## STANDARDS AND INSTRUCTIONS FOR ACCREDITATION OF STUDY PROGRAMS OF DOCTORAL STUDIES IN EDUCATIONAL SCIENTIFIC FIELDS

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# **INTRODUCTION - INSTITUTION**

NAME OF THE HIGHER EDUCATION INSTITUTION:											
		FACULTY OF AGRICULTURE									
ADDRESS: NEMANJINA 6, 11080 BELGRADE - ZEMUN											
WEB ADDRESS: www.agrif.bg.ac.rs											
Educational-scientific / educational-art field:											
Mathematical sciences	Art										
Number of accredited	students										
Basic academic studies		3160									
Master Academic Studi		450									
Specialist academic stu	24										
PhD studies	426										
Basic vocational studies											
Specialist vocational studies  Master Vocational Studies											
Total number of studen	4060										
Active teaching classes electronic form	Lectures	Exercises									
Basic academic studies	546,7	594,4									
Master Academic Studi	222,2	176,6									
Specialist academic stu	dies	36	11								
PhD studies		127	1								
Basic vocational studies	s	/	/								
Specialist vocational str	udies	/	/								
Master Vocational Stud	/	/									
Total number of classes	931,9	782									
Total number of active	teaching classes	171	3,9								
Простор Space											
Space, Library		483									
Space, total surface are	a	25961m <sup>2</sup>									
Ratio of total surface ar	rea / total number of stude	25961/4000=6	,49 m <sup>2</sup> /student								
Total number of library process is carried out (b	units in the area from whoase of electronic units)	669	66987								
Total number of computers in computer classrooms 120											

## **Number of teachers**

Number of teachers /teachers' titles	Foreign Language teacher	Skill teacher	Lecturer	Lecturer with no employment contract	Higher lecturer	Prof. for foreign students	Assistant professor	Associate prof.	Full prof.	Researcher	Emeritus	SASA Member	Others
Full-time employees	2						24	49	115				
Part-time employees									1				
Engaged in extra work							3	1	2		·		
Total number	2						27	50	118		·		
Total number of teachers	197												

All teachers and associates engagedin the higher education institution are counted.

## Number of associates

Number of associates / associates' titles	Teaching associate	Associate with no employment contract	Associate for practical teaching / Clinical assistant	Assistant	Assistant with a PhD	Holder of an MESTD scholarship	Junior Researcher	Research Associate	Arts associate	Senior Arts Associate	Independent arts associate	Expert Associate	Senior ExpertAssociate	Independent expert associate	Lectors	Senior lector	Others
Full-time employees	4			38	6	1	11	8									11
Part-time employees																	
Engaged for extra work																	
Total number	4			38	6	1	11	8				•				-	11
Total number of associates 79																	
All teachers and associates engaged in the	All teachers and associates engaged in the higher education institution are counted.																

## **INTRODUCTION:**

Name of the study program	Agri-food value chain
Name of the institution with which the joint study program is organized (if several institutions participate)	
Higher education institution where the study program is being conducted	University of Belgrade – Faculty of Agriculture
Educational-scientific/educational-art field	Technical-technological field
Scientific or art field	Biotechnical sciences
Scope of study expressed by ECTScredits	180 ECTS credits
Name of diploma	Doctor of Science - Biotechnical Sciences
Duration of studies	3 years (6 semesters)
The year in which the study program started	
The year when the study program will start (if the program is new)	2025/2026
Number of accredited students in this study program	
Planned number of students who will enroll in the first year of study (total number – first year x 3) of this study program	60 (20 – first year)
Date when the program was accepted by the relevant body (indicate which)	29.05.2024 Educational and Scientific Council of the Faculty 10.07.2024 The University Senate
The language of the study program	Serbian and English language
Year when the program was accredited	
Web address with information about the study program	www.agrif.bg.ac.rs

**Special standard:** Competence of the higher education institution for conducting doctoral studies

The higher education institution proves its readiness for conducting doctoral studies on the basis of indicators related to scientific research work.

## **Description (max. 100 words):**

Faculty of Agriculture has accredited PhD programs in Serbian language since 2008. Currently the following PhD programs are under accreditation:

- Food Technology (last accreditation 2020)
- Agricultural economy and rural development (last accreditation 2020)
- Agricultural sciences (last accreditation 2020)

In the last five years (period 2018 - 2023), the number of doctoral dissertations defended is 103, and 61 dissertations were defended in the previous three school years. Compared with master students that completed their master studies in the same period of the last three school years (total of 406 master students), the ratio is 0,15 (15%).

There is a total of 269 teachers at the faculty, out of which 230 are fully involved in scientific research projects (85,5%).

During the last ten years, total of 2,666 scientific papers have been published by teachers from this faculty (source: eNauka). As there are 190 active teachers, the ratio is 14,3 publications / teacher.

The faculty has active cooperation with universities, faculties and other scientific and professional institutions from the country and abroad. A great number of teachers (almost 90%) are involved in national and international projects, and the total number of SCI/SSCI-indexed papers for 2020, 2021, 2022 and 2023 is 645 results.

Currently, 59 teachers meet the criteria to be mentors in the preparation of a doctorate for the PhD program in English language.

## standards

## Standard 1: Structure of the study program

Doctoral studies have at least 180 ECTS credits, with a previously completed study scope of at least 300 ECTS credits in basic and master academic studies, or in completed integrated academic studies. The doctoral dissertation is the final part of the doctoral studies study program.

## **Description (maximum 300 words):**

The study program "Agri-food value chain" of the third level of studies is a multidisciplinary PhD program comprising of different aspects of agronomy, food science and technology and agricultural economy. The main objective of this program is to offer a unique PhD program for potential students targeting various aspects within the entire food value chain. It enables students to receive both hard and soft skills related to the research stream of their PhD (student competences, Standard 4) and pave the way for their further advancement in developing their scientific skills. The main outcome is a skilled PhD student capable of performing research on the highest scientific level, from designing the experiment to interpretation of the results.

Upon completion of the studies, the student is granted with a diploma of Doctor of Science - Biotechnical Sciences. The study program lasts 3 year, 6 semesters. Upon completion, students receive 180 ECST credits.

Preconditions for enrollment in the study program is that potential PhD candidates from Serbia have completed at least five years of higher education (master academic studies and/or integrated studies) and are granted with at least 300 ECTS credits. In parallel, they need to have an average score during studies above 8.

In addition, all foreign students need to initiate the procedure for recognition of the documents needed for the enrolment on the doctoral academic studies, in line with the rules of the University of Belgrade (<a href="http://arhiva.rect.bg.ac.rs/en/education/recognition.php">http://arhiva.rect.bg.ac.rs/en/education/recognition.php</a>).

In parallel, before commencing a new academic year, list of active research proposals for doctoral thesis will be posted online on the website of the faculty (<a href="www.agrif.bg.ac.rs">www.agrif.bg.ac.rs</a>) to attract potential students from all over the world. Research proposals will be updated on an annual level (three months before the start of the academic year).

The doctoral academic studies are designed to have four groups of subjects, as follows:

- Research Design is a mandatory curriculum where the student, under supervision of the mentor(s) designs the entire PhD. In parallel, there are three mandatory subjects covering main soft skills needed for young scientist - Writing scientific papers and research dissemination, Intellectual property and patents and Communication and presentation skills.
- Elective subjects are divided into two groups methodological courses and topic specific courses. The methodological courses cover different fields of mathematics, physics, chemistry and biochemistry and sensory analysis. These courses are in the first semester, creating a research basis for the students. Students choose three (3) methodological courses.
- Topic specific courses are directly related to the topic of the doctoral thesis, and out of over 40 courses, students select two (2). The portfolio of courses provides the students with the possibility to choose different aspects of the food value chain, from the farm to the fork.
- Second and third years of the doctoral academic studies are dedicated to research.

List of compulsory and elective subjects as well as their ECTS values is shown in Table 5.1, while subject content in Table 5.2 (Book of subjects).

This program has the capacity to enroll 20 students per year (60 during three years of the program).

At all subjects, knowledge of the students is continuously evaluated by different evaluation methods such as exams, tests, colloquia in line with the teaching process.

To be consistent with the Mobility Program of the EU, all students have the possibility to choose a subject form another University. This is in line with the internal act of the Faculty.

If needed, students have the possibility to choose subjects from similar doctoral studies aligned with this doctoral program and in line with the internal act of the Faculty. These subjects have to contribute to raising competencies of the student.

Students from other doctoral academic programs (in Serbia and abroad) can move to this PhD program, subject to recognition of the program and subjects.

## **Standard 2:** The purpose of the study program

The study program of doctoral studies has a clearly defined and published purpose and role in the education system.

## **Description (maximum 300 words):**

The main purpose of the doctoral academic study program is to offer a multidisciplinary program to students from all around the world that express interest in completing a doctoral thesis from different aspects of agronomy, food science and technology and agricultural economy.

Due to its multidisciplinary curriculum, it enables development of critical thinking of existing knowledge and sheds a pathway towards deploying food science beyond state of the art. It has the potential for research in agronomy, food science, food technology, food sustainability and agricultural economy intertwined with a vast of different methodological courses. It serves to the society by enhancing new breakthroughs in the food value chain cultivating young scientistspublic and governmental institutions, and enabling their future scientific work in different areas.

Bearing in mind that the University of Belgrade is among 100 Academic Ranking World Universities in Food Science & Technology in the last five years, where Faculty of Agriculture plays a significant role and is recognized as a leading institution in south-east Europe, the mission of Faculty is to be a leader in southeast Europe and accreditation of this program serves to this purpose.

#### standards

#### Standard 3: The goals of the study program

The study program of doctoral studies has defined goals.

## **Description (maximum 300 words):**

The main objective of this program is to offer a unique doctoral academic program that utilizes development of hard and soft skills of doctorate candidates associated with different aspect of the food value chain. The program is created to enable development of students' capacities in serving the society as young scientists with multidisciplinary knowledge in agriculture, food science and agricultural economy. The goals are twofold. On one side, young scientists will be skilled in performing research on the highest scientific level, from designing the experiment to interpretation of the results. On the other side, they will be a new generation of experts that will serve as assets to different types of stakeholders in the food chain continuum, working with food producers at different parts of the food supply chain, policy makers, governmental institutions and public bodies, scientific institutions and academia and other interested parties.

Goals of this program are realistic and could be achieved concerning resources, both human and material. Development of the new study program is within the mission of the Faculty which is periodically evaluated in the process of planning and allocating resources. The goals are fully aligned with basic tasks and goals of the Faculty of Agriculture to follow the principles of Bologna and enable students' inclusion in European higher education area and realization of European common agricultural policies.

## **Standard 4: Competencies of graduated students**

By mastering the study program of doctoral studies the students build general and specific research skills that are focused on quality performance of professional and scientific activity.

## **Description (maximum 300 words):**

The doctoral study program enables students to possess knowledge, skills, developed abilities and competencesholding a degree of doctor of biotechnical sciences. During the three years program, the students will perform an independent research work associated with their doctoral thesis. The problem-based approach will improve their skills in recognizing research problems, defining the research idea, setting the research experiment, performing research, understanding the data and interpreting the results.

Where applicable, as part of the doctoral research, students will be engaged in national and international scientific projects performed at the Faculty.

Topic specific courses provide insights into the current state of the art of existing technologies applied in the food value chain and enable research breakthroughs beyond state of the art. These topic specific courses will develop criticalthinking of young scientist developing their creativity and independence.

Mandatory courses related to writing scientific papers and research dissemination will provide students with necessary knowledge about the importance of ethics in science as the main pillar in scientific integrity and how to write and publish a scientific paper.

Mandatory course related to communication and presentation skills will help students in communicating scientific and research results at a professional level through different dissemination activities.

Intellectual property and patents will also be covered as part of a mandatory soft skill course.

The learning outcomes of this PhD program are aligned with the descriptors of the learning outcomes of the *national qualifications framework*, proposed by the National Council for Higher Education and adopted by the Ministry.

## **Attachments for Standard 4:**

#### **Attachment 4.1. Diploma Supplement**

## standards

#### Standard 5: Curriculum

The curriculum includes the list and the structure of compulsory and elective subjects and modules with descriptions and doctoral dissertation as the final part of the study program of doctoral studies.

### **Description (maximum 300 words):**

The doctoral academic program is a three-year program. Upon completion, the students will achieve a total of 180 ECST credits (60 ECST credit a year). The first year is designed to provide lectures and SIR (work research), serving as the basic year in gaining theoretical background for research. Second and third years are designed to enable fully independent research work of a student combining different teaching methods.

The doctoral academic program has both mandatory and elective courses. Joint with the mentors, the first mandatory course is for designing the entire doctoral research program. Other mandatory courses provide soft skills to the students in writing scientific papers, research dissemination, intellectual property and patents and development of their communication and presentation skills.

First group of elective courses are the methodological courses needed for performing the doctoral research. There is a group of 16 courses covering data science, mathematical modelling, physics, physical chemistry, chemistry, biochemistry and sensory science.

Second group of elective courses are topic specific courses directly associated with the doctoral thesis. There are over 40 different courses enabling a combination of different multidisciplinary thesis.

For all courses, goal of the course with expected outcomes are clearly outlined, including requirements for attending the course, content of the course, recommended literature, teaching method, modes of testing the knowledge and evaluation. Depending on the type of course, a variety of different methods are offered comprising of lectures, practical in the laboratory, field trips, interactive teaching/learning methods such as: teamwork, cooperative and collaborative exercises, elements of e-learning. Interactive methods are both, group (debates, workshops, joint learning sessions) and individual (student projects and/or study cases) related to their doctoral research program.

Based on the program, during the first year, elective courses have 31 ECST credits (51.6% of 60 ECST in the first year). As the second and third years are dedicated to independent research, their ECST load is 50,0%(60 ECST out of 120 ECST).

Regarding active lectures, they make 22,17% of all lectures.

Faculty of Agriculture has accredited doctoral academic studies in Serbian language since 2008. Currently the following programs are under accreditation since 2020: Food Technology; Agricultural economy and rural development and Agricultural sciences.

## **Tables for Standard 5:**

Table 5.2. Course schedule by semesters and years of study

### **Attachments for Standard 5:**

**Attachment 5.2.** Book of Subjects (in the documentation and on the institution's website).

#### standards

# Standard 6: Quality, contemporary character and international conformity of the study program

The study program follows the contemporary world trends and the state of the profession and science in the relevant educational and scientific field, it is compliant with the country's strategic priorities and is comparable to similar programs in foreign higher education institutions within the European educational area.

## **Description (maximum 300 words):**

This doctoral academic study program "Agri-food value chain" offer a multidisciplinary curriculum providing the latest scientific knowledge in the fields of agronomy, food science, food technology, food sustainability and agricultural economy.

Since the University of Belgrade is among 100 Academic Ranking World Universities in Food Science & Technology in the last five years, where Faculty of Agriculture plays a significant role, this provides a guarantee that the students will be able to understand current state of the art and go beyond state of the art with their doctoral research.

In line with the strategies of development of education, science and profession in the Republic of Serbia, this program offers a new approach in attracting students from all around the world.

The study program is compatible with similar PhD programs that are delivered at prestigious European universities such as:

- Wageningen University & Research Engineering Doctorate (EngD)
   (<a href="https://www.wur.nl/en/education-programmes/phd-programme/practical-information/training-education.htm">https://www.wur.nl/en/education-programmes/phd-programme/practical-information/training-education.htm</a>),
- University of Porto Faculty of Nutrition and Food Sciences Doctoral Program in Food Science and Technology and Nutrition (https://www.up.pt/portal/en/study/doctorates/courses/),
- Ghent University (https://www.ugent.be/en/research/doctoralresearch),
- University of Copenhagen Faculty of Science (<a href="https://science.ku.dk/phd/">https://science.ku.dk/phd/</a>),
- KU Lueven (<a href="https://research.kuleuven.be/en/career/phd/index">https://research.kuleuven.be/en/career/phd/index</a>),
- University of Valencia (<a href="https://www.uv.es/uvweb/college/en/postgraduate-courses/doctoral-studies/doctoral-programmes-offering-1285957462233.html">https://www.uv.es/uvweb/college/en/postgraduate-courses/doctoral-studies/doctoral-programmes-offering-1285957462233.html</a>),
- University of Granada (https://www.ugr.es/en/study/doctoral-programmes),
- University of Naples Federico II (<a href="https://www.international.unina.it/findaphd-phd-programmes-at-university-of-npales-federico-ii/">https://www.international.unina.it/findaphd-phd-programmes-at-university-of-npales-federico-ii/</a>) и
- University of Bologna Agricultural, environmental and food science and technology (<a href="https://www.unibo.it/en/teaching/phd">https://www.unibo.it/en/teaching/phd</a>).

Conditions and procedures for achieving PhD degree are clearly defined and made public in, both, electronic and printed form, and are in accordance with the main goals of the Faculty. Study program is tuned with the modern concept in similar study programs abroad, especially within the European higher education area. It is aligned with the strategic and specific goals regarding food science in our country and in the EU.

The quality of the program is reflected by the standards requested for the accreditation process. Quality assurance is obtained through continual improvement of the curriculum, annual assessment of the program though a highly interactive process with the students and teachers.

The faculty has developed procedures for quality assurance and assessment through faculty bodies: departments, institutes, commission for quality control and self-evaluation and faculty council. The faculty actively communicates with different stakeholders in the food chain continuum on improving the quality of the program.

## standards

#### Standard 7: Student enrollment

In accordance with the social needs and needs of the development of science, education and culture, and its resources, the higher education institution, enrolls students for the study program of doctoral studies.

## **Description (maximum 300 words):**

Faculty of Agriculture welcomes students from all over the world. All student need to initiate the procedure for recognition of the documents needed for the enrolment on the doctoral academic studies, in line with the rules of the University of Belgrade:

(http://arhiva.rect.bg.ac.rs/en/education/recognition.php).

Number of students enrolling this PhD program is confirmed every year by decision of the Faculty teaching and scientific council. In 2025/26, it is planned to enroll 20 students. This number of students is reflection of the resources available.

All the students have to pay their tuition fee, have to be financed by their governments or need to find financial sources for their tuition. Faculty publishes information related to the entry as well as study program in printed form as well on the faculty web site. In line with internal acts of the faculty, the PhD commission is responsible for the regular entry procedures.

There are no restrictions or discrimination regarding race, sex/gender, sexual orientation, national and social origin, language, religion, political or different opinion, birth and material status and/or handicap for any students. This is guaranteed by Constitution Law.

Selection process covers two main criteria: legibility to enroll (recognition of documents by the University of Belgrade), knowledge of English language.

First precondition for the entry to this study program is that student has 300 ECTS (basic and academic studies or integrated studies), or a similar degree recognized by the University of Belgrade during the recognition process and success achieved during these studies (average rank above 8.0 or 7.5 with at least one publication in a per-reviewed journal with an impact factor).

In case more than 30 students apply, their ranking will be done according to the success in their previous studies, length and equivalence of previous studies.

The foreign student has to know English language at advanced level of C1 or C2, in line with the Common European Framework of Reference (CEFR).

Potential mentor communicates with students before enrollment and pre-selects eligible students for proposed doctoral thesis for that academic year.

## standards

## **Standard 8: Evaluation and progress of students**

Assessment of students is carried out by continuous monitoring of students' work and based on points earned in pre-examination obligations and the exam. The doctoral dissertation is assessed on the basis of the indicator of its scientific contribution.

## **Description (maximum 300 words):**

Examination of students is done according to the previously stated rules, criteria, procedures stated in the Book of regulations for examination procedures and outlined in Table 5.2. for every subject.

Methods of student examination are complementary to the aims and content of the study program. Student outcomes are evaluated during the teaching process and at the final exam. Student attendance to the classes is mandatory and they are motivated to be active during the teaching process and collect point for various activities stated in Table 5.2. for every subject.

Each course will be allocated with at least three (3) hours per week. Each semester will last at least fifteen (15) weeks of teaching, after which, an appropriate time shall be allocated to examinations.

Total points during teaching process and points obtained at the final exam could be maximum 100. Out of this total number of points minimum 30 and maximum 70 could be earned during the teaching process.

Teacher evaluates the knowledge at the final exam with the marks: 10 – excellent-extraordinary, 9-excellent, 8-very good, 7-good, 6-enough to pass and 5-not enough to pass. The final mark is the sum of points from the pre-exam activities and final exam.

Faculty is permanently keeping evidence on student exams. Teachers are obliged to regularly analyze the results of exams, and to suggest measures for improving the examination procedures. Student have, both, right and obligation to participate in this process, to give suggestions on criteria or exam procedures to the faculty Commission for QAA and faculty Teaching-research Council through their representatives or in direct communication with the heads of the departments.

The faculty systematically analyses, evaluates and improves methods of examination, if it is adjusted to the nature of the subject, are learning outcomes evaluated during the teaching process, the ratio between points earned before and at the final exam, criteria for evaluating knowledge application and for the final mark, etc. This is performed on an annual basis.

Faculty also permanently checks student marks in all subjects and takes measures if there are irregularities in the mark distributions (too much high or low marks) in the longer period, if the pass rate is too small etc. Vice-dean for teaching informs faculty's Teaching-research Council on the exam results. The Council also proposes corrective measures if necessary.

Student's Parliament also participates in the analysis of student exam results; study conditions and gives suggestions for improvement. Students may appeal to the faculty Council for lack of transparency in the conduct of examinations, unfair treatment or poor assessment. Any difficulties that staff members have with students should be addressed through the student disciplinary procedures. The number of ECTS credits of each course is determined based on the workload of the student.

The dissertation is the final part of the doctoral studies study program and presents an outcome of an independent scientific research work. As this program fits within the Technical-technological sciences, the condition that need to be met in order to proceed to the defense of a doctoral dissertation is at least one student paper related to the content of a doctoral dissertation, in which that student is the first author, has been published or has been accepted for publishing in a journal with an impact factor from the SCI list or SCIE list. Procedure for the acceptance of the topic of a dissertation can start as of the second semester (first year of the PhD program), as part of the course "Research Design", supervised by the mentor(s).

The assessment of the finished dissertation and the fulfillment of the conditions for a public oral defense are in line with the general act of the University and internal act of the Faculty. Defense of dissertations are public.

## Standard 9: Teaching staff

Teaching staff with the necessary scientific competence is ensured for carrying out the study program of doctoral studies.

## **Description (maximum 300 words):**

The faculty has an appointed responsible person for this doctoral study program (Manager of the PhD program), in line with the internal act of the institution.

Criteria for delivering lectures at the third level of studies (PhD program) are clearly defined in internal act of the faculty (and University act for professor as higher educational institution), andcan be seen in tables 9.6 for all teachers. The criteria clearly outline academic career of the teacher, number of peer reviewed publications published in journal with an impact factor (SCI journals), total number of citation and current participation in national and international scientific research projects.

The competence of teachers is determined on the basis of scientific papers published in international journals (at least three papers in the past ten years published or accepted for publishing in the journal with impact factor from the SCI list, or SCIE list). In addition, to deliver lectures at doctoral academic studies in English language, teachers have to provide evidence of speaking, reading and understating English language in line with internal act of the faculty.

In total 61teachers have fulfilled the criteria whose competencies for teaching in doctoral studies are proven. All of them are involved in at least one scientific research project. Workload of all teachers is according to the standards. All teachers are permanent staff at the faculty. All teachers are PhDs (must have a qualification at least of the level being sought by the candidate) and have knowledge and research ability in the discipline. The number of teachers with a suitable number of teaching hours is appropriate for achieving quality in the teaching process (thesis supervision and tutorials, delivery and assessment of training activities).

All teachers are full time employees at this faculty. There are no visiting professors. As for professor emeritus, they can participate in all forms of teaching, be a mentor and a member of the commission in the process of drafting and defending doctoral dissertations.

A mentor can be a person elected to a teaching profession: assistant professor, associate professor, full professor, professor emeritus that is employed at the Faculty of Agriculture.

The role of thesis mentor is supervision and directing the research tasks conducted by the PhD student. The thesis mentor is the most competent teacher ensuring the coherence and suitability of training activities, of impact and development in the field and of the topic area of the PhD thesis. The aforesaid individual is also in charge of ensuring the aptness of the PhD students for the projects and activities they sign up for.

Criteria for mentors are that they have at least five (5) publications in the past ten yearsin line with the topic of the dissertation and published in peer-reviewed journals with an impact factor journal (Table 9.8). A total of 59 teacher are listed as potential mentors fulfilling the criteria. The mentor can lead up to five doctors at the same time.

#### **Tables for Standard 9:**

<u>Table 9.6.</u> Competence of the teacher.

<u>Table 9.8.</u> Competence of the mentor.

## Standard 10: Organizational and material resources

For the execution of the study program, relevant HR, spatial, technical and technological, library and other resources are provided that are relevant to the character of the study program of doctoral studies and the number of students enrolled.

## **Description (no more than 300 words):**

The faculty has evaluated its capacities for the new doctoral academic studies "Agri-food value chain", in line with its resources and budget. As previously mentioned, there is tuition for all students for this doctoral program. All research activities that will be performed for the doctoral thesis will be financed from the tuition, from cooperation that this Faculty has with other scientific institutions in Serbia and abroad, and from scientific projects performed by mentors of the thesis.

The faculty consists of 29 departments with over 30 different laboratories covering all aspects of agricultural production and food technology such as crop science, fruit science and viticulture, animal science, soil management, phytomedicine, agricultural engineering, food technology, agricultural economics, sustainable agricultural production and food sustainability.

Total area of the faculty building is 25.961 m<sup>2</sup>. Teaching is performed in 2 shifts which satisfy the need for students of all three levels of studies. In addition to that students have school estate and library as well as learning platform Moodle and MS Teams. Library has all teaching material: textbooks, scripts, monographs. In parallel, there is an e-Library with literature in electronic format (mainly pdf) holding over 100 eBooks. Also, there is aninstitutional digital repository of the University of Belgrade, Faculty of Agriculture (AgroSpace - https://aspace.agrif.bg.ac.rs).

Faculty has positive financial results in the period longer than 3 years and the financial plan during the study programme.

#### standards

#### **Standard 11: Quality control**

For the study program of doctoral studies, the higher education institution regularly and systematically conducts quality control through self-evaluation and external quality control.

#### **Description (max. 100 words):**

Faculty has strategy for quality assurance and assessment for all aspects of its work: teaching, science and management. The document is publicly available. Faculty has a Commission for quality assurance. Quality control is realized regularly by external evaluation and by self-assessment. Commission for Quality assurance is in charge of these processes and report annually.

All department, institutes and management are fully involved in this process.

Students are also involved in these activities. At the end of every term, students evaluate the teaching process as well as examination procedures. Students are also involved in the process of permanent improvement of teaching, development of evaluation methods etc. Conditions and infrastructure are provided for regular collection and processing of data required for external quality control.

## **Standard 12: Transparency**

The higher education institution provides public access to the study program and doctoral dissertation as final work of doctoral studies.

## **Description (max. 100 words):**

The doctoral academic study program "Agri-food value chain" is accredited in Serbian and English language. All teachers and staff who participate in this study program have the appropriate language competencies for teaching in English, and all of them have proof of compliance with this requirement of the standard. During the accreditation period, teachers and assistants will systematically improve their language and other competencies and obtain relevant evidence. The Faculty of Agriculture has an e-Library with over 100 digital units in English, as well as the necessary teaching materials. Faculty services are trained to provide services in English, as well as to issue bilingual public documents and administrative documents in Serbian and English.

Once completed, the doctoral thesis and report of the doctoral Committee is publicly available in the library of the Faculty (in hard copy) and on the web site of the Faculty (<a href="https://agrif.bg.ac.rs/sr/fakultet/uvid-javnosti/doktorske-disertacije">https://agrif.bg.ac.rs/sr/fakultet/uvid-javnosti/doktorske-disertacije</a>) and official web site of the University of Belgrade (<a href="https://uvidok.rcub.bg.ac.rs/">https://uvidok.rcub.bg.ac.rs/</a>).

AgroSpace (https://aspace.agrif.bg.ac.rs/) is the institutional digital repository of the University of Belgrade, Faculty of Agriculture. It provides open access to electronic versions of defended doctoral dissertations, publications and other research outputs resulting from the projects implemented by the Faculty of Agriculture. The software platform of the repository is adapted to the modern standards applied in the dissemination of scientific publications and is compatible with international infrastructure in this field.

University library "SvetozarMarković" forms a register and digital repository of the University (<a href="https://phaidrabg.bg.ac.rs/">https://phaidrabg.bg.ac.rs/</a>) for storing electronic versions of defended doctoral thesis, joint with the final report of the doctoral Committee, mentor(s) and member of the Committee. The same library also keeps a hard and soft copy of the doctoral thesis (<a href="http://www.unilib.rs/">http://www.unilib.rs/</a>).

## standards

#### Standard 13: Studies in the foreign languages

The higher education institution may organize a study program of doctoral studies in a foreign language for each field and every educational-scientific field, if it has HR and material resources for teaching in accordance with the standards.

## **Description (maximum 300 words):**

As the doctoral academic study program "Agri-food value chain" is delivered in Serbian and also in a foreign language (English language), all criteria are fulfilled. Teaching staff have provided evidence of competences for teaching in English. The e-Library has over 100 eBooks associated with the curriculum. In parallel, when needed, laboratories will provide clear instructions in English for the foreign students.

Service staff that is in contact with the foreign students at the doctoral academic level of studies has adequate competences in English.

All public documents and administrative documents are issued on abilingual form, in Serbian in Cyrillic scriptand English.

During the enrolment process, proficiency in English language of foreign students will be checked.

As this program is accredited in both English and Serbian languages the calculation of teachers 'and associates' load, as well as in determining the required space, the total number of students in both languages is taken into account. However, this program is treated as one study program.

All standards, the diploma supplement, a course book and a teacher's book are provided in both Serbian and English language.

**Attachment 13.1**. Documentation in the world language (item 13.9 of the Instruction).

<u>Attachment 13.2.</u> Documentation in Serbian and the world language (if accredited for both languages)

<u>Attachment 13.3.</u> Evidence that the requirements of the Instruction for applying Standard 13 have been met.

<u>Attachment 13.4.</u> Evidence of the relevant competencies of teachers and associates for teaching in that language.

#### Level of language competence:

- Competency Level Advanced Certificate = C1 according to the Common European Framework of Reference for Languages (CEFR). For English: Cambridge Advanced Certificate in English (CAE)/IELTS (International English Language Testing System.
- that they have completed any degree of university education in a given language;
- that they have a completed one semester study stay or mobility stay in the given language;
- that they have lecture by invitation at an international conference where the given language is an officiallanguage;
- thatthey had a guest lecture in the given language (enclosed certificate).

**Attachment 13.5**. Evidence of student competencies in a foreign language in which the study program is being conducted.- **NOT APPLICABLE** 

#### Level of language competence:

Certificate of Competence Level: Higher Medium = B2 according to the Common European Reference Framework for Languages (CEFR).

For English: Cambridge Advanced Certificate in English (CAE)/IELTS (International English Language Testing System).