the percentage of employment, whereby his total employment may not exceed 10 hours/14 hours in the field of teaching art per week at all higher education institutions where he is engaged.
5.1.9. A person elected to a scientific title in the manner and according to the procedure prescribed by the law regulating scientific research activity can participate in all forms of teaching in the second and third cycle of studies, be a mentor and a member of commissions in the process of preparing and defending the final thesis in the second and third cycle of studies, to be a member of the committee for preparing proposals for the selection of university teachers and associates and to participate in scientific research work. If such a person does not have an established employment relationship in the higher education institution where the program is administered, the institution concludes an engagement contract for teaching with that person.
5.1.10. A visiting professor who participates in the realization of the study program is counted as a parttime teacher.
5.1.11. The number of associates corresponds to the needs of the study programs that the institution plans to implement, whereby the associate achieves an average of 300 hours/360 hours in the field of teaching art per year, that is, an average of 10 hours $/ 12$ hours in the field of teaching art per week. Engagement per associate cannot be more than 15 hours/16 hours in the field of art teaching per week at all higher education institutions in the Republic of Srpska/B\&H.
5.1.12. The higher education institution has a defined human resources management policy with clear and transparent criteria for the employment of academic staff, responsibilities, workload and responsibilities, criteria for professional development, advancement and professional development of academic staff and mechanisms for monitoring the work of academic staff with measures for improvement.
5.1.13. The higher education institution provides opportunities for professional advancement and development and provides the teaching staff with adequate conditions for active engagement in scientific, artistic and research work. The academic staff is dedicated to research, i.e. scientificresearch and artistic work, especially through international scientific-research projects, and joint activities of mentors and students to find grants or scholarships.
5.1.14. A person retired in accordance with the regulations of the Federation of Bosnia and Herzegovina, Brčko District of Bosnia and Herzegovina or another state cannot teach at higher education institutions in the Republic of Srpska.
5.1.15. Full-time teachers conduct at least $50 \%$ of lectures in courses that belong to the following key categories: professional, narrow-professional and professional-applicative in the first and second cycle of academic studies, i.e. professional and professional-applicative in the first and second cycle of applied study; artistic, theoretical-artistic and professional-applicative in the first and second cycle of academic studies, i.e. the first and second cycle of applied studies in the field of art.
5.1.16. In order to teach a study program in a world language, teachers and associates must have the appropriate competencies for teaching in that language.
5.1.17. If the same program is accredited in Serbian and in one world language, the total number of students in both languages is taken into account when calculating the workload of teachers and associates, as well as when determining the required space. Such programs are treated as one study program.
5.1.18. In the case when an interdisciplinary or multidisciplinary study program is realized within the framework of international cooperation, the institution provides at least $50 \%$ of the competent teaching staff required for the implementation of the study program in a full-time working relationship at the higher education institution, if the remaining $20 \%$ of the classes are realized by teachers from accredited foreign universities.
5.1.19. If the IM study program is implemented by several higher education institutions, the total coverage by full-time staff at the higher education institution must be, in the sum of all higher education institutions, a minimum of $70 \%$.
5.1.20. A higher education institution that conducts distance studies has qualified and competent teaching staff to conduct the study program.
Teachers are responsible for writing teaching materials, tests for pre-exams and final exams, as well as for coordinating all activities aimed at mastering the necessary knowledge. All teachers and associates who participate in the implementation of the study program have experience in preparing materials for distance studies, or have received appropriate training, with adequate certificates as prerequisites for the competence of distance work.

One teacher covers a maximum of three courses per semester. When calculating the minimum number and workload of teachers and associates for the implementation of the study program, the following approach is used:

- the teacher's workload is determined at the level of one group of students, with $50 \%$ of the workload he would have in the case of classical studies.
- the minimum number of teachers required for the implementation of the distance learning program is determined as in the case of classical studies for one group, with the calculated minimum number of teachers burdened with $50 \%$ of the load for classical studies.

The required number of full-time teachers and associates is $70 \%$ of the minimum number of teachers and associates required to carry out the study program. The total required number of teachers and associates is determined as in the case of the classical way of administering studies.

The higher education institution must show the workload for each course through the following categories: lectures and other forms of teaching (interactive work - workload of teachers/associates for the implementation of forums, tests, seminar papers, etc.).
There is a responsible teacher - the head of the study program which is realized by distance learning.
The higher education institution is obliged to ensure the use of adequate media and technologies that correspond to the nature of the program, as well as appropriate training and professional support for teachers and associates.
5.1.21. Administrative and support staff are given the opportunity to improve their skills through participation in trainings, especially regarding information systems and management systems.
5.1.22. If the study program is administered in a world language, the services that work with students must be trained to provide services in that language.

## STANDARD 6. Resources and financing

This standard is aligned with criterion 6 of the Criteria for accreditation of first and second cycle study programs in Bosnia and Herzegovina and standard 1.6 of the Standards and Guidelines for Quality Assurance in the European Higher Education Area (ESG).


#### Abstract

Appropriate human, spatial, technical-technological, library and other resources appropriate to the nature of the study program and the expected number of students are provided for the execution of the study program.


## Guidelines for the application of Standard 6:

6.1. The resources for the implementation of the study program are in accordance with these standards and regulations in the field of quality assurance and are available to students.
6.2. For the implementation of the study program, the higher education institution provides a space whose structure must meet the basic prerequisites for the teaching process and scientific research, namely:

- facilities that provide optimal surfaces of the total useful workspace per one enrolled student,
- amphitheatres, classrooms, laboratories, i.e. other rooms for teaching, as well as library space and reading room, in accordance with the needs of the educational process in the study program,
- appropriate workspace for teachers and associates,
- a place in the amphitheater, classroom and laboratory for every student.
6.3. The minimum areas of the total useful office space per one enrolled student and according to the field of education are:

1. natural and agricultural sciences $3 \mathrm{~m}^{2}$,
2. engineering and technology $5 \mathrm{~m}^{2}$,
3. medical and health sciences $7 \mathrm{~m}^{2}$,
4. social sciences and humanities $2 \mathrm{~m}^{2} \mathrm{i}$
5. art and sport $9 \mathrm{~m}^{2}$.

- The higher education institution provides all the necessary technical equipment for the modern teaching of the study program.
- The higher education institution provides a space that must be accessible for students and professors, as well as other academic and non-academic staff with reduced mobility.
- The library has at least five library units per course relevant to the implementation of the study program of the higher education institution.
- For teaching in a world language, the institution provides at least five library units per course in that language.
- The higher education institution provides coverage of all courses with appropriate textbook literature, teaching aids and aids that are available on time and in sufficient numbers for the normal development of the teaching process of that study program.
- The necessary information technology is provided for the execution of the study program.
- For the execution of the study program of the second cycle of academic studies, except for the field of art, the higher education institution must meet the conditions for conducting scientific research work.
- The higher education institution is obliged to have at least one laboratory with 15 places for every 300 enrolled students for study programs in natural and agricultural sciences, engineering and technology, and medical and health sciences.
- The higher education institution that administers study programs in the field of natural sciences provides additional laboratory space for conducting experimental teaching, conditions for teaching in the field and other conditions in accordance with the needs of the study program in relation to the number of students in courses from which experimental teaching is conducted.
- A higher education institution that administers study programs in the field of medical sciences provides laboratories, i.e. teaching bases for conducting practical classes in preclinical courses, the capacity and size of which correspond to the number of students enrolled and the specifics of studies and courses, so that the capacity is sufficient for a minimum of $20 \%$ from the total number of enrolled students. In order to realize the clinical training of students, the university and the medical faculties within it cooperate with the respective clinics as partners in medical education, for which they conclude a cooperation agreement, in accordance with the law. Clinical bases and clinical teaching capacities fully cover the clinical courses of a specific study program.
- For the implementation of study programs in the field of engineering and technology, the higher education institution provides appropriate educational and scientific bases, which can be its own or in the economy. Own teaching-scientific bases are: teaching laboratories, scientific and research-development laboratories, experimental fields, demonstration facilities, technical centers and other scientific, research-development and innovation units within higher education institutions. Educational and scientific bases in the economy are: institutes, centers of exceptional value, organizations for carrying out innovation activities, organizations for providing infrastructural support for innovation activities and enterprises for the production of food, raw materials, equipment and services. Teaching-scientific bases in the economy are equipped with the necessary measuring, demonstration, computer and information-communication equipment for the performance of teaching activities of an experimental, demonstration and simulation character in all courses within a certain group of scientific-professional and professional-applied courses. In the field of agricultural sciences, the higher education institution provides at least one appropriate demonstration property and demonstration facility. Demonstration properties and demonstartion facilities in the field of agriculture are owned by a higher education institution or used by leasing arable land on which different types of plants are produced and different types of livestock are grown, nursery and seed production, with the application of modern technology supported by quality machinery, in accordance with the requirements of the study programs. Demonstration properties and demonstration facilities in the field of forestry are in the possession of the higher education institution or are used on the basis of a lease, agreement or contract on the use of land, on which different types of forests and forest land are grown, the production of seeds and nursery material is carried out with the application of modern technology, supported quality machinery. The contents of the demonstration properties and demonstartion facilities correspond to the requirements of the study programs carried out by the higher education institution. Higher education institutions that are not in agricultural sciences, but have study programs in agriculture
and forestry, have the same minimum professional practice as higher education institutions in agricultural sciences. For programs in agriculture, the higher education institution must have at least 50 ha of arable land for use, and in forestry 500 ha under forest stands.
- For the performance of the study program in the field of art, special spaces are required depending on the specifics of the art field: workshops, laboratories, space for exhibitions, concert hall, sound and opera studio, theater hall, movie projection hall, film and TV studio, etc. . For the performance of the study program, the necessary equipment for modern teaching is provided, depending on the specifics of the artistic field.
- A higher education institution that organizes second-cycle studies in natural and agricultural sciences, engineering and technology, and medical and health sciences, is obliged to dispose of laboratories for performing scientific research work or to have a contract with an institution that enables the performance of scientific research work. Depending on the type of study program, the higher education institution is required to have laboratories, special equipment, software and classrooms necessary for carrying out the teaching process in these study programs.
- The higher education institution monitors the implementation of the investment plan in physical resources and equipment for scientific-research work and teaching-educational activities.
- The higher education institution provides, through contractual relations with other higher education institutions and research centers, the possibility of using their resources.
- If the study program is administered in a world language, the institution provides teaching material and teaching tools in the language in which the teaching is conducted.
6.4. Distance learning resources (equipment, library and space):
- The higher education institution provides equipment and communication-IT technologies for the establishment and maintenance of two-way communication on the teacher-student line for the realization of educational activities at a distance (parts of classes, consultations, self-tests, knowledge checks as part of pre-examination obligations, projects, seminar papers, etc.) . Within the system for managing the distance learning process, the higher education institution must provide:
- one own, Open Source or leased integrated computer platform that has adequate technical characteristics for distance learning (DLS - Distance Learning System), with specialized software for hosting and distributing multimedia teaching content intended for independent learning (text, audio and video information) and for the complete management of the learning process;
- different forms of teaching: public broadcasting of a time-planned teaching event (broadcasting of lectures or discussions of teachers/experts recorded with the help of live video cameras or a previously made and prepared video), delivery of lectures and multimedia teaching materials from the server and consultations;
- a unique user interface that supports multiple categories of users, including students, teachers and administrative staff;
- the obligation to record the time that the student spends on studying the teaching material and checking and evaluating students using tests, with the support and control of a specialized software package;
- high reliability of the system through an appropriate system of access control and content protection;
- defining the authority for posting materials by teachers and associates, administrative staff and students;
- communication of teachers and associates with students, which includes the use of e-mail, discussion forums and real-time discussions;
- remote monitoring and evaluation of students (self-tests, pre-exam tests, submission of reports, exams);
- recording access to the system by all users.
- The infrastructure of the distance learning system must be designed and maintained in such a way as to ensure the confidentiality and integrity of the data, that is, the continuity of the teaching process.
- The higher education institution provides access to its own or other appropriate libraries, and especially to organizations that specialize in the delivery of textbooks and other educational and scientific publications in electronic form.
- The higher education institution has a space that, in terms of size and conditions, ensures the normal performance of the final exam, the work of the administrative staff and the accommodation and work of teachers
- The higher education institution that administers the study program through distance learning should have an organizational unit (department/center) for distance learning.


## STANDARD 7. Management of information about study programs

This standard is aligned with criterion 7 of the Criteria for accreditation of first and second cycle study programs in Bosnia and Herzegovina and standard 1.7 of the Standards and Guidelines for Quality Assurance in the European Higher Education Area (ESG).

The higher education institution regularly collects and processes information on all aspects of study programs.

## Guidelines for the application of standard 7:

7.1. A system of regular collection and processing of information on all aspects of study programs (on the success rate of students, dropping out of studies, student satisfaction, employability of graduates, etc.) has been established and is used to improve the quality of study programs.
7.2. At the level of the study program, data on the number and age structure of academic staff, gender, the ratio of the number of teachers and students, the ratio of own and visiting staff, as well as data from student surveys and other relevant data are regularly collected and analyzed.

## STANDARD 8. Informing the public about study programs

This standard is aligned with criterion 8 of the Criteria for accreditation of first and second cycle study programs in Bosnia and Herzegovina and standard 1.8 of the Standards and Guidelines for Quality Assurance in the European Higher Education Area (ESG).

The higher education institution objectively and timely informs the public with updated information about all aspects of the study programs.

## Guidelines for the application of standard 8:

8.1. The higher education institution objectively and timely informs the public with updated information about all aspects of the work of the study programs with special reference to the defined objectives of the study programs and learning outcomes.
8.2. Information about teachers and associates (work history, job titles, references) must be available to the public.
8.3. A minimum of $50 \%$ of the total information is also available in English or another world language.

## STANDARD 9. Continuous monitoring, periodic evaluation and revision of study programs

This standard is aligned with criterion 9 of the Criteria for accreditation of first and second cycle study programs in Bosnia and Herzegovina and standard 1.9 of the Standards and Guidelines for Quality Assurance in the European Higher Education Area (ESG).

Procedures have been established for periodic evaluation, improvement and restructuring of study programs that include the opinions of students and other interested parties. Compliance with contemporary world trends and the state of the profession, science and art in the appropriate educational-scientific, or artistic-educational field is taken into account and comparability with similar programs at foreign higher education institutions, especially within the European Higher Education Area.

Guidelines for the application of standard 9:
9.1. The higher education institution periodically evaluates the curriculum, the teaching process, the degree of realization of learning outcomes and their relevance to the labor market by surveying students, academic and administrative staff, and uses feedback for innovation and improvement.
9.2. The higher education institution also evaluates the quality, modernity and availability of resources for the execution of the study program through surveys of students, academic and administrative staff.
9.3. When revising study programs, the latest scientific, artistic, or professional knowledge from the respective field is followed.
9.4. When revising study programs, compliance with at least three accredited programs of foreign higher education institutions, of which at least two are from higher education institutions of the European area of higher education, is taken into account.
9.5. The study program is formally and structurally aligned with established course-specific standards for accreditation, if such standards exist.
9.6. The higher education institution monitors and evaluates the implementation of the internationalization action plan, the benefits from signed agreements on international cooperation, the percentage of foreign students and professors, the number and progress of its students on professional training abroad, the employment of graduate students and more.
9.7. At the level of the study program, a self-evaluation report is prepared at least every two years.

## STANDARD 10. Mobility of academic staff and students

This standard is aligned with criterion 10 of the Criteria for Accreditation of First and Second Cycle Study Programs in Bosnia and Herzegovina.

The study program promotes and improves the mobility of academic staff and students.

## Guidelines for the application of standard 10:

10.1. The mobility of academic staff and students in the study program is promoted and improved through joint applications and participation in projects with other higher education institutions from the country and abroad.
10.2. Mechanisms for achieving bilateral and multilateral exchange of students with foreign higher education institutions through various programs and student exchange networks with recognition of time, grades and ECTS points achieved during the exchange have been established.
10.3. The higher education institution strengthens the personnel and financial capacities of the services for international cooperation and two-way mobility of academic staff and students. This service monitors and evaluates mobility, and prepares an annual report on the mobility of academic staff and students with proposed measures for improvement.

