

МИША АНАСТАСИЕВИЧЪ СВОМУ ОТЕЧЕСТВУ.

1963

***undergraduate and  
integrated studies***

University of Belgrade



# Introduction

We have a great pleasure to introduce you to a catalogue of all undergraduate academic and integrated academic study programs which are available at the University of Belgrade.

The University of Belgrade is the oldest university in Serbia, well-known for its tradition and quality of education, which lasts for more than 200 years. Maintaining a high level of education and practical experience provided to our students has always been, and will always remain, our top priority. What is interesting to know about our University is that the member faculties are not all located on one campus, but scattered all over the city of Belgrade, the capital of the Republic of Serbia. This gives studying here a unique experience, because students can be in touch with the life of the city itself, not only student life on the campus. The University of Belgrade represents a powerful higher education institution of 31 Faculties, 11 Institutes, 9 Centers and a University library, which all work together on achieving academic excellence.

This catalogue aims to provide information about study programs, such as their objectives, goals, outcomes, number of credits, as well as details regarding the admission requirements. For a more detailed description of a specific study program, please refer to the web page of the University and the member faculties, as well as the provided contact information.

Please note: In this catalogue all study programs have been translated into English. However, this does not mean that the language of instruction is automatically English; for the majority of programs it is Serbian. Look carefully for the information about the language of instruction for each individual study program.



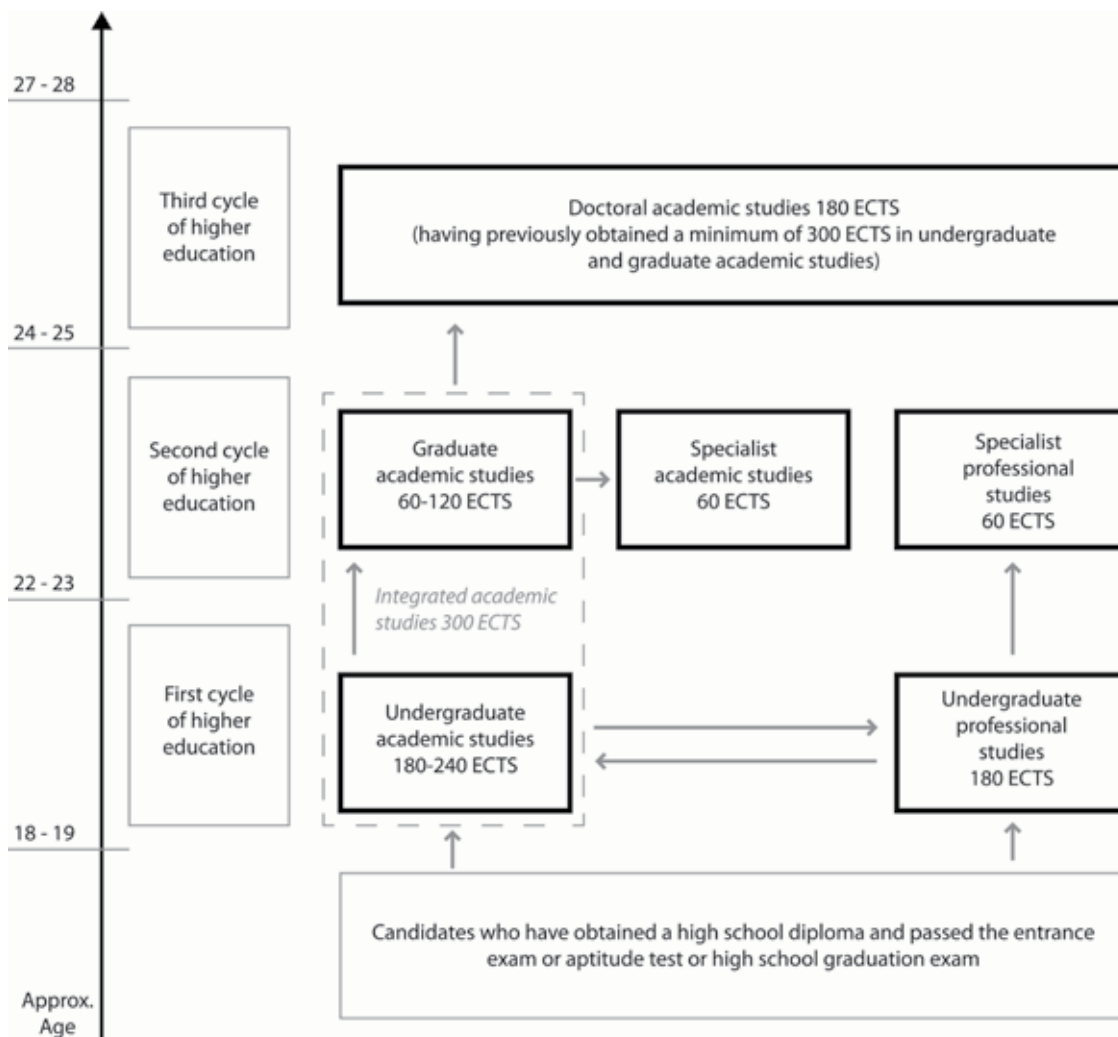
# The System of Higher Education

Students' success in the exams is reflected by the following grades:

- 10 – remarkable;
- 9 – excellent;
- 8 – very good;
- 7 – good;
- 6 – satisfactory;
- 5 – failed.

There are six exam terms which are organized in accordance with the annual plan of exams of a higher education institution. Exam schedule is made at the beginning of an academic year.

Undergraduate academic and integrated academic study programs are completed after passing all required exams and fulfilling other study obligations, which in some cases may include writing the final paper and its public defense, as defined by the particular study program.



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# Faculty of Economics



# Economics, Business Management and Statistics

at Faculty of Economics, 6 Kamenička, 11000 Belgrade, [www.ekof.bg.ac.rs](http://www.ekof.bg.ac.rs)

ECTS: 240/ DEGREE: GRADUATE IN ECONOMICS

## Study program content

The study program of undergraduate studies "Economics, Business Management and Statistics" lasts four years and ensures 240 ECTS. It is a complex study program consisting of nine modules. It has been created in accordance to the latest accomplishments of the economic science and contemporary practice of Europe's and the world's most famous faculties, as well as following to the needs of our economy and society.

Human and material resources of the Faculty have been guaranteeing for a successful realization of the program. The concept of this study program strictly followed the relevant standards given by the National Council for Higher Education. "Economics, Business Management and Statistics" has been defined as an integral and comprehensive study program in compliance with other Faculty's programs. It is a set of compulsory and optional study areas - modules, i.e. of the subjects with general contents. After passing the exams a student acquires required knowledge for gaining the professional title Graduate in Economics (Bachelor in Economic).

## Study program goals

The goal of the study program is the education of professionals whose general competence would be broadened by comprehensive insight into academic knowledge and practice within economics, business management and statistics. In functional terms, the goal of the study program is to offer to the students of the Faculty of Economics basic knowledge, the concepts, strategies and the skills of contemporary research, creation, planning, realization, monitoring and control of economic and business phenomena and issues, basing on the behavioral as well as on a strong and reliable quantitative - statistical grounds. This general aim and orientation gradually evolve, depending on optional module, cycle and student's educational level. On the other hand, the program goal is to offer required competencies for performing economic and analytic jobs in enterprises, profit and non-profit organizations, as well as in state offices and institutions, both on national and international levels.

## Study program outcomes

Students are to acquire basic information and guidelines on economics, business management and statistics, both in theoretical and practical terms. These three viewpoints enable them to understand the role and importance of optimization of the relations between investment and the effects, both on macro and micro level.

The study program deals with basic principles of efficient functioning and progressive development, which have crucial and orientation role in a lifetime perspective of individuals, families, entrepreneurs, small, medium or large enterprises, profit and non-profit organizations, state, international or global organization or institution.

The student who gets to know, understand, recognize in practice and apply basic principles of economic logical functioning and progressive growth and development, in any sphere of application, should not worry about his/her future. The final competencies are additionally profiled by study modules and sub-modules, which students can choose and finalize.

## Modules

At the undergraduate level, the Faculty of Economics offers a composite study program lasting for four years (240 ECTS), titled "Economics, Business Management and Statistics". It is comprised of nine modules:

1. Economic analysis and policy,
2. Marketing,
3. Accounting, auditing and financial management,
4. Trade management and marketing,
5. Finance, banking and insurance,
6. Statistics, informatics and quantitative finance,
7. Tourism and hotel industry,
8. Management,
9. International economics and foreign trade.

This module-structured study program gradually directs students to the desired outcome - gaining of adequate set of general and professional competencies.

## Admission requirements

The prerequisites for admission imply previously acquired high school education through four-year program, as well as the passing of compulsory entrance exam which consist of a general knowledge part (three subjects: history, geography, sociology) and of one test from an optional subject (mathematics, informatics and computing science, principles of economics, business economics).

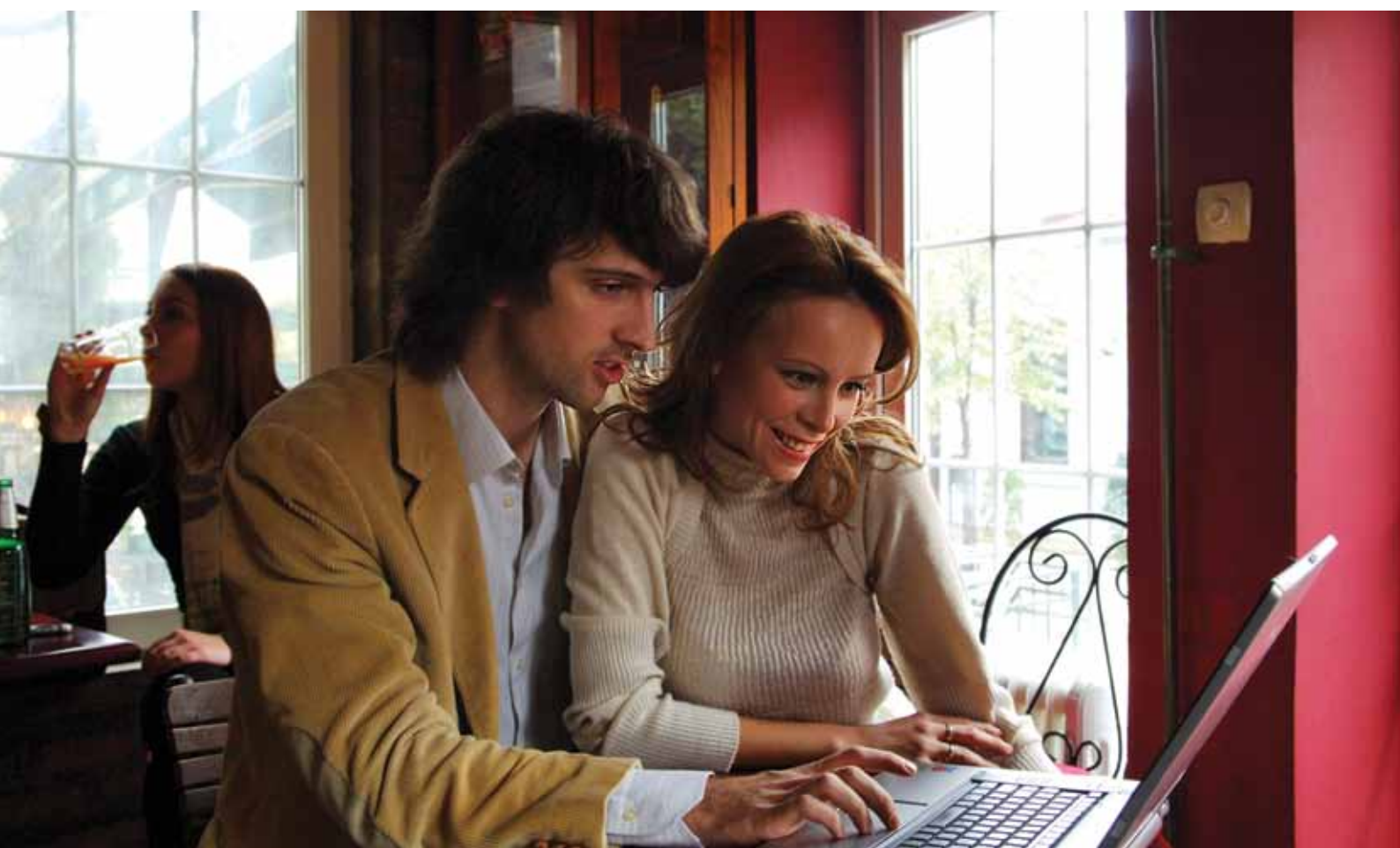
## Contact

Head of the study program:

Branislav Boričić, PhD

Telephone: +381 11 302 12 22

Contact e-mail: [dekanat@ekof.bg.ac.rs](mailto:dekanat@ekof.bg.ac.rs)





ПРАВНИ  
ФАКУЛТЕТ

Faculty of Law

# Law

at Faculty of Law, 67 Bulevar kralja Aleksandra, 11000 Belgrade, [www.ius.bg.ac.rs](http://www.ius.bg.ac.rs)

ECTS: 240/ DEGREE: BACHELOR OF LAWS WITH HONORS

## Study program content

Basic academic studies last four years and their successful completion brings diploma of higher education and the title Bachelor of Laws with Honours. The goal of the basic academic studies program is to enable students to develop and apply scientific and professional achievements in the field of legal science and profession. The program provides acquirement of theoretical knowledge and skills necessary for conscious, competent and professional performing of legal affairs demanding appliance of legal knowledge and skills (in judicial system, economy, public administration and local self-government, public services, NGO sector, international organizations etc.). The program provides such competences that enable students to continue their studies, not only at the University of Belgrade - Faculty of Law, but also at other law and related faculties in Serbia and abroad.

## Study program goals

The main goal of the study program of basic academic studies is education of future lawyers in a way to reach competences, capacities and skills for professional and responsible performing of the activities of legal profession, as well as for gaining knowledge, capacities and skills necessary for participation in further educational process in order to achieve higher level of knowledge (master, specialist and doctoral studies). The aim of the study program is also that students adopt scientific and professional methodology (which is) needed to acquire and apply knowledge, scientific and professional achievements in the field of law and related scientific and professional disciplines.

## Modules

Judicial-Administrative Module, Business Law Module, International Law Module, Legal Theory Module

## Study program outcomes

Upon the completion of studies the student acquire capacities (knowledge and skills) which enable further professional and scientific improvement, movement toward master academic studies and specialist law studies (and related disciplines). Successful completion of the basic academic studies, allows student to reach general legal knowledge and skills, as well as fundamental competence and understanding of the Constitutional Law, disciplines of the Civil Law family, Criminal Law, International Law, Administration Law, Business Law, Public Finances and Finance Law.

## Admission requirements

Completed four years of high school and passed entrance examination.

## Contact

Head of the study program:  
**Prof. Dr. Vladan Petrov**  
Telephone: +381 11 302 77 21  
Contact e-mail: [vpetrov@ius.bg.ac.rs](mailto:vpetrov@ius.bg.ac.rs)



# Faculty of Orthodox Theology

# General Theology

at Faculty of Orthodox Theology, 11b Mije Kovačevića, 11060 Belgrade, [www.bfspc.bg.ac.rs](http://www.bfspc.bg.ac.rs)

ECTS: 240/ DEGREE: BACHELOR OF THEOLOGY WITH HONORS

## Study program content

Study program consists of:

1. Academic - general education courses – which allow students to gain knowledge in the area of social-humanistic sciences,
2. Theoretical-methodological courses in the area of Theology and Pedagogy,
3. Scientific-specialist courses which focus on the narrow area of Theological sciences and
4. Specialist-applicative courses in the areas of Theology, foreign languages and Pastoral Theology.

Basic Academic Studies of Theology – General Theology program of studies requires mandatory attendance at lectures and passing 5 out of 12 elective courses which are freely chosen by students.

## Study program goals

Fundamental goal of the study program of Basic Academic Studies of Theology – General Theology is to educate future theologians by enabling them to gain competences and abilities for concrete ministries and services in the areas of ecclesial and social life, and to develop necessary knowledge and abilities to engage in further studies within the educational process, i.e. master and doctoral studies. It is also the goal of the study program to enable the students to adopt the necessary scientific and specialist methodology which would allow them to gain and apply knowledge, scientific and specialist achievements in the area of Theology, contacting and complementary scientific, and specialist disciplines.

## Study program outcomes

Students who complete the study program of Basic Academic Studies of Theology – General Theology gain following general competences: ability to analyze and synthesize, and to predict solutions and consequences within the domain of Theology; ability to apply methods, procedures, and to implement research activity in accordance with

scientific methodology; ability to practice critical and self-critical opinion; ability to apply gained knowledge in practice; communicational abilities and proficiency; ability to cooperate both within the immediate social environment and in an international setting; a developed professional ethics.

## Admission requirements

Completed four year Secondary school, passed entrance examination, and a written blessing of their bishop for enrollment.

## Contact

Head of the study program:  
**Rodoljub Kubat, ThD, Associate Professor**  
Contact e-mail: [kubatr69@yahoo.de](mailto:kubatr69@yahoo.de)

# Practical Theology

at Faculty of Orthodox Theology, 11b Mije Kovačevića, 11060 Belgrade, [www.bfspc.bg.ac.rs](http://www.bfspc.bg.ac.rs)

ECTS: 180/ DEGREE: BACHELOR OF THEOLOGY

## Study program content

Basic academic practical studies enable the students to research, to transfer and advance Theology as the learning of the Church and the science of faith and to encourage a creative dialogue of Theology with complementary and contacting disciplines. Study program consists of:

1. Academic- general education courses – which allow students to gain knowledge in the area of social-humanistic sciences;
2. Theoretical-methodological courses in the areas of Theology and Pedagogy;
3. Scientific-specialist courses concentrated on a narrow field of Theological sciences;
4. Specialist-applicative courses in the areas of Theology, foreign languages and Pastoral Theology.

## Study program goals

Fundamental goal of the study program of Basic Academic Studies of Theology – Practical Theology is to educate future theologians by enabling them to gain competences and abilities for concrete ministries and services in the areas of ecclesial and social life (with a special accent on the applicative dimension), and to develop necessary knowledge and abilities to engage in further studies within the educational process, i.e. master and doctoral studies. It is also the goal of the study program to enable the students to adopt the necessary scientific and specialist methodology which would allow them to gain and apply knowledge, scientific and specialist achievements in the area of Theology and complementary scientific and specialist disciplines.

## Study program outcomes

Students who complete the study program of Basic Academic Studies of Theology – Practical Theology gain following specific competences: fundamental knowledge and understanding of Theology as a scientific discipline and the subject of Theology within general and specific transversal and longitudinal frameworks; ability

to apply gained knowledge within all forms of professional activity; ability to prepare, organize and perform religious instruction in primary and secondary schools, to perform sacerdotal duties in all of their dimensions - missionary, liturgical, pastoral, catechetical, etc., to participate competently in the activities of institutions of culture, media, the state, non-governmental and other organizations; ability to use information-communication technologies; ability to follow up on the new results of scientific research and to have them applied; ability to popularize Theology as a scientific discipline and a general Christian cultural-intellectual heritage; ability to further specialist knowledge and skills in all forms of professional activity, and to continue studies at a higher level of education - master studies.

## Admission requirements

Completed four year secondary school, passed entrance examination, and a written blessing of their bishop for enrollment.

## Contact

Head of the study program:  
**Predrag Dragutinović, ThD, Associate Professor**  
Contact e-mail: [pedja35@hotmail.com](mailto:pedja35@hotmail.com)

ЖЕНСКА УЧИТЕЛСКА ШКОЛА КРАЉИЦЕ МАРИЈЕ

Teacher Training  
Faculty



# Graduate Academic Studies in Preschool Teaching

at Teacher Training Faculty, 43 Kraljice Natalije, 11000 Belgrade, [www.uf.bg.ac.rs](http://www.uf.bg.ac.rs)

ECTS: 240/ DEGREE: BA IN PRESCHOOL TEACHING

## Study program content

The study course lasts four years (8 semesters) and is based on lectures, practice lessons, individual student work and professional praxis. The curriculum includes general, pedagogical-psychological and methodological subjects.

## Study program goals

The goal of the study course is providing students with education and professional training for successful work in preschool institutions. For this goal to be achieved, students acquire knowledge and skills related to: the child's nature and ways of encouraging children's development; teaching techniques and interaction patterns in work with children; recognition and appreciation of children's needs; forms of cooperation with children, parents, other preschool teachers, associates and the local community; identification and exploitation of resources (in the preschool institution and wider); procedures of individualization and respect for the rights for differences and peculiarities in children and their parents; principles of inclusion in education.

## Study program outcomes

Graduate students should:

- organize and realize pedagogical and educational work with preschool children;
- create socio-emotional atmosphere that encourages children to feel safe and guarantees positive personality development;
- create favorable conditions for optimal physical, socio-emotional and cognitive development, for good communication and creativity;
- enrich the cultural context in which the children are growing;
- improve children's physical development, speaking skills, as well as drama and art creative skills;
- support children in acquiring basic concepts regarding the living and material world, time and space, shapes, qualities and quantities related to concepts, processes and objects;
- prepare children for entering the educational process.

## Admission requirements

Completed four-year secondary education, test of speaking, musical and physical skills of eliminatory character, and the entrance exam consisting of the test in the Serbian, i.e. native language and literature and the general knowledge test.

## Contact

Head of the study program:

**Prof. Dr. Aleksandar Jovanović**

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# Graduate Academic Studies in Primary School Teaching

at Teacher Training Faculty, 43 Kraljice Natalije, 11000 Belgrade, [www.uf.bg.ac.rs](http://www.uf.bg.ac.rs)

ECTS: 240/ DEGREE: BA IN PRIMARY SCHOOL TEACHING

## Study program content

The study course lasts four years (8 semesters) and is based on lectures, practice lessons, individual student work and professional praxis. The curriculum includes general, psychological-pedagogical, school and methodological subjects.

## Study program goals

The goal of the study course is providing students with education and professional training for successful work in primary schools (class-teaching) and affiliating institutions. Students are trained for and their competences built in: school subjects and teaching methodologies; teaching and learning; providing support to students in their personality development; communication and cooperation; self-evaluation and professional development.

## Study program outcomes

Graduate students should:

- be capable of independent planning, performance and evaluation of the teaching process based on educational standards and syllabi;
- know and understand the nature of learn-

ing, different learning and teaching styles and strategies;

- understand and accept intellectual, physical, social, emotional and other individual characteristics and differences among students;
- be well trained for cooperation with students, parents, teachers and other participants in the educational system;
- be trained for self-evaluation, critical self-reflection and continual professional development.

## Admission requirements

Completed four-year secondary education, test of speaking, musical and physical skills of eliminatory character, and the entrance exam consisting of the test in the Serbian, i.e. native language and literature and the general knowledge test.

## Contact

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Head of the study program:

**Prof. Dr. Aleksandar Jovanović**

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Contact e-mail: [dekanat@uf.bg.ac.rs](mailto:dekanat@uf.bg.ac.rs)



[ФБ]

УНИВЕРЗИТЕТ У БЕОГРАДУ  
ФАКУЛТЕТ БЕЗБЕДНОСТИ  
UNIVERSITY OF BELGRADE  
FACULTY OF SECURITY STUDIES



Faculty of Security  
Studies

# Security

at Faculty of Security Studies, 50 Gopodara Vučića, 11000 Belgrade; [www.fb.bg.ac.rs](http://www.fb.bg.ac.rs)

ECTS: 240/ DEGREE: SECURITY MANAGER

## Study program content

The curriculum of the undergraduate academic security studies has been designed as highly multidisciplinary curriculum. It consists of 28 compulsory and 32 optional courses, professional practice and final paper. It has been designed so as to enable students to acquire knowledge in the fields having theoretical and strategic importance for the development of civil society and human resources. Students can also study certain subjects essential to management, human resources management implementation as well as those dealing with security, defense and protection management.

## Study program goals

The purpose of this curriculum is to create security managers having interdisciplinary knowledge and various skills in the field of security studies with potential to improve them and move forward in their academic career. It also includes the development of their creative capacity as security managers to analyze security problems, to be capable of critical and analytical thinking, of cooperation with others within a team, of communication and of acquiring certain practical skills essential to their profession.

The basic goal we want to achieve at the study group Security studies is to provide students with theoretical and practical knowledge on social and other types and sources of security threats, on the very essence, organization and functioning of security system, with its proactive and reactive aspects. Students should acquire competence to be able to successfully manage security tasks in large companies, various institutions both in government and in private sector.

The goal of the curriculum is to enable and strengthen the academic and professional competence of students vital for their engagement in the fields of defense, protection, security, and human and social resources management in civil sector, in the capacity of executives or officers in central, regional, or local administration, in large economic systems, small and medium enterprises and private companies, institutions

for scientific research, educational centers, the non-profit sector, humanitarian organizations, inspection authorities, the media, etc.

## Modules

Four optional study groups with 8 optional courses each:

- Optional study group 1 - Security Studies;
- Optional study group 2 - Human and Social Resources Studies;
- Optional group 3 - Civil Protection and Environmental Protection Studies;
- Optional group 4 - Defense Studies;

## Study program outcomes

By studying subjects within this curriculum students acquire general and subject-specific knowledge and skills enabling them to take effective part and be successful in their professional career in the field of security studies, social and human resources studies, civil protection and environmental protection studies and defense studies.

General competence and skills of the graduates include the development of critical thinking and ability to analyze current security issues, their ability to apply the knowledge and to keep up with the latest achievements, to resolve crises on all levels and cooperate with local and international institutions. As far as subject-specific skills and competence are concerned, security managers are capable of performing a number of tasks and taking posts in the field of security studies, the most important among them being:

- in government administration, in charge of security issues;
- in security services and inspection authorities and as officers in charge of public and national security;
- in companies and institutions, in charge of security systems for individuals, assets and business;
- in the field of security planning on all levels (companies, municipalities, regions, republic);
- in developing security studies, analyses, as-

- assessments and plans;
- in government administration in the field of human and social resources management;
- in civil defense, civil protection and environmental protection and security in the field of human and social resources management;
- in the field of management in the humanitarian sector;
- in the field of emergency management;
- in the field of risk management in companies and environment;
- in the field of integrated protection systems management;
- in inspection authorities;
- in the field of protection measures planning;
- in civil defense management in Serbia, on a regional and local level;
- in the field of expert evaluation of population vulnerability and endangerment, as well as of their assets and other values;
- in the field of planning the use of available resources in emergency and war situations;
- in the field of civil protection measures implementation control in times of peace and war;

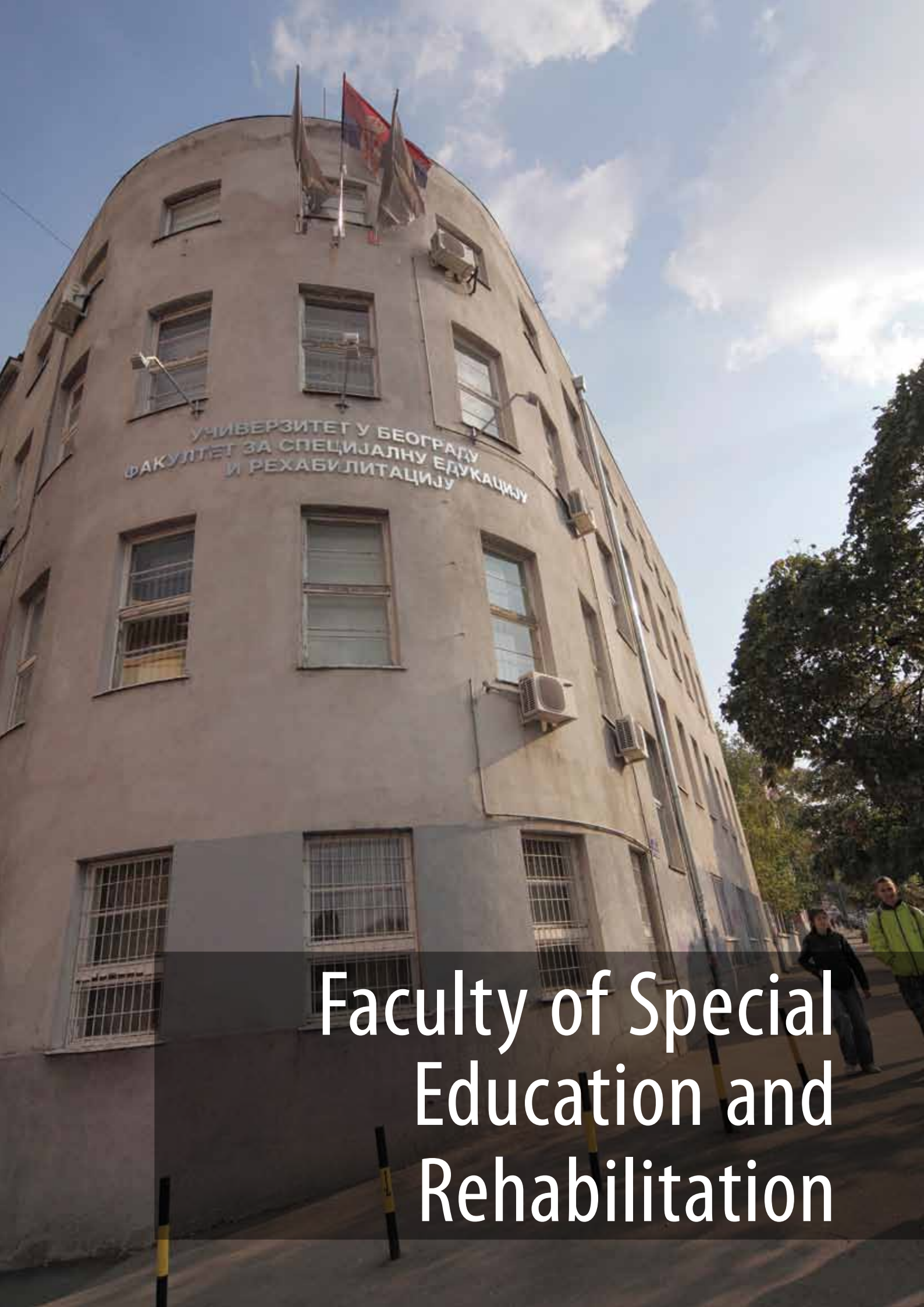
### Admission requirements

Completed four-year high school education.

### Contact

Head of the study program:  
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 Telephone: +381 11 645 18 58  
 Contact e-mail: [kentaur.hiron@gmail.com](mailto:kentaur.hiron@gmail.com)





УНИВЕРЗИТЕТ У БЕОГРАДУ  
ФАКУЛТЕТ ЗА СПЕЦИЈАЛНУ ЕДУКАЦИЈУ  
И РЕХАБИЛИТАЦИЈУ

# Faculty of Special Education and Rehabilitation

# Speech and Language Pathology

at Faculty of Special Education and Rehabilitation, 2 Visokog Stevana, 11000 Belgrade, [www.fasper.bg.ac.rs](http://www.fasper.bg.ac.rs)

ECTS: 240/ DEGREE: BACHELOR OF SPEECH-LANGUAGE PATHOLOGY WITH HONORS

## Study program content

The study program of Basic Academic Studies in Speech-Language Pathology requires passing 27 subjects, that are common to other study programs.

The study program consists of 16 compulsory two-semester and 17 one-semester courses and 20 elective one-semester subjects, of which students take 10 subjects. Teaching is conducted through lectures, exercises, other forms of teaching and mandatory vocational practice during the fourth year of studies. The purpose of the study program in Speech-Language Pathology is education in the field of speech disorders, language and communication, in order to ensure successful performance of tasks in speech-language pathology through the development of its own quality assurance system.

## Study program goals

The goals in Speech-Language Pathology (Logopedics) program are aimed at the acquisition of academic knowledge and skills related to the field of speech, language and communication disorders and rehabilitation of persons with speech and language function disorders, in accordance with international standards.

Speech and language development of scientific ideas through research and education of logopedics should enable these professionals to independently perform the detection, prevention and diagnosis of speech and language disorders, habilitation and rehabilitation of persons with speech and language function disorders, as well as improving standards in the field of special education and rehabilitation. The ultimate goal is to create quality experts and scholars in the field of speech, language and communication disorders, who need to adopt the highest professional standards.

## Study program outcomes

Speech-Language Pathology study program prepares professionals for the following: to work on prevention, detection, diagnosis and

treatment of human communication disorders, which presupposes all the processes and functions related to speech production and comprehension of spoken and written language and nonverbal aspects of communication. Specifically, this course educates professionals to work on prevention, detection, diagnosis and treatment of: articulation disorders, developmental speech and language disorders, developmental disorders of school (academic) skills (dyslexia, dysgraphia), stuttering, aphasia and related disorders (dysarthria, apraxia, agnosia, acalculia) and voice disorders. In addition, these professionals are trained in diagnosis and treatment of communication disorders in people with many disorders (persons with intellectual disability, cerebral palsy, visual impairments, autism), to work on the rehabilitation of speech in people with impaired hearing, to work with persons with multiple disabilities, for the diagnosis and treatment of language disorders and maintenance of communication skills of people with dementia and cerebral changes that accompany aging, for working on developing additional and alternative means of communication.

## Admission requirements

A four-year secondary education is required for the enrollment in Basic Academic Studies: the gymnasium, medical, economic or other secondary schools, whose educational programs relate to the studies. An important requirement for admission is the result achieved on the admission exam.

## Contact

Head of the study program:  
**Prof. Nadica Jovanović-Simić**  
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# Prevention and Treatment of Behavioral Disorders

at Faculty of Special Education and Rehabilitation, 2 Visokog Stevana, 11000 Belgrade, [www.fasper.bg.ac.rs](http://www.fasper.bg.ac.rs)

ECTS: 240/ DEGREE: BACHELOR OF SPECIAL EDUCATION AND REHABILITATION WITH HONORS

## Study program content

Basic Academic Studies in Prevention and Treatment of Behavioral Disorders last four years, with a total of 240 ECTS or 60 ECTS credits per year. Annual student load is 690 active lessons during the first year of studies, 750 lessons during the second year, 720 lessons during the third year and 645 lessons during the fourth year. Teaching is conducted through eight semesters (30 ECTS Points each) during the period of 30 working weeks per year. The study program consists of 52 subjects, of which student needs to complete 41 subject (30 are compulsory and 22 are elective). During the third and fourth year of studies, students attend a vocational practice of two weeks, which is implemented under the supervision of teachers, assistants and coordinators from institutions. Students engage in activities of prevention, assessment and treatment of persons with behavioral disorders with the application of acquired knowledge and skills, and work evaluation.

## Study program goals

The goals of the program are: to acquire knowledge on the etiology, phenomenology and the consequences of behavioral disorders; mastery of knowledge and skills in the areas of universal, selective and indicated prevention of behavioral disorders; to acquire knowledge necessary for the implementation of assessment and the potential need to apply the treatment to persons with various forms of behavioral disorders; mastery of knowledge and skills in the field of planning and programming of preventive, educational and corrective actions; mastery of knowledge and skills in the field of vocational guidance, training and social reintegration of people with behavioral disorders; development and improvement of professional ethics and humanistic approach to the problems of people with behavioral disorders, as well as youth and adult offenders; developing social and pedagogical skills of acting in the local community and wider social environment.

## Study program outcomes

Bachelor expert is qualified to work on prevention, detection, assessment, early intervention, treatment, social reintegration of persons with behavioral disorders, as well as on strengthening their social environment. The competence areas of our specialists are modification, education, upbringing, socialization, rehabilitation, social control and social inclusion of individuals at risk for behavior disorders or with the clear presence of behavioral disorders. Study program is developing knowledge and skills especially in the following areas: prevention and treatment of behavioral disorders of children in preschools and schools; institutions for children with disabilities and children without parental care, institutions for mental health, prevention of juvenile delinquency, crime, addictive and other antisocial behavior, penal and post penal treatment of juvenile and adult offenders in institutional and non-institutional environment; rehabilitation of addictive behavior; protection of the crime victims.

## Admission requirements

A four-year secondary education is required for the enrollment in Basic Academic Studies: the gymnasium, medical, economic or other secondary schools, whose educational programs relate to the studies. An important requirement for admission is the result achieved on the admission exam.

## Contact

Head of the study program:  
**Prof. Dr. Zoran Ilić**  
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# Special Education and Rehabilitation of Persons who are Deaf and Hard of Hearing

at Faculty of Special Education and Rehabilitation, 2 Visokog Stevana, 11000 Belgrade, [www.fasper.bg.ac.rs](http://www.fasper.bg.ac.rs)

ECTS: 240/ DEGREE: BACHELOR OF SPECIAL EDUCATION AND REHABILITATION WITH HONORS

## Study program content

The study program in Special Education and Rehabilitation of Deaf and Hard of Hearing consists of 54 subjects, of which student needs to complete 44 subjects (34 compulsory and 20 elective, of which 10 subjects are to be selected). Elective subjects are divided into 10 groups. Teaching is conducted through lectures, exercises and other teaching forms.

The program provides the compulsory professional (vocational) practice during the third and fourth year. With the help of coordination and supervision of teachers, assistants and coordinators from the institutions where their professional practice is taking place, students will engage in educational process, in certain aspects of clinical work and treatment of deaf and hard of hearing persons, which will enable the creation of quality experts in the field of Special Education and Rehabilitation – Surdology.

The main goal of the study program is the education of students in Special Education and Rehabilitation of Deaf and Hard of Hearing persons, in order to ensure a successful performance of professional duties in surdology, by developing its own quality assurance system. Faculty for Special Education and Rehabilitation, Department of Surdology in particular, will seek to continually improve the quality of its educational, professional and scientific activities, abiding standards that represent the highest level and that are set in the developed countries.

## Study program goals

The goals of the Special Education and Rehabilitation of Deaf and Hard of Hearing persons study program are directed to the acquisition of academic knowledge and skills related to the field of Special Education and Rehabilitation of Deaf and Hard of Hearing persons, in accordance with international standards at the level of undergraduate studies.

Development of scientific ideas in surdology, through research and education, should enable special educators and rehabilitators to independently perform the detection, prevention, diag-

nosis, habilitation, rehabilitation and educational work with the deaf and hard of hearing persons, and improve standards in the field of special education and rehabilitation as well. The ultimate goal is to create high-quality professionals and scientists in the field of surdology, and enable them to adopt the highest professional standards.

## Study program outcomes

Special educator and rehabilitator is qualified to:

- recognize the characteristics of deaf and hard of hearing persons, work on early detection, work in the clinics that provide services in diagnostics of hearing, habilitation, rehabilitation and development of individual rehabilitation programs, evaluation of the deaf and hard of hearing persons;
- work in the preschool classes, preschool classes in schools for deaf and hard of hearing children, in elementary and secondary schools for the deaf and hard of hearing and to participate in the development of individual educational programs in boarding schools that accommodate deaf and hard of hearing children, in workshops dealing with the professional training of deaf and hard of hearing and in the professional organizations of deaf and hard of hearing;
- also, special educator and rehabilitator is trained to work with deaf and hard of hearing children with multiple disabilities, as well as with deaf and hard of hearing children in the regular education system, has the capability to use modern information technology to work with this population, deals with the adult deaf and hard of hearing persons in all aspects of their lives and creates and maintains appropriate documentation.

## Admission requirements

A four-year secondary education is required for the enrollment in Basic Academic Studies: the gymnasium, medical, economic or other secondary schools, whose educational programs relate to the studies. An important requirement for admission is the result achieved on the admission exam.

## Contact

Head of the study program:

**Prof. Dr. Nadežda Dimić**

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# Special Education and Rehabilitation of Persons with Physical Disabilities

at Faculty of Special Education and Rehabilitation, 2 Visokog Stevana, 11000 Belgrade, [www.fasper.bg.ac.rs](http://www.fasper.bg.ac.rs)

ECTS: 240/ DEGREE: BACHELOR OF SPECIAL EDUCATION AND REHABILITATION WITH HONORS

## Study program content

The study program in Special Education and Rehabilitation of Persons with Motor Disorders consists of 42 subjects, of which 80% are compulsory and 20% are elective, and a vocational practice during the third and fourth year of studies, and a compulsory final exam at the end of the study program. The study program is based on the traditional theory of biological, psychological and social unity of people with disabilities, including persons with physical disabilities and efforts to involve them to the community. It is an affirmative approach to persons with disabilities, persons with physical disabilities and chronic illnesses, based on the activation of the potential and reorganization of motor function in order to integrate them to the community.

## Study program goals

The goals of Basic Academic Studies program are aimed at the achievement of professional competences for work in the field of educational and clinical practice with people with physical disabilities, i.e. preparation and mastery of basic skills in the field of education, health and social care of people with motor disorders (physical disabilities, chronically ill and persons with multiple disabilities) of all ages and categories. By mastering the learning content in the tangent fields, students acquire basic knowledge of: the intellectual disability; the field of biology of motor and cognitive functions; the functioning areas of persons with visual and hearing impairments; the speech-language areas of communication; methods of medical rehabilitation.

## Study program outcomes

Such expert is a holder of professional services in the areas of prevention, detection, diagnosis, habilitation-rehabilitation programs, education, vocational training, and the objectives of these specialists are people with central and peripheral nervous system impairments, damages to the bone-joint system, chronic illness, disability, i.e. psychomotor disturbance, motor behavior disorders occurring in other disabilities (sensory, mental, etc.).

Mastering the specific methods of working with children of preschool age with motor impairments, special-pedagogical practices of educational and remedial work with children of school age, methods of vocational guidance for people with physical disabilities, special-pedagogical methods and clinical approaches to overcoming the effects of physical disability, provides qualified personnel for the duties and tasks of an educator in special educational groups and social care facilities, a primary school teacher in schools for the education of children with physical disabilities, an expert associate in regular preschool and primary institutions, as well as primary special schools and a medical associate in health institutions with the habilitation-rehabilitation programs.

## Admission requirements

A four-year secondary education is required for the enrollment in Basic Academic Studies: the gymnasium, medical, economic or other secondary schools, whose educational programs relate to the studies. An important requirement for admission is the result achieved on the admission exam.

## Contact

Head of the study program:

**Prof. Dr. Dragan Rapaic**

Contact e-mail: [rapdrag@gmail.com](mailto:rapdrag@gmail.com)

# Special Education and Rehabilitation of Persons with Visual Impairments

at Faculty of Special Education and Rehabilitation, 2 Visokog Stevana, 11000 Belgrade, [www.fasper.bg.ac.rs](http://www.fasper.bg.ac.rs)

ECTS: 60/ DEGREE: BACHELOR OF SPECIAL EDUCATION AND REHABILITATION WITH HONORS

## Study program content

Basic Academic studies in Special Education and Rehabilitation of Persons with Visual Impairments last four years or eight semesters, valued at 240 ECTS. The study program consists of 54 subjects (courses). Students actively attend 43 courses (32 compulsory and 11 elective) and a professional (vocational) practice. Subjects belong to categories of academic and general education, theoretical and methodological, scientifically technical and professionally applicable. The total number of active teaching lessons per year is 2895. The credit value of the compulsory subjects ranges from 3 to 9 ECTS, and the elective subjects from 3 to 5 ECTS. Lectures, exercises and other forms of teaching are conducted by using modern methods and create positive conditions for the active attitude of students toward teaching contents. Vocational training is compulsory (fourth year students) and includes practical, educational and rehabilitation work with visually impaired persons.

## Study program goals

The goals of Basic Academic Studies Program in Special Education and Rehabilitation of Persons with Visual Impairments are focused on achieving professional competencies for working in the fields of education, clinical work, and social education and rehabilitation of persons with visual impairments with or without multiple disabilities. Students acquire basic academic knowledge, as well as professional skills and abilities, that enable them to follow modern approaches to work and be able and willing to respect the facts and accordingly deal with the specific problems, to apply theoretical concepts and conclusions in a variety of situations in the education and rehabilitation practices. As the population of people with visual impairments is highly heterogeneous, it requires transdisciplinary skills, that allow special educators to establish certain principles and, above all, respect for the special and individual.

## Study program outcomes

Completion of Basic Academic Studies program in Special Education and Rehabilitation of Persons with Visual Impairments provides competence and professional skills for: corrective-pedagogical and educational work with children with visual impairments of preschool and school age; educational and rehabilitation work with children with visual impairments and other disabilities in mainstream and special schools and centers; tactile/kinesthetic training and literacy in Braille; program development of visual perception for persons with visual impairments; professional orientation for persons with visual impairments and education for independent movement; functional diagnosis and rehabilitation of visual functions; testing the monocular and binocular visual function in the early detection of amblyopia, strabismus, and visual impairment; orthoptic therapy for various forms of strabismus and binocular vision disorders; pleoptic therapy for functional visual impairment, diagnosis and correction of refractive errors; application of optical devices in ametropia; education in the use of optical aids; rehabilitation counseling and social integration of persons with visual impairments; work programs for children with visual impairments with multiple disabilities; typhlotechnics and ICT in the rehabilitation.

## Admission requirements

A four-year secondary education is required for the enrollment in Basic Academic Studies: the gymnasium, medical, economic or other secondary schools, whose educational programs relate to the studies. An important requirement for admission is the result achieved on the admission exam.

## Contact

Head of the study program:

**Prof. Dr. Branka Jablan**

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# Special Education and Rehabilitation of Persons with Intellectual Disabilities

at Faculty of Special Education and Rehabilitation, 2 Visokog Stevana, 11000 Belgrade, [www.fasper.bg.ac.rs](http://www.fasper.bg.ac.rs)

ECTS: 240/ DEGREE: BACHELOR OF SPECIAL EDUCATION AND REHABILITATION WITH HONORS

## Study program content

The study program is aimed at training students for the implementation of primary and secondary programs in prevention, education, vocational training and rehabilitation of persons with intellectual disabilities.

Studies last four years, with a total of 240 ECTS, 60 ECTS credits per year.

The program consists of 54 subjects, of which student needs to complete 44 subjects (34 compulsory and 20 elective, of which 10 subjects are to be selected). Elective subjects are divided into 10 groups. Plan and program of Basic Academic Studies is accomplished by performing teaching, which consists of lectures, exercises and practical (vocational) training.

## Study program goals

- Mastering the knowledge and skills in the areas of primary and secondary prevention of problems in mental development.
- Acquiring knowledge and skills necessary for the implementation of specific aspects of clinical assessment and clinical treatment of persons with intellectual disabilities.
- Mastering the knowledge and skills in the field of the education process of persons with intellectual disabilities.
- Acquiring knowledge and skills necessary for the implementation of the educational process of children and youth with intellectual disabilities.
- Mastering the knowledge and skills in the field of vocational rehabilitation and social integration of people with different types and levels of intellectual development disorders.

## Study program outcomes

Basic Academic Studies provide students with: knowledge about the causes, prevalence, incidence, types, levels, methods of expression and the consequences of difficulties in mental development, knowledge and skills in the areas of pri-

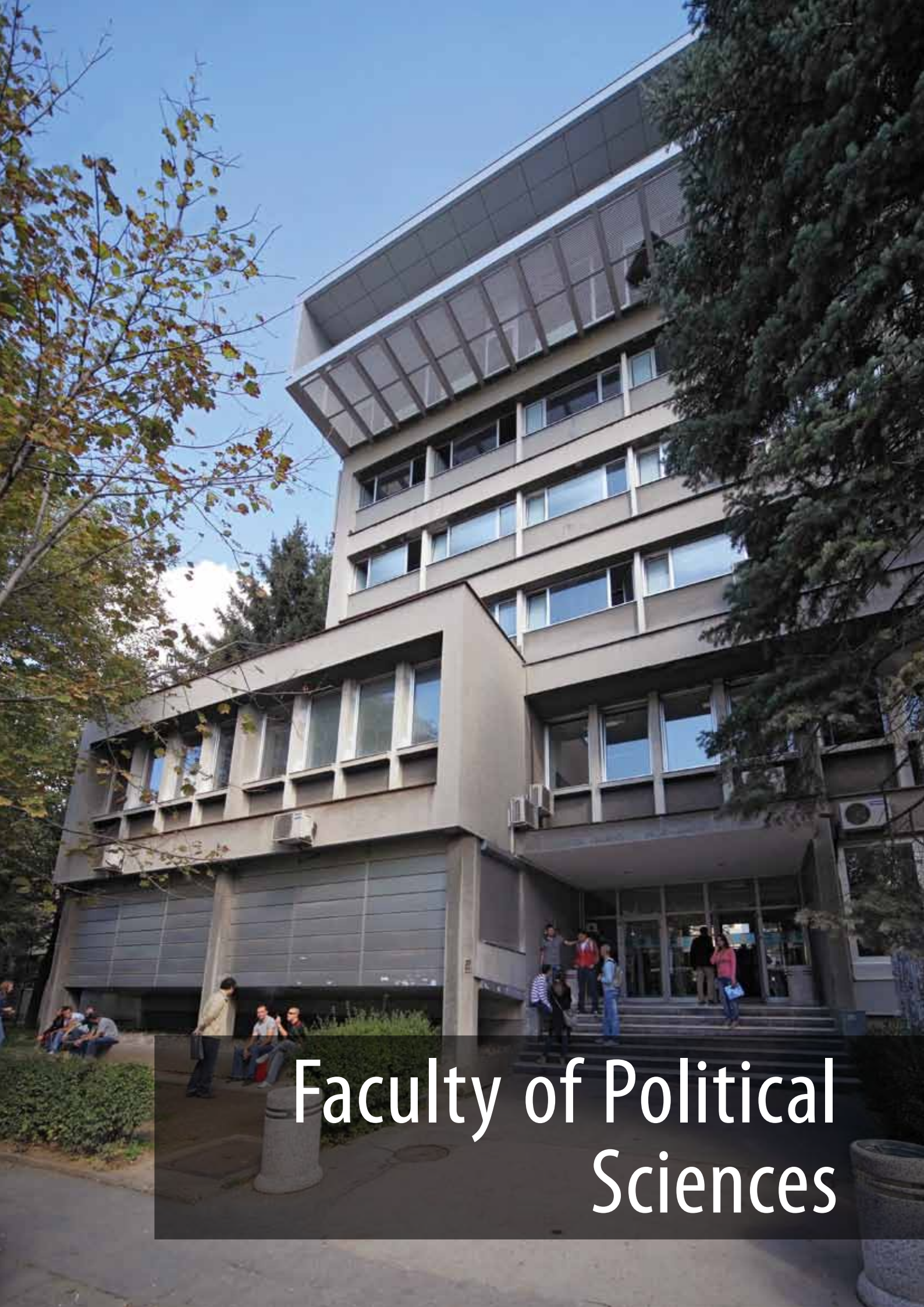
mary prevention, early intervention, specific aspects of clinical assessment; individual support and clinical treatment of people with intellectual disabilities; knowledge and skills in the field of education, vocational training and employment of persons with intellectual disabilities; knowledge and skills in assessment and treatment of people with autistic disorder, specific learning disabilities and multiple disabilities, ability to cooperate with parents and promote the rights of persons with intellectual disabilities.

## Admission requirements

A four-year secondary education is required for the enrollment in Basic Academic Studies: the gymnasium, medical, economic or other secondary schools, whose educational programs relate to the studies. An important requirement for admission is the result achieved on the admission exam.

## Contact

Head of the study program:  
**Prof. Dr. Svetlana Kaljača**  
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# Faculty of Political Sciences

# Political Science

at Faculty of Political Sciences, 165 Jove Ilića, 11000 Belgrade, [www.fpn.bg.ac.rs](http://www.fpn.bg.ac.rs)

ECTS: 240/ DEGREE: BA WITH HONORS - POLITICAL SCIENCE

## Study program content

Upon completing the four-year studies of political science, students will master diverse general educational, theoretical-methodological, academic professional and professional applicative knowledge and skills. Besides the political science courses in the narrow sense, students will pass examinations in philosophy, history, sociology, economy, law, psychology and other tangent and complementary fields which will enable them for understanding and critical thinking of contemporary complex political phenomena, relations and processes at the local, regional and global level.

## Study program goals

Improvement of the existing and acquisition of new theoretical and practical knowledge and skills in the fields of political theory and political system, political violence and state, political sociology and analytics, as well as relevant scientific disciplines; Training for specific professional knowledge enabling professional work on tasks of analyst and organizer in public authorities, political parties, local self-governance, public services and corporations; Acquisition of advanced knowledge of political phenomena and processes and manners of explanation of social development and changes, for the sake of critical understanding and active approach to dealing with system, structural and organizational aspects of functioning of political institutions and processes; Acquisition of knowledge of local, regional, supranational and global dimensions of politics, political relations, political processes and political institutions; Training for specific professional knowledge enabling professional work on tasks of analyst and organizer in public authorities, political parties, local self-governance, public services and corporations; Training of experts for the tasks of political decision-making and management, organization of tasks in various fields of political action, increase of the level of political culture and formation of democratic public.

## Study program outcomes

Upon completing the studies, students will gain detailed insight in contemporary theoretical and methodological basis and approaches from the field of political science disciplines, have a comparative review of contemporary theoretical concepts as the grounds for commencing their work in social practice. They will acquire thorough knowledge and skills of research in the field of political science, i.e. political theory and political institutions, i.e. studies of political violence and state, as well as studies of political sociology and analytics, including critical adoption of research in practice and ethical application of relevant research paradigms.

They will be trained for independent performance of the largest portion of complex tasks in institutions dealing with political issues, as well as for eventual independent and team research within the framework of several fields of political studies. In addition, they will be able to independently plan and realize various concrete tasks and monitor effects of these procedures and correct them if necessary. They will be trained for independent or team implementation of methods pertaining to disciplines of international studies in analysis and resolution of concrete problems our society will face with in the political field.

## Admission requirements

Completed four-year secondary education; passed entrance examination.

## Contact

Head of the study program:

**Prof. Dr. Nenad Kecmanović**

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# International Studies

at Faculty of Political Sciences, 165 Jove Ilića, 11000 Belgrade, [www.fpn.bg.ac.rs](http://www.fpn.bg.ac.rs)

ECTS: 240/ DEGREE: BA WITH HONS. - INTERNATIONAL STUDIES

## Study program content

The program offers a comprehensive education in the entire field of international studies, from its theoretical to its applied areas, supporting the development of individual interests and talents. Students are enabled for comprehensive understanding of historical development and actual nature of international structures, institutions, processes and events. Students get thoroughly introduced with present international system and its key actors, as well as with situation in and the most important features of world society and world processes and their main actors.

The program provides students understanding and adoption of main concepts, approaches and theories in all particular fields of international studies necessary for training them for systematic analysis, interpretation and assessment of international issues and developments. It systematically develops the students' capacities in four separate fields, i.e. according to their affinities, students may choose to gain particular knowledge and develop their research and practical capacities and most important skills in the fields of: international and foreign policy, diplomacy, law and economy; in the field of European integration; in the field of studies and practice of maintenance of peace and non-violent conflict resolution; in the field of international and national security.

## Study program goals

The main goal of the study program of international studies is to train students to use the obtained knowledge on past and actual diversity of the world of international living at global and regional realm and in specific sectors of international affairs for understanding, analysis, assessments and practical work. Students shall obtain comprehensive, thorough knowledge of the most important factors of dynamics and structure of international system, main patterns of permanence and changes of international relations, the most important theoretical explanations and key international processes that will enable them to develop capacities of qualified judging on realistic possibilities and limitations in initiating, making and implementing various

decisions pertaining to international developments. Students shall improve their critical and analytic skills, practical capacities and creative affinities for particular fields of international activities.

## Study program outcomes

Upon successful completion of this study program, students shall be able to understand the nature, goals and meaning of international activity, tasks and assignments as the developments important in global, regional, national and local sense. They will be able to apply knowledge and show understanding of historical development and contemporary nature of international system and international processes. They will master the models and theories used in various particular fields of international studies, implementing them in analysis of various international plans and proposals, practices and numerous concrete issues at the global and regional level. They will master the capacity of assessment of diverse interpretations of international developments and assessments of their possible consequences for sustainability of international order, stability of international system and regional and national development, security and peace. They will acquire particular knowledge and skills related to one of the following fields: international politics, European integration, peace studies and security studies.

## Admission requirements

Completed four-year secondary education; passed entrance examination.

## Contact

Head of the study program:  
**Prof. Dr. Predrag Simić**

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# Social Policy and Social Work

at Faculty of Political Sciences, 165 Jove Ilića, 11000 Belgrade, [www.fpn.bg.ac.rs](http://www.fpn.bg.ac.rs)

ECTS: 240/ DEGREE: BA WITH HONORS - SOCIAL WORK

## Study program content

Undergraduate academic studies of social policy and social work encompass four-year study program of 240 ECTS. The program implies common basis during the first three years of studies and two elective modules from the fields of social policy and social work. The four-year studies offer basic knowledge of social phenomena and processes and key knowledge from the field of social policy and social work. Students are trained for practical work in social, healthcare, educational, judicial and administrative services and authorities, where they will implement the acquired knowledge and understanding in a professional manner recognizing the purpose, goals, principles and ethic postulates of the profession of social work; the acquired knowledge enables them for continuing of studies as well.

## Study program goals

Acquisition of elementary knowledge in sociology, psychology, political science, law and economy, for the sake of understanding of the nature, structure and manner of satisfaction of human needs; understanding of the manner of emerging of contemporary social problems and the responses of social policy thereto; acquisition of knowledge and understanding of theoretical-methodological concepts of the basics of national and comparative social policy; acquisition of knowledge on key concepts and theories of welfare, implying the theories and methods of comparative analysis and their implementation in international context; introduction with functioning, financing and legal regulation in the field of social security, education, healthcare, social protection and housing policy; introduction with manners in which the state attempts to satisfy the needs of population, as well as assessment of performances of state interventions and their impact on beneficiaries; acquisition of knowledge and understanding of theoretical-methodological concepts and bases of social work; acquisition of general knowledge and skills of social work with individuals, families, groups and communities; introduction with contemporary theoretical approaches and scientific

findings in the field of social policy and social work; introduction with practical aspects of social work and development of skills necessary for direct work with individuals and social groups; building of professional identity and adoption of value basis of social work; acquisition of knowledge on sources of data on social system, and the insight into key methods used in research.

## Study program outcomes

Upon completing the studies, students will master basic theoretical concepts from the field of social policy and social work, as well as from relevant scientific disciplines. They will acquire knowledge of key concepts of the theories of society, processes and actors of functioning of society and social change, theories of human development and behavior in social environment and interaction of biological, psychological, social-structural, economic, political and cultural factors. They will be familiar with the politics, legal bases and services of social protection and social security mechanisms at the local, state and international level. They will master basic research methods and procedures of data collection, systematization and analysis. They will be training for team and independent application of basic developmental, preventive and protective psycho-social interventions, data collection, planning and evaluation of direct work with individuals, families, groups and communities.

## Admission requirements

Completed four-year secondary education; passed entrance examination.

## Contact

Head of the study program:

**Prof. Dr. Ana Čekerevac**

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# Journalism and Communication Studies

at Faculty of Political Sciences, 165 Jove Ilića, 11000 Belgrade, [www.fpn.bg.ac.rs](http://www.fpn.bg.ac.rs)

ECTS: 240/ DEGREE: BA WITH HONORS - JOURNALISM

## Study program content

Undergraduate academic studies of Journalism and Communication is a four-year study program of 240 ECTS. The program encompasses academic general education courses, theoretical-methodological, academic professional and professional applicative courses.

The set of academic general education courses includes courses from the fields of sociology, philosophy and psychology. Theoretical-methodological group consists of disciplines of political science, economics, anthropology, cultural studies, communication studies and methodology. Academic-professional courses teach media academic disciplines, as well as disciplines of political science, international studies and environmental protection. Professional-applicative disciplines include courses from journalistic disciplines and skills and specific legal disciplines and skills.

## Study program goals

The goal of the study program is to train students for the professions and for scientific-research and pedagogical institutions dealing with these professions or requiring them as logistic and expert support. In order for this goal to be achieved, students are offered knowledge from general education courses, theoretical-methodological, academic-professional and professional-applicative courses. The aim is to provide students with professional education as broadly, profoundly and completely as possible. Another goal is to provide them, upon the completed studies, with sufficient theoretical and practical knowledge and skills for quality work in the relevant institutions.

## Study program outcomes

Upon the completion of studies, student shall be provided with knowledge and skills and capable for independent professional performance of journalistic tasks in printed and electronic media. They shall also have knowledge necessary for carrying out editorial, managerial, presenter

roles, PR experts and other posts for the needs of future modern media system of Serbia and contemporary communication systems. Interdisciplinary education shall enable students to get involved into scientific-research institutions dealing with media, public opinion polls, various kinds of management, drafting of communication strategies, informative-analytic tasks and pedagogic activities. Students shall also master the knowledge from theory and practice of social communication and skills required for professional participation in the process of public and mass communication via media and internet. They shall be trained not only for work in communication institutions, but also for occupations such are: cultural attache at diplomatic-consular offices, media planner in media, spokesperson in governmental authorities, public administration, political parties and corporations, and as associates in the Office for free access to information of public importance.

## Admission requirements

Completed four-year secondary education; passed entrance examination.

## Contact

Head of the study program:

**Prof. Dr. Čedomir Čupić**

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Contact e-mail: [cedomir.cupic@fpn.bg.ac.rs](mailto:cedomir.cupic@fpn.bg.ac.rs)

ФАКУЛТЕТ СПОРТА  
И  
ФИЗИЧКОГ ВАСПИТАЊА

Faculty of Sport  
and Physical Education

# Physical Education and Sport

at Faculty of Sport and Physical Education, 156 Blagoja Parovića, 11000 Belgrade, [www.dif.bg.ac.rs](http://www.dif.bg.ac.rs)

ECTS: 240/ DEGREE: GRADUATE PROFESSOR OF PHYSICAL EDUCATION AND SPORT

BACHELOR OF SPORT AND PHYSICAL EDUCATION (BSPE)

## Study program content

Study program contains 5 mandatory (4 one-semester and 1 two-semester), 8 elective courses and graduation thesis. The program is conducted in a manner characteristic for the study of physical education, sport and recreation. The classes are implemented in the facilities of the Faculty, a part of teaching (practical exercises and professional practice) is done in sports clubs, schools, representative teams, as well as other institutions with which the faculty has agreed cooperation. In addition study program provides depth knowledge of analytical and diagnostic processes are studied in the individual case.

For this study program through the acquisition of practical knowledge and skills is particularly emphasized education and training of students for independent work, and work in research institutions and institutions dealing with development, management and control in the field of sports. Professional and pedagogical practices are conducted in schools, sports clubs, as well as other institutions with which the faculty has agreed cooperation.

## Study program goals

Study program physical education and sports aimed at the formation of a competent and independent experts, in accordance with modern trends in education in the world, with respect to claims related to the processes on which modern education is based. The objectives of the study result from the perception of the state of science and engineering in the country, as well as the need for the provision of academic and professional staff in the field of physical education and sport.

The function of the competence of students, study program includes a series of general education, theoretical-methodological and scientific subjects which are a condition for the understanding and realization of professional application subjects.

The program aims to familiarize students with the interdisciplinary profession and successfully

linking knowledge in different educational areas and to enable students, through its implementation of practical and theoretical exercises to gain knowledge on the basis of direct involvement.

## Study program outcomes

Upon completion of the study program of physical education and sport at basic academic studies, the students shall be qualified for work in:

- school physical education (classes and extracurricular activities) at all educational levels,
- sport (theory and technology of the selected sport, general jobs in system of sport),
- recreation / sports recreation (organization and technology of recreational processes).

Educational outcomes of the basic academic studies of physical education and sport are the following competences:

- PE educational work at all instruction levels: preschool, elementary and high school age, university students,
- work in all forms of physical education and school sport system,
- work in sport or recreation based on the competences resulting from knowledge acquired through studying of a selected elective course,
- analyzing and problem solving in professional processes (physical education, sport, recreation),
- application of methods, procedures and processes in teaching methods and work technology,
- knowledge application in practice and advanced training,
- socio-cultural-professional communication with entities from closer and broader environment,
- advanced training and further institutional education,
- application of the Ethical code of the profession,
- usage of modern information-communication technologies in professional domain.

### Admission requirements

Completed 4-year high school and entrance examination passed.

### Contact

Head of the study program:

**Prof. Dr. Saša Jakovljević**

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# Faculty of Philosophy

# Andragogy

at Faculty of Philosophy, 18-20 Čika Ljubina, 11000 Belgrade, [www.f.bg.ac.rs](http://www.f.bg.ac.rs)

ECTS: 240/ DEGREE: B.A. IN ADULT EDUCATION (ANDRAGOGY)

## Study program content

In the course of the studies, student is obliged to take 38 exams, of which 27 are in required subjects and 11 are in elective subjects (chosen from the list of foreign languages, besides six more lists of elective courses), and also to complete his or her professional practice during the 8th semester, gaining in that way 240 ECTS (60 per year). All the courses are one-semester.

## Study program goals

The main goal of a Bachelor's study program in Andragogy is to equip each student with an ability to apply gained knowledge towards improving both Andragogy as a science and Andragogy as a manner of educating adults.

## Study program outcomes

A student that graduates with a Bachelor degree in Andragogy will accomplish and perform the following:

1. Will understand theoretical basis of Andragogy and its methodological and epistemological status
2. Will comprehend different concepts in Andragogy and to understand European systems of adult education
3. Will realize and make a distinction between different theories and concepts relevant for understanding the development of the adults and the way the function in diverse environments and within specific contexts, such as: family, work, school, free time, etc.
4. Will understand the factors that shape global, national and regional politics of educating adults, and will participate in creating strategic and operational solutions on national and local level
5. Will explore the practice of educating adults, and will present research study findings in appropriate manners.

## Admission requirements

An entrance condition for enrollment in a Bachelor's study program is to have graduated full high school, approved entrance examination scores, and acceptance to study program. Rules for entrance examinations and admission are set in connection with the Faculty of Philosophy Statute.

## Contact

Head of the study program:  
**Prof. Dr. Miomir Despotović**  
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# Archeology

at Faculty of Philosophy, 18-20 Čika Ljubina, 11000 Belgrade, [www.f.bg.ac.rs](http://www.f.bg.ac.rs)

ECTS: 240/ DEGREE: B.A. IN ARCHEOLOGY

## Study program content

The curriculum includes: - required courses in specific fields of Archeology (Theory and Methodology, Prehistory, Classic Archeology, Middle Ages, Physical Anthropology, Archeozoology) which lasts two semesters within initial years of studying - elective courses which provide students with detailed knowledge in particular fields of Archeology - required courses in other fields and scientific disciplines, which form the basis of knowledge essential in the field of archeology (Foreign Language, History, Classical Languages, Museology and Heritology) - a rich elective list of courses from all other departments of the Faculty of Philosophy which give students opportunity to acquire broad general knowledge in the field of Social Sciences and Humanistic.

## Study program goals

The main goals of a Bachelor's study program in Archaeology are as following:

- Offering a great chronological (from Early Prehistory to Middle Age) and geographical (Balkan, Europe, Mediterranean, Egypt, Near East) insight in archaeological research, as well at the fundamentals of particularly specialized archaeological disciplines, such as: Environmental Archaeology, Archaeozoologia, Physical Anthropology, etc.
- Presenting exhaustive knowledge in particular areas of Archaeology
- Proposing possibilities of multi and interdisciplinary collaboration
- Assuring knowledge and skills necessary for continuing and perfecting education, and performing and satisfying professional responsibilities.

## Study program outcomes

After accomplishing a Bachelor's study program in Archaeology, a student will be proficient in performing following activities:

- Will acquire general knowledge about material culture of human societies in past, with

- particular focus on Central Balkan territory
- Will obtain practical knowledge and skills necessary for processing archaeological materials and documentation
- Will acquire knowledge and expertise essential in creating and accomplishing research study works, and in continuing education
- Will be equipped with ability to apply acquired knowledge and skills in different professional environments, such as: working in the museums, educational, caring and cultural institutions.

## Admission requirements

An entrance condition for enrollment in a Bachelor's study program is to have graduated full high school, approved entrance examination scores, and acceptance to study program. Rules for entrance examinations and admission are set in connection with the Faculty of Philosophy Statute.

## Contact

Head of the study program:  
**Prof. Dr. Staša Babić**  
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Contact e-mail: [arh@f.bg.ac.rs](mailto:arh@f.bg.ac.rs)



# Ethnology and Anthropology

at Faculty of Philosophy, 18-20 Čika Ljubina, 11000 Belgrade, [www.f.bg.ac.rs](http://www.f.bg.ac.rs)

ECTS: 240/ DEGREE: B.A. IN ETHNOLOGY AND ANTHROPOLOGY

## Study program content

The undergraduate academic studies of ethnology-anthropology are divided into 8 semesters, that is, four years of studies. Lessons are given in different forms (lectures, exercises, seminars, discussions, field work of various types etc.) The curriculum allows students to choose one or more courses in the field of Sociology, Philosophy, Archeology, History and Foreign Language. Elective courses make 20% of the curriculum.

## Study program goals

In past two decades of the proficient profiling of this occupation, a Bachelor's study program in Ethnology and Anthropology has been oriented towards developing professional competencies of a socially recognized and prominent career of a Bachelor of Ethnology and Anthropology, while creating an occupation essential for conducting research study works and projects, planning, governing and evaluating some of the largest socio-cultural transformations within the history of the country that are current progress.

## Study program outcomes

A student that graduates with a Bachelor's degree in Ethnology and Anthropology will be equipped for performing the following:

- Organize, design and conduct scientific research projects within cultural, public, and religious domains, as well as in various social and institutions and groups
- Perform mediation in situations of ethnic, cultural, religious, racial or comparable conflicts frequent in multicultural societies
- Identify, document, classify, archive, interpret and evaluate elements of cultural heritage
- Actively apply ethnological and anthropological knowledge and findings in cultural spheres of media, sports, fashion and tourism
- Analyze, implement and evaluate projects in social and cultural-political study fields
- Conduct scientific and applied projects supported and financed by numerous government and non-for-profit organizations

- Participate and contribute in process of education in preschool institutions, as well as in elementary, middle and high school institutions, and in process of permanent education
- Competently and proficiently partake and contribute in conducting research projects, creating projects and administrating cultural institutions, such as: museums, galleries, libraries, archives, media archives, cultural centers, etc.
- Participate and contribute in developmental projects based on analytic, predictive and evaluative level
- Continue education through a Master's study program or Specialization program within socio-humanistic study fields.

## Admission requirements

An entrance condition for enrollment in a Bachelor's study program is to have graduated full high school, approved entrance examination scores, and acceptance to study program. Rules for entrance examinations and admission are set in connection with the Faculty of Philosophy Statute.

## Contact

Head of the study program:  
**Prof. Dr. Bojan Žikić**  
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# Philosophy

at Faculty of Philosophy, 18-20 Čika Ljubina, 11000 Belgrade, [www.f.bg.ac.rs](http://www.f.bg.ac.rs)

ECTS: 240/ DEGREE: B.A. IN PHILOSOPHY

## Study program content

The undergraduate academic studies of Philosophy last four years, that is, eight semesters. The studies are aimed at acquiring knowledge and skills necessary for philosopher's professional work in various fields, and also for further education and continuous professional training.

## Study program goals

The main focus of the Bachelor's degree study program is oriented towards gaining knowledge and developing capabilities and skills essential for a work of a Bachelor of Philosophy at any professional level, as well as for continuing education and further specialization.

The main goals of the Bachelor's degree study program in Philosophy are the following:

- Achieving fundamental knowledge in History of Philosophy, Logics, Methodology, Epistemology, Ethics and Aesthetics
- Introducing basic philosophical terms, issues, methods, theory and traditions
- Developing competence to self-create and self-conduct the analysis of philosophical arguments and matters
- Emerging capabilities of relating philosophical contexts to individual and social problems
- Introducing current tendencies and trends in reference to modern philosophical issues
- Acquiring academic and professional skills of students applicable in studying, professional work and continuing education.

## Study program outcomes

A graduate student with a Bachelor's degree in Philosophy will have gained fundamental and necessary knowledge in following areas of study: History of Philosophy, Logics, Epistemology, Philosophy of Science, Methodology, Ethics, and Aesthetics. The familiarity with the history of various philosophical ideas and opinions is an essential pre-requisite for further understanding of modern philosophical matters. A great amount of information gained from studying

Logics, Epistemology, Philosophy of Science and Methodology are of great assessment for emerging and increasing critical thinking and talent of debating. The focus of the third section of the curriculum is on philosophical disciplines such as Ethics, Aesthetics, Philosophy of Politics and Law that explore matters or moral values and rational thinking, and facilitate successful management of daily practical and professional activities. Due to the gained knowledge, the graduate student with a Bachelor's degree in Philosophy will be prepared to perform numerous and various complex professional tasks as well as be qualified and trained to conduct lectures and research projects.

## Admission requirements

An entrance condition for enrollment in a Bachelor's study program is to have graduated full high school, approved entrance examination scores, and acceptance to study program. Rules for entrance examinations and admission are set in connection with the Faculty of Philosophy Statute.

## Contact

Head of the study program:  
**Prof. Dr. Drago Đurić**  
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# History

at Faculty of Philosophy, 18-20 Čika Ljubina, 11000 Belgrade, [www.f.bg.ac.rs](http://www.f.bg.ac.rs)

ECTS: 240/ DEGREE: B.A. IN HISTORY

## Study program content

The undergraduate academic studies of history are divided into 8 semesters and last four years. The content of required scientific and professional courses is based on the combination of chronological, spatial and topical principles with the aim to enable students to learn about historical processes, phenomena and events in the development of human society in various epochs and areas, and also to understand them and interpret them in an analytical manner.

## Study program goals

A Bachelor's study program in History is oriented towards acquiring knowledge about the history of human society and about history as a scientific discipline, as well as towards developing abilities of understanding and critical thinking of historical process, occurrences and events scientifically based on historical perspective. The intention of the study program is to enable a student for further advancement of acquired knowledge and skills, and for applying the same in all professional activities, as well as towards forming an opinion about past and present political, social and cultural events and matters.

## Study program outcomes

A student that graduates with a Bachelor degree in History will accomplish and perform the following:

- Will acquire a system of knowledge about History as special scientific discipline; will acquire a system of knowledge about history of human society from ancient to modern times, including history of Serbian nation
- Will obtain capability of understanding and critical analysis of historical process and progression, occurrences and happenings during the development of human society throughout different epochs and areas, as well as the ability of comprehending signifi-

cant and current political, social and cultural matters

- Will acquire the ability of applying gained knowledge in all potential professional fields concerning History, as well as developing and advancing personal professional skills within the process of continued education.

## Admission requirements

An entrance condition for enrollment in a Bachelor's study program is to have graduated full high school, approved entrance examination scores, and acceptance to study program. Rules for entrance examinations and admission are set in connection with the Faculty of Philosophy Statute.

## Contact

Head of the study program:  
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# History of Art

at Faculty of Philosophy, 18-20 Čika Ljubina, 11000 Belgrade, [www.f.bg.ac.rs](http://www.f.bg.ac.rs)

ECTS: 240/DEGREE: B.A. IN HISTORY OF ART

## Study program content

The undergraduate academic studies of History of Art are divided into 8 semesters, and last in total four years. The curriculum includes: - required courses of specific branches of History of Art (Greek and Roman Art, History of Architecture, Mediaeval Art with special stress on Serbian and Byzantine Mediaeval art, Modern Times Art, Modern Art, Theory and Methodology, Museology and Conservation). The above mentioned general areas of studying are divided into several one-semester courses depending on their chronological, problem and topical content.

## Study program goals

The main focus of the Bachelor's degree study program is oriented towards gaining knowledge and developing capabilities and skills essential for a work of a Bachelor of Philosophy at any professional level, as well as for continuing education and further specialization.

The main goals of the Bachelor's degree study program in Philosophy are the following:

1. Achieving fundamental knowledge in History of Philosophy, Logics, Methodology, Epistemology, Ethics and Aesthetics
2. Introducing basic philosophical terms, issues, methods, theory and traditions
3. Developing competence to self-create and self-conduct the analysis of philosophical arguments and matters
4. Emerging capabilities of relating philosophical contexts to individual and social problems
5. Introducing current tendencies and trends in reference to modern philosophical issues
6. Acquiring academic and professional skills of students applicable in studying, professional work and continuing education.

## Study program outcomes

A graduate student with a Bachelor's degree in Philosophy will have gained fundamental and necessary knowledge in following areas of

study: History of Philosophy, Logics, Epistemology, Philosophy of Science, Methodology, Ethics, and Aesthetics. The familiarity with the history of various philosophical ideas and opinions is an essential pre-requisite for further understanding of modern philosophical matters. A great amount of information gained from studying Logics, Epistemology, Philosophy of Science and Methodology are of great assessment for emerging and increasing critical thinking and talent of debating. The focus of the third section of the curriculum is on philosophical disciplines such as Ethics, Aesthetics, Philosophy of Politics and Law that explore matters or moral values and rational thinking, and facilitate successful management of daily practical and professional activities. Due to the gained knowledge, the graduate student with a Bachelor's degree in Philosophy will be prepared to perform numerous and various complex professional tasks as well as be qualified and trained to conduct lectures and research projects.

## Admission requirements

An entrance condition for enrollment in a Bachelor's study program is to have graduated full high school, approved entrance examination scores, and acceptance to study program. Rules for entrance examinations and admission are set in connection with the Faculty of Philosophy Statute.

## Contact

Head of the study program:  
**Prof. Dr. Aleksandar Kadjević**  
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# Philology/Classical studies

at Faculty of Philosophy, 18-20 Čika Ljubina, 11000 Belgrade, [www.f.bg.ac.rs](http://www.f.bg.ac.rs)

ECTS: 240/ DEGREE: B.A. IN CLASSICAL LANGUAGES / CLASSICS

## Study program content

During four years of undergraduate academic Classical Studies, students attend classes and take exams in 24, respectively 25 subjects (6 within the first year, 7 within the second, 5 within the third, and 6, respectively 7 within the fourth year). In the course of the first two years students listen to intensive two-semester courses of Latin and Greek languages (6 lessons per week; besides grammar lessons they read and interpret original ancient Greek and Latin authors, beginning from less difficult to more difficult ones).

The first two years of studies include also those subjects which introduce the basics of ancient Greek and Roman culture and civilization: Introduction to Classical Studies, Overview of Ancient Roman and Greek Literature, Ancient History - consisting of two separate subjects (Ancient Greek and Ancient Rome history) - and two one-semester courses in Classical Archeology. In the course of third year of studies the knowledge of Greek and Latin is deepened (by studying their historical development, language levels, stylistic features of particular writers depending of literary genre etc. which makes also 6 lessons per week.)

The studies of Ancient Greek literature are intensified; Byzantine philology and Modern Greek is introduced to students after they have passed an exam after the course named Short Overview of Byzantine History. The fourth year of studies comprises one required course of Roman Literature, besides four more courses which students choose among 11 elective courses (respectively two courses, if a student choose psychology, pedagogy or teaching methods). In this way, students are directed toward the writing of their thesis.

## Study program goals

The main goal of a Bachelor's study program in Classical Languages is acquiring knowledge about ancient times, primarily concerning Latin

Language and Ancient Greek Language, understanding all aspects of ancient man lifestyle and ancient culture, and recognizing traces of ancient times in modern and contemporary world.

## Study program outcomes

A Bachelor's study program in Classical Languages is designed to acquire students with knowledge of classical languages in order to utilize that knowledge in understanding and translating Latin or Ancient Greek texts, in recognizing essential societal characteristics of ancient civilizations and culture, and to share acquired knowledge with future generations, primarily concerning the profession of a Latin Language or Ancient Greek Language professor in high schools or other educational institutions.

## Admission requirements

An entrance condition for enrollment in a Bachelor's study program is to have graduated full high school, approved entrance examination scores, and acceptance to study program. Rules for entrance examinations and admission are set in connection with the Faculty of Philosophy Statute.

## Contact

Head of the study program:  
**Prof. Dr. Aleksandar Popović**  
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Contact e-mail: [klf@f.bg.ac.rs](mailto:klf@f.bg.ac.rs)

# Psychology

at Faculty of Philosophy, 18-20 Čika Ljubina, 11000 Belgrade, [www.f.bg.ac.rs](http://www.f.bg.ac.rs)

ECTS: 240/ DEGREE: B.A. IN PSYCHOLOGY

## Study program content

The undergraduate academic studies of psychology are divided into 8 semesters, lasting in total four years. The curriculum consists of 78 courses, of which 30 are required; other 39 courses are divided into nine elective groups within first six semesters; and 31 required courses plus 65 courses in eight elective groups in modules. In the course of undergraduate studies, by getting acquainted with psychology, its history, disciplines and scientific knowledge, its theories, methods and techniques, students acquire knowledge and skills necessary to continue their professional education in order to become qualified to do their respective jobs as psychologists while working in various branches of economy, health care and education in the public and private sectors.

## Study program goals

A Bachelor's study program in Psychology is oriented towards acquiring knowledge and skills in the area of Psychology, obtaining abilities for fulfilling minor professional responsibilities as well as towards continuing education.

## Study program outcomes

A student with achieved Bachelor's degree in Psychology will be equipped with the knowledge and understanding of psychological phenomena, facts and laws; will be skilled at using research methods and techniques; will be perceptive of psychological occurrences and their biological, contextual, social and personal characteristics and conditions; will acquire outstanding ability to communicate; and will be qualified to teach Psychology in high schools.

## Admission requirements

An entrance condition for enrollment in a Bachelor's study program is to have graduated full high school, approved entrance examination scores, and acceptance to study program. Rules for entrance examinations and admission are set in connection with the Faculty of Philosophy Statute.

## Contact

Head of the study program:

**Prof. Dr. Ana Pešikan**

Telephone: +381 11 320 61 41

Contact e-mail: [psi@f.bg.ac.rs](mailto:psi@f.bg.ac.rs)



# Pedagogy

at Faculty of Philosophy, 18-20 Čika Ljubina, 11000 Belgrade, [www.f.bg.ac.rs](http://www.f.bg.ac.rs)

ECTS: 240/ DEGREE: B.A. IN PEDAGOGY

## Study program content

The undergraduate academic studies of Pedagogy last four school years, that is, 8 semesters. Beside lessons and practices, they include professional practice lessons – four lessons per week within the sixth and eighth semesters, that is, 120 lessons in total. The undergraduate academic studies of Pedagogy are aimed at acquiring knowledge and developing abilities and skills necessary for a pedagogue's professional practice in the field of bringing up and education, and also for his or hers further education and continuous professional training.

## Study program goals

A Bachelor's study program in Pedagogy is oriented towards acquiring knowledge and skills in the area of Pedagogy, obtaining abilities necessary for satisfying professional responsibilities within educational systems and programs as well as towards continuing education.

## Study program outcomes

A student that graduates with a Bachelor degree in Pedagogy will accomplish and perform the following:

- Will acquire knowledge about facts and terms concerning Pedagogy, as well as obtain understanding of principles and rules of educational systems and programs
- Will comprehend pedagogic ideas, theories and concepts, as well as the basis and specifics of educational process
- Will recognize to apply acquired knowledge in professional pedagogic work

## Admission requirements

An entrance condition for enrollment in a Bachelor's study program is to have graduated full high school, approved entrance examination scores, and acceptance to study program. Rules for entrance examinations and admission are set in connection with the Faculty of Philosophy Statute.

## Contact

Head of the study program:  
**Prof. Dr. Radovan Antonijević**  
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Contact e-mail: [pea@f.bg.ac.rs](mailto:pea@f.bg.ac.rs)



# Sociology

at Faculty of Philosophy, 18-20 Čika Ljubina, 11000 Belgrade, [www.f.bg.ac.rs](http://www.f.bg.ac.rs)

ECTS: 240/ DEGREE: B.A. IN SOCIOLOGY

## Study program content

Undergraduate academic studies of Sociology lasts eight semesters (four years) organizing lectures, seminars and practicum (empirical research). Undergraduate academic studies of Sociology are conceptualized through system of theoretical and applied sociological disciplines and other scientific disciplines (Psychology, Philosophy, History, Anthropology), which enable general overview on social phenomena and gives the base for successful career in empirical, pedagogical and advisory practice and its improvement.

The goal of study program of Undergraduate academic studies of Sociology is to educate high-profile sociologists for work in various institutions in public, state, private and civil sector.

## Study program goals

Undergraduate study program within the Department of Sociology is a four-year long study program, and the student who graduated from it will not only be equipped with knowledge about fundamental sociological terms and terms concerning related disciplines, but also introduced to major humanistic theories about society the graduated student will become aware of various social actors and changes as well as of ways in which society functions.

The Bachelor study program's main goal is to make a student capable of recognizing and discussing most important social issues and phenomena, classifying the same and comparing them to related topics and matters. Also, the student with a Bachelor's degree in Sociology will acquire special professional skills pertaining to basic collecting methods and procedures, information systematization, and data analysis, and all due to the practical laboratory work organized by the Department of Sociology within the study group.

The Bachelor's study program in Sociology prepares one to perform numerous and vari-

ous complex professional tasks as well as be qualified and trained to conduct lectures and research projects.

## Modules

Undergraduate study program has four modules (Economic sociology, Sociology of Culture, Sociology of Politics and Sociology of social groups and communities) which provides professional profiling in certain fields. Modules are organized in sixth and eighth semesters (third and fourth year) and it is possible for students to choose one of two offered modules in each semester.

## Study program outcomes

Undergraduate study program within the Department of Sociology is a four-year long study program, and the student who graduated from it will not only be equipped with knowledge about fundamental sociological terms and terms concerning related disciplines, but also introduced to major humanistic theories about society the graduated student will become aware of various social actors and changes as well as of ways in which society functions.

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The Bachelor's study program in Sociology prepares one to perform numerous and various complex professional tasks as well as be qualified and trained to conduct lectures and research projects.



### Admission requirements

An entrance condition for enrollment in a Bachelor's study program is to have graduated full high school, approved entrance examination scores, and acceptance to study program. Rules for entrance examinations and admission are set in connection with the Faculty of Philosophy Statute.

### Contact

Head of the study program:

**Prof. Dr.Ognjen Radonjić**

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# Faculty of Philology

# Serbian Language and Literature

at Faculty of Philology, 3 Studentski trg, 11000 Belgrade, [www.fil.bg.ac.rs](http://www.fil.bg.ac.rs)

ECTS: 240/ DEGREE: GRADUATED PROFESSOR OF LANGUAGE AND LITERATURE

## Study program content

The study program of Serbian Literature and Language with the Comparative Studies which lasts four years (or eight semesters) is realized through basic academic studies. The program is designed so that the knowledge of Serbian Literature and Comparative Literature, Serbian Language and Teaching methods of Literature and Serbian Language are acquired in a systematic way. The program consists of:

- The history and poetics of Serbian Literature as well as their comparative context.
- General literature and the theory of literature as well as South Slavic literatures.
- The history of Serbian Language and writing and contemporary Serbian Language.
- Teaching methods of Serbian literature and language.

## Study program goals

During basic academic studies of Serbian Literature and Language with Comparative Studies highly qualified teaching-staff in the field of Serbian literature, language and comparative studies is trained for performing jobs in the teaching of Serbian language and literature in schools as well as for jobs of proof reading, editing, publishing and other jobs in the field of education, publishing, culture and media.

Acquired academic knowledge and skills include:

- The knowledge of the history and poetics of Serbian literature from earliest times to the beginning of 21st century.
- The knowledge of general literature and South Slavic literatures.
- The knowledge in the field of General linguistics and standard Serbian language.
- The comparative knowledge and its applicability in the interpretation of the literature.
- The methodic knowledge of Serbian language and literature teaching.
- The capability of critical and scientifically based comparative studies of literature.
- The professional knowledge and skills which enable a critical approach to literary texts of

different genres with the emphasis on comparative views.

## Study program outcomes

Students of the basic studies of Serbian Literature and Language with Comparative Studies will acquire the following scholarly and professional competences:

- Knowledge of the history and poetics of Serbian literature and their larger literary framework.
- Knowledge of the cultural context of literature and scientifically based literary methodology and Serbian literature and language teaching methods.
- A capability of applying scientifically based literary methodology and methodic and language knowledge in the practice of studying literature and Serbian language.
- Knowledge of European literatures and general literature.
- The skill of placing of Serbian literature into the context of European literatures and to study it comparatively and wholly within that framework.
- Knowledge in the field of General linguistics, the present state and developmental prospects of Serbian language
- Knowledge of the standard of Serbian literary language in accordance with the various level of language competence as defined by language learning standards.
- Capability of taking up the critical approach in the research process of studying contemporary Serbian and world literature.
- Knowledge of the system and scientific form of the Serbian language.
- Capability of applying acquired knowledge in Serbian literature and language at primary and secondary schools and in other professional activities.
- Developing skills in the acquaintances of all available resources, sources of information and data which are professionally and scientifically relevant and significant for achieving an argumentative verification in study papers.

## Admission requirements

Completed four year secondary school education.

## Contact

Head of the study program:

**Prof. Dr. Dušan Ivanić**

Telephone: +381 11 263 91 49

Contact e-mail: [skjsk@fil.bg.ac.rs](mailto:skjsk@fil.bg.ac.rs)



# Serbian Language

at Faculty of Philology, 3 Studentski trg, 11000 Belgrade, [www.fil.bg.ac.rs](http://www.fil.bg.ac.rs)

ECTS: 240/ DEGREE: GRADUATED PROFESSOR OF LANGUAGE AND LITERATURE

## Study program content

The study program last four years (or eight semesters) and is composed of obligatory and elective subjects. The obligatory subjects are the core of the present study program and are equally distributed from first to eighth semester. In each semester groups of different elective subjects are offered to students which direct them to different study profiles: from academic general knowledge profile, through theoretical and methodic and scientific and professional profiles to professionally applicative.

Through offered courses students will be able to completely master the Serbian Language standard, the history of the language, history of literature, theory of literature and review of literature, from ancient to contemporary.

In this way students will acquire professional and practical skills and knowledge and will be completely enabled for lecturing Serbian Language and Literature in primary and secondary schools, for teaching Serbian as a foreign language as well as for working in scientific and cultural institutions.

The purpose of this study program is the education of teaching personnel for performing jobs in all educational institutions where language and literature occupy the most prominent place which is evident from the total number of lessons (yearly, weekly) that they hold in the educational system through all forms of language teaching, literature, cultural expression, as well as for work in cultural and scholar institutions.

## Study program goals

The students will acquire necessary knowledge and skills for performing of the work and tasks of a Serbian Language and Literature professor. The students will also be enabled to perform all extracurricular activities at schools as well as for performing editing, publishing and other jobs concerning various language events (written and oral) and literature in cultural institutions.

## Modules

Teachers', philological

## Study program outcomes

The students will be qualified for carrying out teacher's work and tasks in preparatory and secondary schools (regular classes, additional classes extracurricular activities). The students will also be qualified for performing jobs in cultural, educational, publishing institutions (radio, television, institutes, publishing houses, theatres, cultural centers, P.R. services).

## Admission requirements

Completed four year secondary school education.

## Contact

Head of the study program:

**Doc. Dr. Veljko Brborić**

Telephone: +381 11 202 17 85

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# Language, Literature, Culture

at Faculty of Philology, 3 Studentski trg, 11000 Belgrade, [www.fil.bg.ac.rs](http://www.fil.bg.ac.rs)

ECTS: 240/ DEGREE: GRADUATED PROFESSOR OF LANGUAGE AND LITERATURE

## Study program content

The study program of the basic academic studies of Language, Literature, Culture are intended for the education of philologists of various interests, uniting the activities of higher education and scientific research as the components of one unique process of higher education. Forms of active teaching are lectures and exercises.

Students of the study program Language, Literature, Culture can attend subjects from other study programs which are noted as common.

## Study program goals

Basic academic studies of Language, Literature, Culture form highly qualified staff in areas of language, literature and culture that will perform educational, journalistic, translating, librarian, informative and cultural jobs as well as jobs in all other fields which required the knowledge of foreign languages, literature and culture.

By completing this study program the student acquires general competences which are in the function of skilled performing of professional and scientific activities. Acquired academic knowledge and skills include: basic theoretical knowledge in the fields of philology, linguistics, literature, cultural studies, librarianship, library informatics, basic knowledge on scientific research methods, capability of applying scientific methods and procedures in the research process, capability of a critical approach to the research process, ability of comprehension, reporting, critical analysis, synthesis and solving language, literature and culture problems, ability of applying acquired theoretical knowledge in practice, ability of communication and collaboration with immediate and wider surroundings.

## Study program outcomes

The basic academic studies of Language, Literature, Culture enable the student to acquire the following general competence which are in the function of quality performing of professional and scientific activities:

1. Basic theoretical knowledge in areas of Language, Literature, Culture.
2. Basic knowledge of method in the field of Language, Literature, Culture.
3. Ability of applying methods and procedures in language and literature researches.
4. Ability of a critical approach in the research process.
5. Ability of comprehension, reporting, critical analysis, synthesis, and solving problems in areas of Language, Literature, Culture.
6. Capability of applying theoretical knowledge of Language, Literature, Culture in practice.
7. Ability of communication and collaboration with immediate and wider surrounds.

By completing the study program the student also acquires the following specific competences, which are in the function of quality performing of professional activities:

1. Thorough knowledge and understanding of history, the present state and development prospects of disciplines in the field of Language, Literature, Culture.
2. Knowledge of phonological, lexical, grammar, semantic, stylistic characteristic and tendencies of development of a single foreign language.
3. Knowledge of structural and other connections between a single foreign language and other languages.
4. Capability of the analysis of a single language and comparative analyses of several languages.
5. Capability of analyses of the specific and the universal in languages.
6. Knowledge of the history and contemporary courses of general and foreign literatures.
7. Capability of comparative analysis of various literatures.
8. Understanding of a literary work in the context of cultural epoch.
9. Ability of interpretation and creative reading of a literary work.
10. Knowledge and comprehension of cultural characteristics in various social environments.

11. Capability of defining and solving concrete problems in the field of Language, Literature, Culture.
12. Ability of connecting knowledge from different areas and its applying in practice.
13. Knowledge of at least two foreign languages.
14. Capability of following and applying novelties in the profession.
15. Capability of applying acquired knowledge in professional activities.
16. Capability of applying of librarian knowledge and informational technologies in mastering the knowledge in areas of Language, Literature, Culture.

### Admission requirements

Completed four year secondary school education.

### Contact

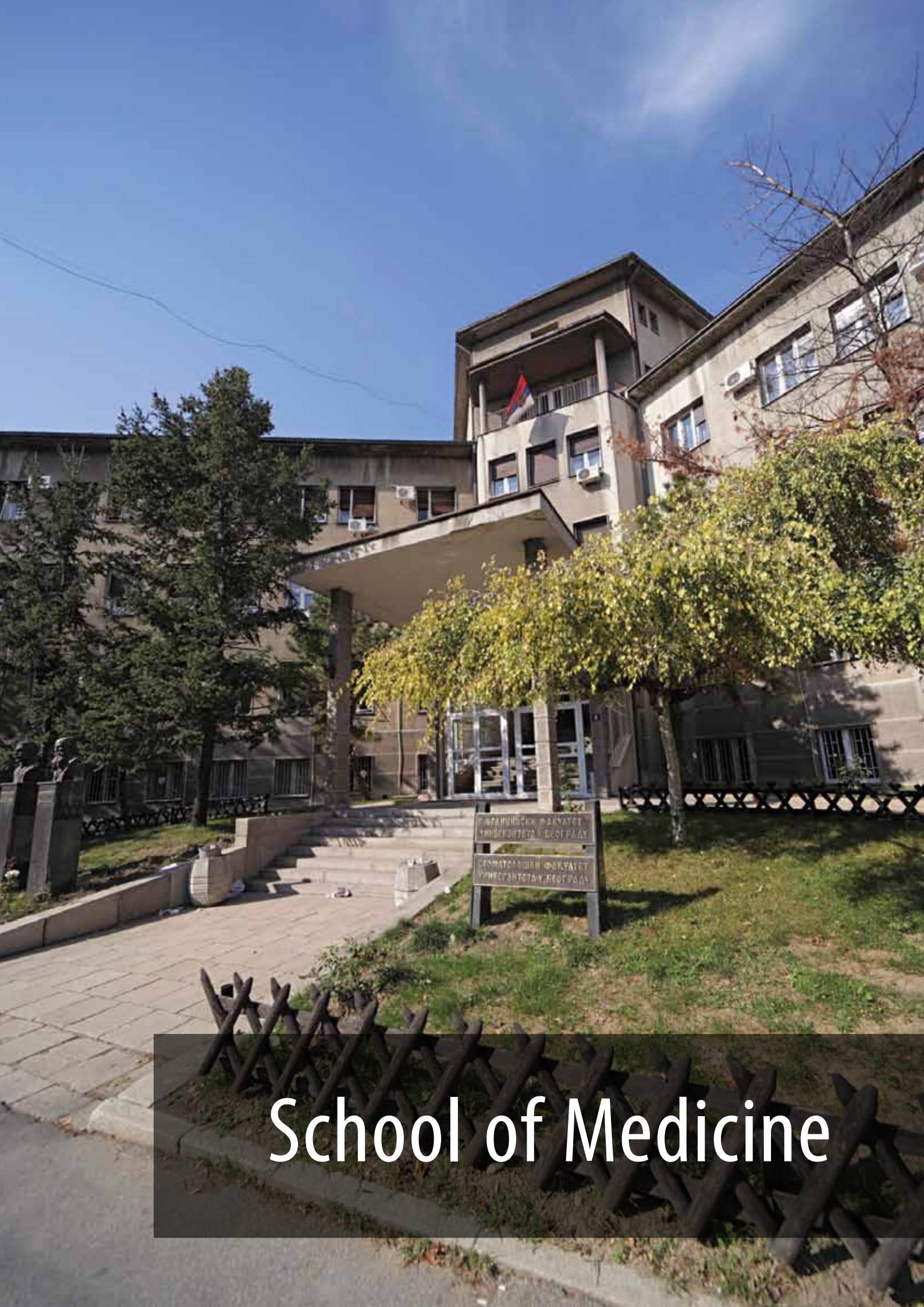
Head of the study program:

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МЕДИЦИНСКИ ФАКУЛТЕТ  
УНИВЕРЗИТЕТА У БЕОГРАДУ  
СТОМАТОЛОШКИ ФАКУЛТЕТ  
УНИВЕРЗИТЕТА У БЕОГРАДУ

# School of Medicine



# Medicine

at School of Medicine, 8 Doktora Subotića, 11000 Belgrade, [www.med.bg.ac.rs](http://www.med.bg.ac.rs)

ECTS: 360/ DEGREE: MEDICAL DOCTOR/ INTEGRATED STUDIES

## Study program content

Integrated academic medical studies for achieving the academic title Doctor of Medicine, at the Belgrade School of Medicine, last 6 years or 12 semesters i.e. 5500 active teaching classes. The classes represent a process that combines lectures, exercises, seminars, clinical practice and clinical internship. The clinical internship is a part of the process of making the final graduation dissertation. The teaching process of an individual subject takes course within either one or two semesters according to the curriculum.

Total student engagement within the study program of the integrated academic medical studies is expressed in ECTS credits. Total number of credits within one school year is 60 ECTS, i.e. 360 ECTS credits for the entire medical studies. Teaching activities relevant to the achievement of the subject goal and result as well as the time necessary for each teaching activity are defined within each subject, so that the total student's working engagement corresponds to the number of credits allocated to the subject. The student gains the subject credits after completing the final exam.

## Study program goals

The basic study program goal of the integrated academic studies of medicine is to train medical doctors for the implementation of scientific and professional achievements in preventing, diagnosing and treating diseases, as well as promoting a healthy lifestyle, legal and moral values, in accordance with the principles of good scientific and clinical practice.

Special program goals are:

1. scientific principle based teaching (practice based on science) and the implementation thereof.
2. the understanding of health and promoting healthy lifestyles
3. acquiring knowledge of biological functions of the organism, the causes and mechanisms of disease origination, the prevention and treatment of diseases.

4. acquiring knowledge about the reproductive health
5. acquiring clinical skills at the top institutions of our health system, which provide the competence to perform basic diagnostic and therapeutic procedures.
6. training in using new medical technologies as well as information systems.
7. introducing students to the organization and functioning of the health system.

## Study program outcomes

The most important competences of a medical doctor are:

1. medical knowledge in the sciences upon which medicine is based on and the understanding of the scientific method which includes biology function measurement basics, the estimation of scientifically proven facts and data analysis
2. the understanding of the structure, functioning and behavior of both healthy and sick persons, as well as the relation between the health condition and the person's physical and social environment.
3. appropriate knowledge of clinical disciplines and practice which enables the student to acquire a coherent image of the mental and physical diseases, of the preventive, diagnostic and therapeutical aspects of medicine and of the human reproduction.
4. the clinical experience acquired under appropriate supervision at a health institution that is necessary for professional activity.
5. the advancement of professional relationships with patients and colleagues, the personal respect towards patients and colleagues, free of prejudices against language, culture, sex, race or lifestyle
6. the understanding of a patient's rights to refuse treatment or participation in educational or research activities.
7. the respect of privacy policies, according to the professional code of ethics which binds doctors to withhold confidential patient information and release them without consent solely in extraordinary circumstances i.e. if the patient or other persons are at risk.

## Admission requirements

A person can enroll in the first year of integrated academic studies of medicine upon completing four years of high school education in comprehensive or medical high schools.

## Contact

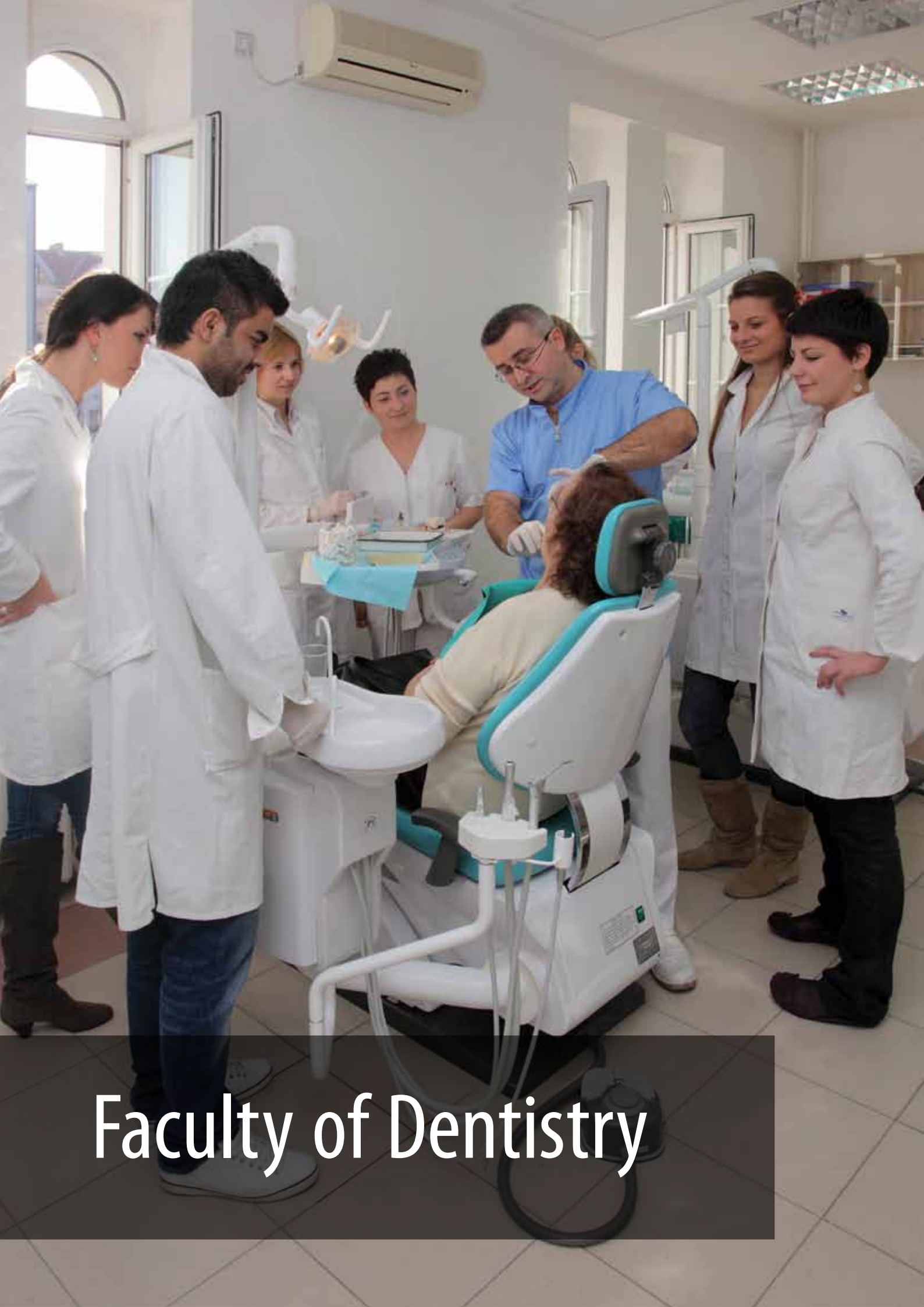
Head of the study program:

**Prof. Dr. Tanja Jovanović and  
Prof. Dr. Gordana Parapid Teofilovska**

Telephone: +381 11 363 63 00

Contact e-mail: [tanja.jovanovic@med.bg.ac.rs](mailto:tanja.jovanovic@med.bg.ac.rs),  
[teofilovska@med.bg.ac.rs](mailto:teofilovska@med.bg.ac.rs)





Faculty of Dentistry

# Dentistry

at School of Medicine, 8 Doktora Subotića , 11000 Belgrade, [www.stomf.bg.ac.rs](http://www.stomf.bg.ac.rs)

ECTS: 360/ DEGREE: DDS (DOCTOR OF DENTAL SURGERY)/ INTEGRATED STUDIES

## Study program content

Curriculum of this study program should:

- enhance understanding and acceptance of the need, that a dental practitioner, at any time, practice dentistry in the best interest of patients, but also in respect of health legislation;
- enable students to acquire clinical competence of working without supervision after graduation, but at the same time, enable understanding of being aware of their capabilities so that they could, if necessary, refer patients to the appropriate specialists;
- promote acquisition of skills, professional attitudes and behaviors that contribute to the efficient and adequate interaction with patients and colleagues;
- provide a basis for effective and long-term education and advanced professional training.

## Study program goals

Creating careful, knowledgeable and competent dentists who are able to:

- take advantage of their knowledge and practical techniques in treating patients;
- accept professional responsibility for the safe and efficient patient care;
- accept the necessity of continuous advanced professional training.

## Study program outcomes

Professional status:

- dentist can independently practice health activities after finishing the mandatory internship of 12 month duration, and passing the state examination.

Access to further study:

- Average grade below 8.00: admission to medical specialties, academic specialized studies
- Average grade above 8.00: admission to medical specialties, PhD studies.

## Admission requirements

Person may enroll the first year of the integrated studies of dentistry if he/she has finished secondary education of four years duration, comprising a high, grammar or medical, school of four years duration.

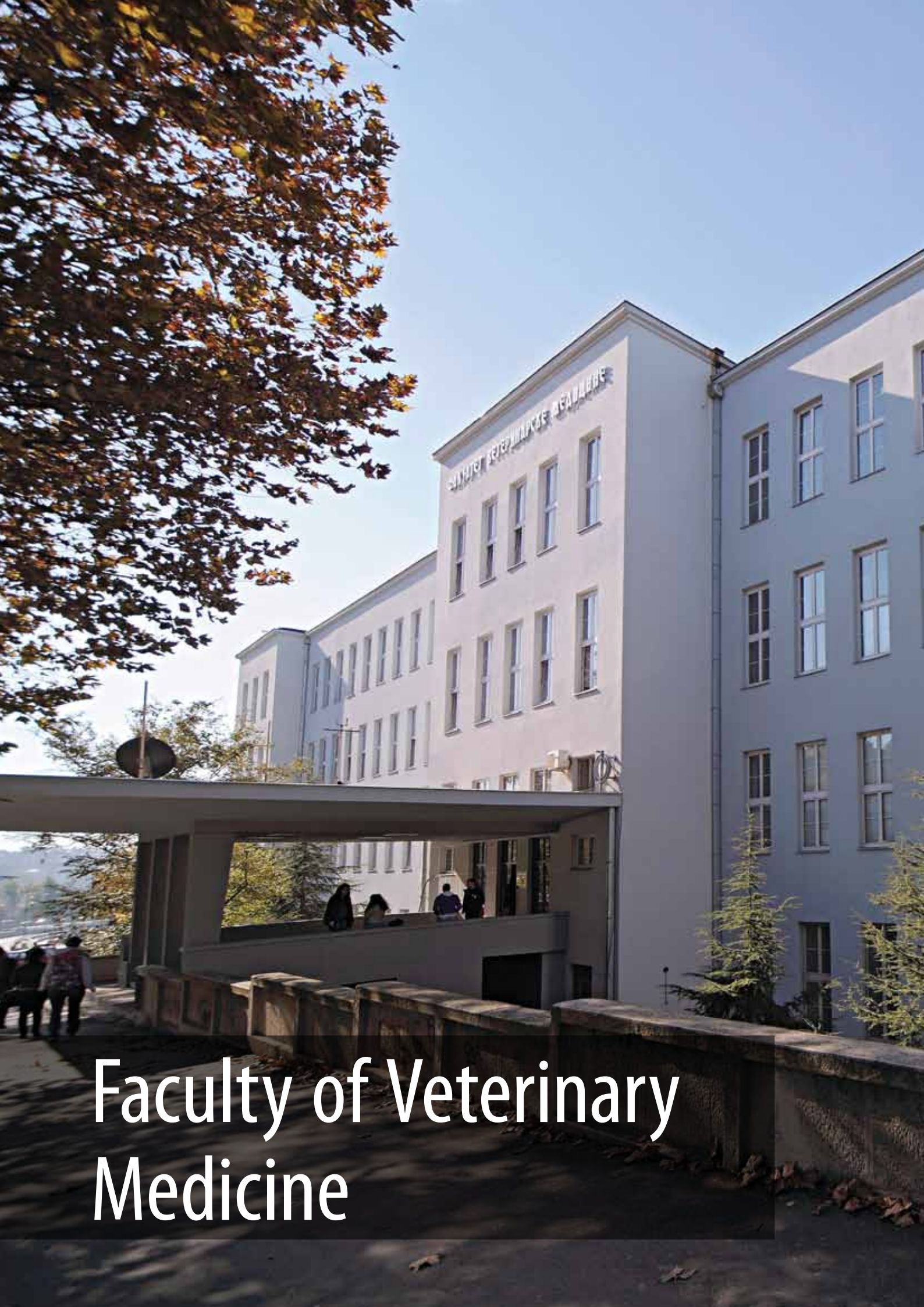
## Contact

Head of the study program:

**Prof. Dr. Ljiljana Tihacek Šojić**

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Contact e-mail: [ljiljana.tihacek@stomf.bg.ac.rs](mailto:ljiljana.tihacek@stomf.bg.ac.rs)



САНКТ-ПЕТЕРБУРГСКОЕ ВЕТЕРИНАРНОЕ УЧИЛИЩЕ

# Faculty of Veterinary Medicine

# Veterinary Medicine

Faculty of Veterinary Medicine, 18 Bulevar oslobođenja, 11000 Beograd, [www.vet.bg.ac.rs](http://www.vet.bg.ac.rs)

ECTS: 360/ DEGREE: DR VET. MED./ INTEGRATED STUDIES

## Study program content

The curriculum of studies lasting 6 years is integrating 48 compulsory and 27 optional subjects and 4 compulsory optional oriented courses (the animal species/professional specialization areas oriented package of subjects) and compulsory practice. Basic theory and methodology in biomedical and animal science are presented in subjects of the first three years of the curriculum. Upon the recommendations of EAEVE, the subjects aiming to include work experience and bonding with animals are also included in the first stage of studies. Species related knowledge, skills and competencies in animal clinical pathology and therapy, public health issues and state veterinary medicine are highlighted during the 4th and 5th year of curriculum. Beside the omni-competent compulsory training, students of the 5th and the 6th year have to choose, upon their affinities and performances, one of four compulsory optional-oriented programs which allows them to profound knowledge and skills within most important fields of veterinary medicine: Clinical pathology and therapy of companion animals, Farm animal clinical pathology and therapy, Preventive veterinary medicine and Public health and state veterinary medicine.

Clinical practice is highlighted during the 6th year of studies, giving students opportunity to learn through training in aim to meet high professional standard of ethic, competence, academic knowledge and technical skills required from recent graduates in veterinary medicine. During the final year of studies students prepare the graduate thesis arising from the training in the compulsory optional oriented program they have successfully finished.

The lectures and practical classes are adjusted to the needs of students and curriculum in accord with outcomes and goals of each subject. Lectures are organized in groups, each under 80 students, while practical classes and trainings are organized in groups of 12 students on pre-clinical subjects and 6 students per group on clinical courses. The students under close supervision of the teaching stuff of the faculty, are participating on academic lectures, practical training, training presentations and clinical practice. The classes

are organized in lecturing theaters, classrooms, laboratories and clinics at the Faculty and/or in the extramural facilities: farms, stud farms, veterinary scientific/diagnostic institutes, etc.

## Study program goals

The main goal of the student curriculum is education and training of competent doctors of veterinary medicine in accordance with national and EU standards, capable of working in all fields of veterinary medicine, i. e:

- fulfill the standard knowledge and practical skills in biomedical science and veterinary medicine,
- in accordance with professional standards and code of practice, develop competencies necessary for proficient work in all fields of veterinary service,
- to develop the spirit of importance and possible roles of veterinary profession in society,
- and the establishment of the professional personality that recognizes the importance of career-long continuing professional education and improvement of knowledge and skills.

## Study program outcomes

The outcomes are defined in details for each subject included in the curriculum and listed in details in the Book of subjects and Book of Information on Studies at the Faculty of Veterinary Medicine, all presented at the internet site of the Faculty of Veterinary Medicine.

## Admission requirements

An entry to the studies of veterinary medicine at the Faculty of Veterinary Medicine, University of Belgrade is open to the candidates with diploma of high school i. e: grammar school, high school for veterinary technicians, school for chemical techniques or schools for medical, dental or pharmaceutical technicians. All eligible candidates are submitted to the entry exam in chemistry and biology before admission.

## Contact

Head of the study program:

**Prof. Dr. Dragiša Trailović**

Telephone: +381 11 361 18 10

Contact e-mail: [dtrailovic@vet.bg.ac.rs](mailto:dtrailovic@vet.bg.ac.rs)





Faculty of Pharmacy



# Pharmacy

Faculty of Pharmacy, 450 Vojvode Stepe, 11000 Beograd, [www.pharmacy.bg.ac.rs](http://www.pharmacy.bg.ac.rs)

ECTS: 300/ DEGREE: MASTER OF PHARMACY/ INTEGRATED STUDIES

## Study program content

The syllabus PHARMACY represents integrated academic studies that last for 5 years, i.e. 10 semesters, totaling in 300 ECTS credits and encompassing 38 compulsory courses (subjects) and 26 optional courses (out of which a student should choose 10), including work on the Diploma Thesis. In the course of PHARMACY studies, it is necessary for the students to acquire adequate knowledge on: medicines (physico-chemical characteristics of drugs, active and auxiliary substances, natural medicinal raw material, isolation, synthesis and biotechnology of active substances), patient (human organism, disease, pharmacotherapy), health care system (pharmaceutical regulations and legislation, health care system management, national medicines policy, knowledge on information technologies and information systems in health care, ethical principles). The lectures are carried out in small groups of students as well as through individual study (with mentor), while the working methods are customized to the number of students (consultations, seminars). The planned teaching methods encompass lectures, laboratory (experimental) exercises that students do on their own, theoretical exercises and coursework. Interactive teaching, implemented at the Faculty of Pharmacy, implies students' active participation in the teaching process for better acquisition of necessary knowledge and skills. Students who are interested in research involvement have the possibility to work individually with their mentor and to take part into the current research programs.

## Study program goals

The Study Program is focused on acquiring fundamental and applied knowledge from various pharmacy branches as follows: medicine, chemistry and introduction into basic medical terminology (concepts on health, disease, etiology, pathogenesis). This Study Program provides for our students to acquire the skills recommended for working in pharmaceutical industry as well as the competence in various controlling laboratories: clinical and biochemical, toxicological etc. The acquired diploma in the Master Studies will be recognized by the European Institutions that

will provide a graduate student to continue their professional and scientific education (doctoral studies) in the branches of pharmacy or other familiar disciplines at domestic and European universities without differential exams.

## Study program outcomes

According to the concept of this Study Program, a student will acquire the professional education and academic knowledge in all aspects of drug, from detecting, formulation and manufacturing to the principles of therapeutic usage, drug interactions and side effects. Student will be capable to understand national, European and international legislation in pharmaceutical branch as well as to apply the knowledge in practice after completing the studies. A student will acquire proficiency in working with modern instruments applied in research laboratories and will be capable to take part into science and research projects, individually or in group, to be familiar with computer usage in order to present the results orally or as a written report. After completing the studies a student will be capable to work individually in a pharmacy and chemical laboratories of various profiles and usage in research and development, drug quality control, standardization etc. A student will also acquire the knowledge and skills of ethical analyses and critical evaluation in making decisions as well as in solving problems from pharmaceutical and biomedical researches as well as from toxicology, ecology and other pharmaceutical branches.

## Admission requirements

All those who completed four-year secondary education may apply for the first year of basic academic studies. Entrance exam is obligatory, but students from other universities and higher education institutions may enroll as well without taking the entrance exam.

## Contact

Head of the study program:

**Prof. Dr. Vesna Kuntić**

Telephone: +381 11 395 13 96

Contact e-mail: [vesna.kuntic@pharmacy.bg.ac.rs](mailto:vesna.kuntic@pharmacy.bg.ac.rs)

# Pharmacy - Medical Biochemistry

Faculty of Pharmacy, 450 Vojvode Stepe, 11000 Beograd, [www.pharmacy.bg.ac.rs](http://www.pharmacy.bg.ac.rs)

ECTS: 300/ DEGREE: MASTER OF PHARMACY - MEDICAL BIOCHEMIST/ INTEGRATED STUDIES

## Study program content

Study Program Pharmacy – Medical Biochemistry at Integrated Academic Studies carries 300 ESPB points and includes 35 compulsory and 18 elective courses (from which a student may choose 9 courses), and final examination. Lectures are carried out to be realized in small groups as well as for individual work (with mentor), while the working methods are customized to the number of students (consultations, seminars etc.).

The provided methods of teaching include lectures, laboratory (experimental) exercises that are realized individually, as well as theoretical exercises, seminary works, interactive teaching.

During their study, students have the advantage to be introduced into theoretical principles, state-of-art technology, devices, instrumental methods and techniques, that are used for the analysis procedures in clinical and biochemical, toxicological and other laboratories. Of utmost importance for their proficiency will be certainly their engagement in various aspects of experimental research.

Students who are interested in research involvement have the possibility to work individually with their mentor and to take part into the current research programs

## Study program goals

The primary goal of this Study Program is to enable a student to be an excellent professional for working in clinical laboratories as well as to provide him/her to acquire the requested knowledge and skills in applying and significance of laboratory analyses for diagnosis, monitoring and prognosis of disease, handling with instruments and equipment, protection of laboratory personnel and safe handling of chemicals, biological materials and medical wastes, using of professional literature and internet, quality control of measuring procedures etc.

This Study Program is also focused to enable a student to be fully competent for working

in medical and biochemical, toxicological and sanitary laboratory in which are realized medical and biochemical procedures as well as those regarding toxicology and sanitary chemistry. The acquired diploma of the Master Studies will be recognized by the European Institutions that will provide graduate students to continue their professional education and specialization in research (doctoral studies) from medical biochemistry or familiar disciplines at domestic and European universities without differential exams.

## Study program outcomes

The competences of students attending this Study Program will be: human body (introduction into physiological and biochemical processes, basic principles of genetics, laboratory analyses of body functions etc.), disease (introduction into etiology, pathology and pathophysiology of disease, primary symptoms and patient's clinical picture, laboratory diagnostics for various diseases), medical and biochemical procedures in health care (introduction into fundamental principles of good laboratory practice, rational laboratory diagnosis and applying of laboratory algorithms etc.) as well as health care system i.e. management in health care policy, regulations and legal provisions.

The goal of the Study Program will be to acquire fundamental and applied knowledge from various domains of medical biochemistry, pharmacy, medicine, chemistry, as well as to be introduced into basic medical terminology and developing competencies for solving problems occurring in professional work and research by applying analytical and computer methods.

After completing the study, a student will be trained for individual working in biochemistry, toxicological and sanitary laboratory, as well as in other laboratories of various profiles and usage (research and development, quality control, standardization etc.).

A student will acquire the knowledge and skills in ethical analyses and critical evaluation in the procedure of making decisions and solving problems from biochemical research, toxicology, ecology and other pharmaceutical domains.

## Admission requirements

All those who completed four-year secondary education may apply for the first year of basic academic studies. Entrance exam is obligatory, but students from other universities and higher education institutions may enroll as well without taking the entrance exam.

## Contact

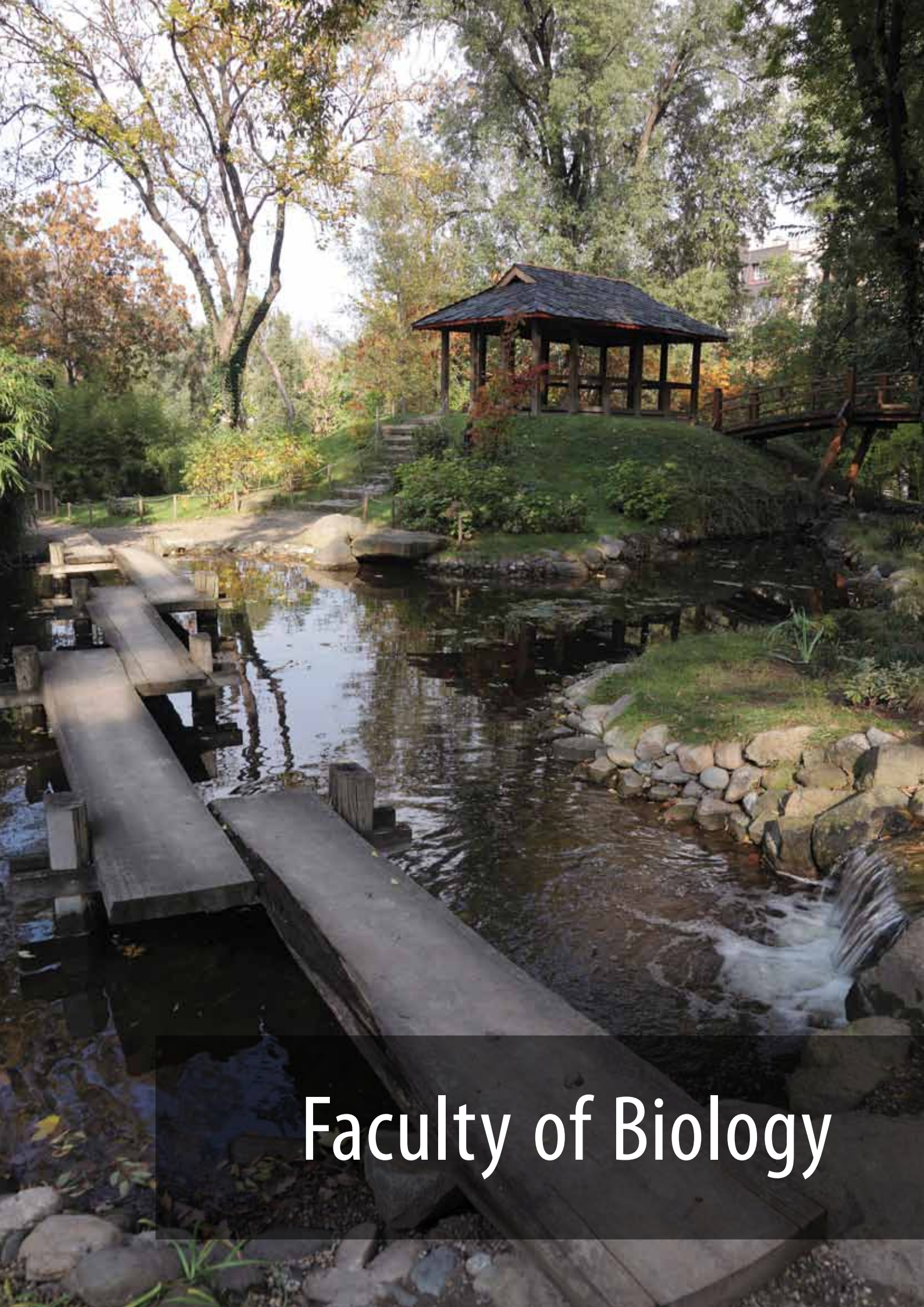
Head of the study program:

**Prof. Dr. Vesna Kuntić**

Telephone: +381 11 395 13 96

Contact e-mail: [vesna.kuntic@pharmacy.bg.ac.rs](mailto:vesna.kuntic@pharmacy.bg.ac.rs)





Faculty of Biology

# Graduate studies in Biology

at Faculty of Biology, 16 Studentski trg, 11000 Belgrade, [www.bio.bg.ac.rs](http://www.bio.bg.ac.rs)

ECTS: 240/ DEGREE: GRADUATE BIOLOGIST

## Study program content

The graduate study program in Biology is a 240 ECTS four-year academic program, dedicated to educating and training students for professional and scientific work in biology. Upon completion of the program, students acquire the academic title of Biologist and have the knowledge and skills necessary to work in all fields in which knowledge of biology is needed. The study program has three modules: Biology, Molecular biology and physiology, and Ecology, and consists of a number of common general subjects, theoretical, methodological, scientific, technical, and professional applicative subjects that provide basic knowledge of biology, module-specific subjects, and elective subjects open to all students. The study program is carried out through various forms of theoretical and practical instructions (lectures, computer exercises, laboratory exercises), field work, seminars, expert research projects, colloquia, exams. The program does not require a final dissertation. On passing the final exam, the student acquires the rights provided by law for the completion of basic studies.

## Study program goals

The aim of the graduate study program in Biology is to provide basic academic education in biology.

## Modules

1. Biology;
2. Molecular biology and physiology;
3. Ecology.

## Study program outcomes

By completing the graduate study program in Biology, students acquire the following general competencies: - ability to analyze and synthesize the basic knowledge about the structure, organization, and function of biological systems, with predictive outcomes and consequences; - mastering the methods, procedures, and processes of biological research; - development of

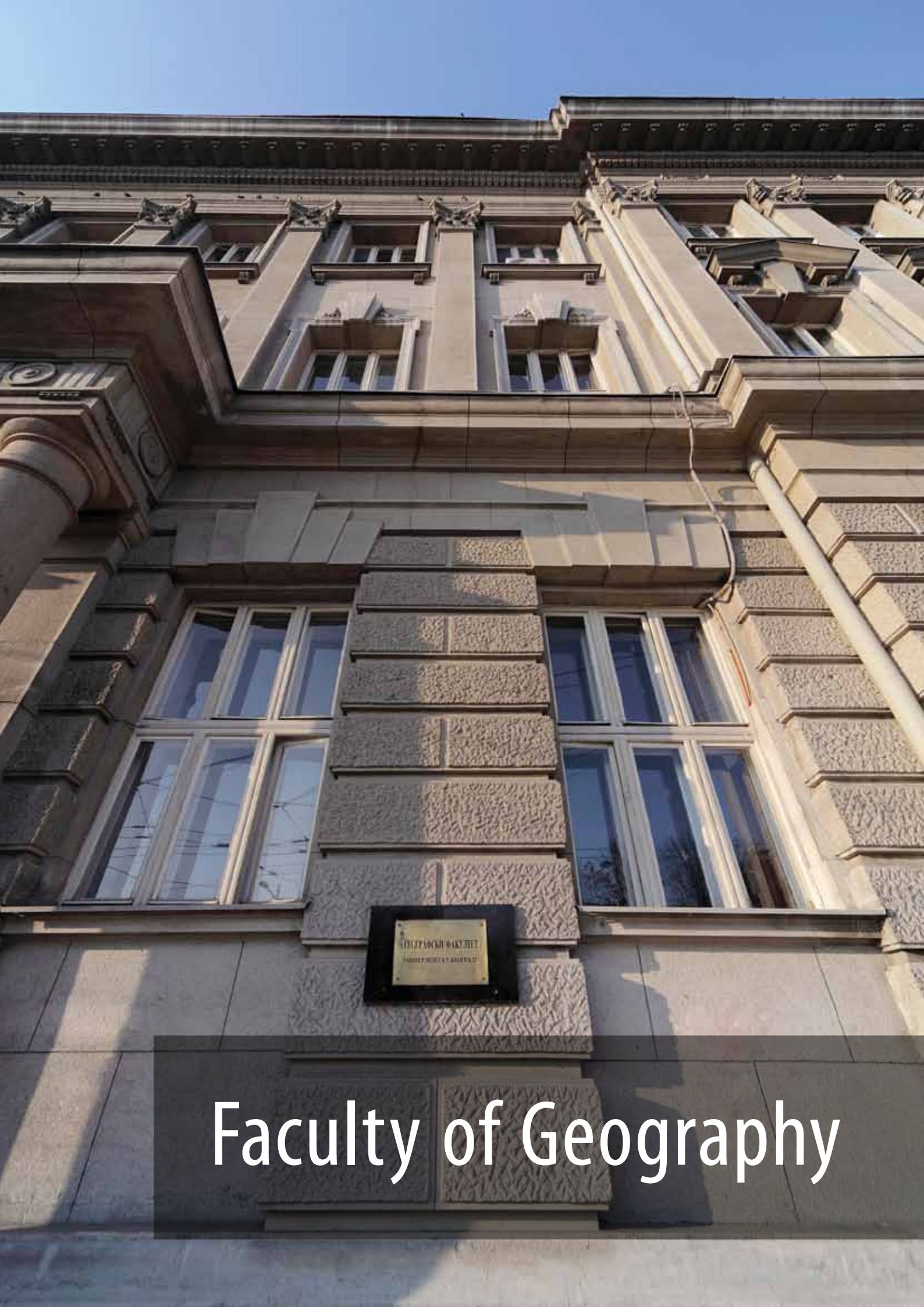
critical and self-critical thinking and approaches; - ability to implement the acquired knowledge in practice; - ability for individual and team work in a multidisciplinary environment; - development of general communication skills and competencies; - ability to exchange information, ideas, problems, and solutions, and to cooperate with others; - awareness of ethical and bioethical behavior.

## Admission requirements

Anyone who has completed four years of high school is eligible to enroll.

## Contact

Head of the study program:  
**Prof. Dr. Siniša Đurašević**  
Contact e-mail: [sslužba@bio.bg.ac.rs](mailto:sslužba@bio.bg.ac.rs)



ГЕОГРАФСКИ ФАКУЛТЕТ  
УНИВЕРЗИТЕТ У БЕОГРАДУ

# Faculty of Geography

# Geography

at Faculty of Geography, 3 Studentski trg / III, 11000 Belgrade, [www.gef.bg.ac.rs](http://www.gef.bg.ac.rs)

ECTS: 240/ DEGREE: GRADUATE GEOGRAPHER

## Study program content

The program of undergraduate studies Geography consists of 28 compulsory and 8 elective subjects including classes of active teaching, field classes I, II and III, internship and completion of final paper. Students earn 240 ECTS credits during four years of undergraduate studies.

## Study program goals

Acquiring of fundamental and applicative knowledge, abilities, skills and opinions needed for planning, organizing and realization of geography classes in primary and secondary schools as well as for monitoring and assessing results of geography teaching.

## Study program outcomes

Graduate geographers will be capable of planning, organizing and teaching geography in primary and secondary schools in accordance with contemporary scientific achievements in the field of geography and its integral scientific disciplines that are studied through this program of studies.

## Admission requirements

Required number of points obtained after completion of four-year secondary or grammar school, combined with the number of points obtained at the entrance exam.

## Contact

Head of the study program:

**Prof. Dr. Miroljub Milinčić**

Telephone: +381 11 263 74 21

Contact e-mail: [dekanat@gef.bg.ac.rs](mailto:dekanat@gef.bg.ac.rs)



# Geospatial and Environmental Science

at Faculty of Geography, 3 Studentski trg / III, 11000 Belgrade, [www.gef.bg.ac.rs](http://www.gef.bg.ac.rs)

ECTS: 240/ DEGREE: GRADUATE GEOGRAPHER

## Study program content

The program of undergraduate studies Geospatial and Environmental Science consists of 32 compulsory subjects, several half-day and two three-day field courses, 10 elective subjects, internship and completion of final paper. Students earn 240 ECTS credits during four years of undergraduate studies.

## Study program goals

Acquiring of fundamental and applicative knowledge, abilities, skills and opinions needed for understanding, monitoring, planning and realization of activities connected to complex geospatial relations in the real environmental system (geo-component, geo-complex and geo-system level) and activities of monitoring and implementation of measures (programs and plans) for environmental protection and development.

## Study program outcomes

Graduate students of Geospatial and Environmental Science studies will be capable of ana-

lyzing, monitoring, planning, organizing and realization of activities in various segments of professional-scientific, practical and educational spheres as well as different segments of social activities in the fields of environmental protection and development and the integral scientific disciplines that are studied through this program of studies.

## Admission requirements

Required number of points obtained after completion of four-year secondary or grammar school, combined with the number of points obtained at the entrance exam.

## Contact

Head of the study program:

**Prof. Dr. Miroljub Milinčić**

Contact e-mail: [dekanat@gef.bg.ac.rs](mailto:dekanat@gef.bg.ac.rs)





# Spatial Planning

at Faculty of Geography, 3 Studentski trg / III, 11000 Belgrade, [www.gef.bg.ac.rs](http://www.gef.bg.ac.rs)

ECTS: 180/ DEGREE: GRADUATE GEOGRAPHER

## Study program content

The program of undergraduate studies Spatial Planning consists of 23 compulsory and 8 elective subjects including classes of active teaching, field classes, internship and completion of final paper. Students earn 180 ECTS credits during three years of undergraduate studies.

## Study program goals

Acquiring of fundamental and applicative knowledge, abilities, skills and opinions needed for spatial planning – professional internship, administrative and scientific work in government executive bodies (ministries, agencies), local government bodies (public institutions for urban planning, municipal offices for urban planning), as well as professional urban planning institutions and companies (public or private).

## Study program outcomes

Graduate spatial planners will be capable of: designing spatial plans and all other plan docu-

ments regulated by law; creating sector studies for development strategies within social, economic, environmental and nature fields; producing programs, solutions and decisions necessary in tender procedures; designing, adopting and implementing plan documents of all kinds and types; developing research studies and analyses needed for creation of all types of strategic documents that include plan documents, etc.

## Admission requirements

Required number of points obtained after completion of four-year secondary or grammar school, combined with the number of points obtained at the entrance exam.

## Contact

Head of the study program:

**Prof. Dr. Mirosljub Milinčić**

Contact e-mail: [dekanat@gef.bg.ac.rs](mailto:dekanat@gef.bg.ac.rs)



# Demography

at Faculty of Geography, 3 Studentski trg / III, 11000 Belgrade, [www.gef.bg.ac.rs](http://www.gef.bg.ac.rs)

ECTS: 240/ DEGREE: GRADUATE GEOGRAPHER

## Study program content

The program of undergraduate studies Demography consists of 27 compulsory and 11 elective subjects including classes of active teaching, field classes, internship and completion of final paper. Students earn 240 ECTS credits during four years of undergraduate studies.

## Study program goals

Acquiring optimal level of knowledge that will enable a graduate demographer to solve complex problems (scientific, expert and practical) connected with the determinants of population growth and placement within areas of various territorial and social dimensions.

## Study program outcomes

Graduate demographers will be capable of applying their knowledge in identifying and solv-

ing problems connected with demographic growth in the context of complex socio-economic processes of a particular area and time period.

## Admission requirements

Required number of points obtained after completion of four-year secondary or grammar school, combined with the number of points obtained at the entrance exam.

## Contact

Head of the study program:

**Prof. Dr. Miroljub Milinčić**

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# Tourism Studies

at Faculty of Geography, 3 Studentski trg / III, 11000 Belgrade, [www.gef.bg.ac.rs](http://www.gef.bg.ac.rs)

ECTS: 240/ DEGREE: GRADUATE GEOGRAPHER

## Study program content

Methods of teaching are: lectures, practice classes and internship, which is organized in state institutions, organizations, scientific institutions and companies (hotels, agencies, transport firms, etc.), whose business activities are connected to development of tourism. Having in mind specific characteristics of this study program, students' independent work is included in their practice classes. Faculty of Geography possesses up-to-date equipment which students at this program of study can use in order to successfully complete some of their teaching activities. Highly skilled lecturers and fellows, both in terms of their pedagogical and academic qualifications, their direct contact with students, permanent consolidation of teaching materials and testing, permit formation of a high quality educational process at the Faculty and high pass rate.

## Study program goals

Acquiring of fundamental and applicative knowledge about tourism as the contemporary and complex geospatial, socio-cultural and economic phenomenon; obtaining of skills and competences necessary for perceiving tourism in an integral way, while appreciating heterogeneous nature of its causes, effects and functions,

thus forming indispensable basis for successful completion of various tasks connected with the theory and practice of contemporary tourism development.

## Study program outcomes

Graduate students of Tourism studies (tourismologists) will be able to perceive and interpret tourism in an integral way, while developing innovative and critical thinking about causes, effects and functions of tourism trends; they will acquire competences and skills necessary for performing analytical, expert, planning, organizational and executive tasks connected with the theory and practice of tourism development.

## Admission requirements

Required number of points obtained after completion of four-year secondary or grammar school, combined with the number of points obtained at the entrance exam.

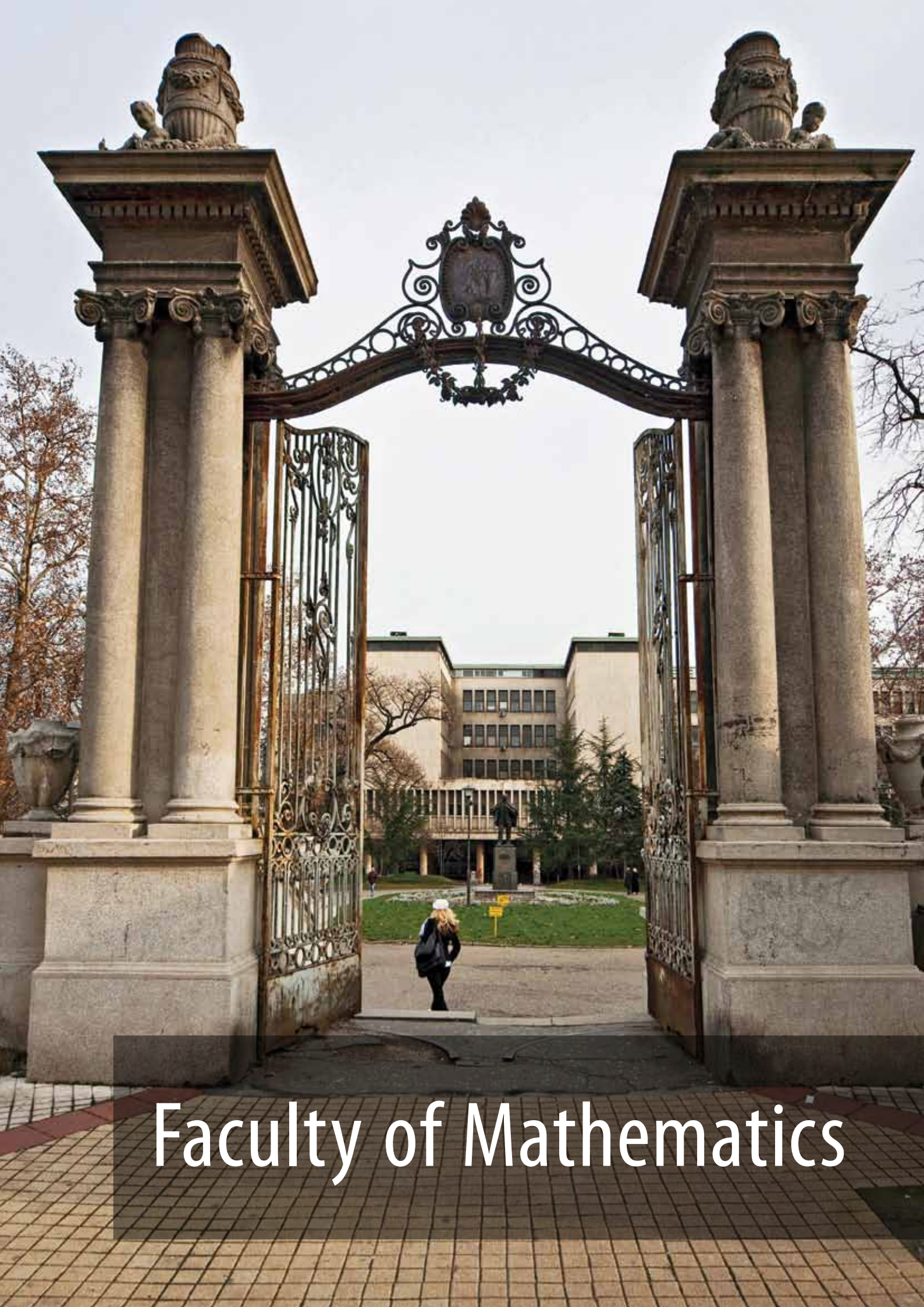
## Contact

Head of the study program:

**Prof. Dr. Mirosljub Milinčić**

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Faculty of Mathematics

# Mathematics

at Faculty of Mathematics, 16 Studentski trg, 11000 Belgrade, [www.matf.bg.ac.rs](http://www.matf.bg.ac.rs)

ECTS: 240/ DEGREE: BACHELOR OF SCIENCE

## Study program content

Mathematics undergraduate academic study program, offers the students education in the area of theoretical mathematics (real and functional analysis, algebra structures, theory of numbers, geometry, mathematical logic, and complex analysis), a large number of its applications (computers and programming, computer science, differential equations, numerical mathematics, probability, statistics, economical mathematics, astronomy, and mechanics) from pedagogical-methodic area, and educational matter of general nature.

By acquiring knowledge from theoretical mathematics and similar subjects, each student can comprehend mathematical concepts and theorems, and apply them when solving problems from the areas of science based on mathematics.

Through a large number of practical exercises and extensive seminar paper writing the students acquire practical education and skills, the ability to solve problems individually, either on paper or using a computer, as well as to address and process a chosen issue, to present the solution in written or electronic form, and convey it to the colleagues in an adequate fashion.

## Study program goals

- To acquire knowledge in mathematics and applied mathematics, especially from the content relevant for the selected module. Each curriculum determines the type and quality of knowledge and in the development of each curriculum we have complied complex criteria that take into account the logical connection between the contents, the mathematical tradition, our and foreign universities' experience, the existing teaching staff and social needs.
- To gain skills such as: solving the tasks that deepen their knowledge, applying knowledge in new situations, perform and carry out various tasks on computers, training of students in elementary and secondary schools, statistical data processing, mathematical modeling and working in financial institutions and industry.

- To improve general education and to adopt general cultural skills relevant for the profession, such as the ability to use literature and collecting information over the Internet, data processing, drafting texts and modern electronic presentations on mother tongue or foreign language and to represent scientific or professional activities in the logical connection and linguistically correct way.
- To develop curiosity and logical, analytical and synthetic, inductive-deductive and abstract thinking that is very important in mathematics.
- To develop general and professional skills.
- To build professional and ethical attitudes and develop critical thinking.
- To prepare for further education at higher levels of study and education throughout life for inclusion in the scientific-research work in scientific institutions, educational and development institutions, as well as in other industries.

## Study program outcomes

By completing Mathematics undergraduate studies, the students acquire the following general and occupation-specific skills:

- They master the concepts and principles falling in the areas of mathematics and relating disciplines - computer science, statistics, sky mechanics and the like, covered in the program,
- Are able to make an optimal choice of literature to address specific problems, to obtain a solution, to process and present the results using a computer and to utilize the acquired knowledge,
- Know how to teach mathematics in secondary and primary schools in accordance with the Regulations on the type of qualification of teachers and educationists,
- Know how to think critically about phenomena related to their profession, critically evaluate and analyze the facts, and to shape their findings in a comprehensible fashion using modern forms of processing and displaying results,
- Know how to present their findings to domestic and international public in an under-

- standable way, and so convey their knowledge to others,
- Know how to respect ethical principles of the profession.

### Admission requirements

Admission requirements are completed four-year secondary education and passed entrance exam.

### Contact

Head of the study program:  
**Prof. Dr. Aleksandar Lipkovski**  
Contact e-mail: [acal@matf.bg.ac.rs](mailto:acal@matf.bg.ac.rs)



# Informatics

at Faculty of Mathematics, 16 Studentski trg, 11000 Belgrade, [www.matf.bg.ac.rs](http://www.matf.bg.ac.rs)

ECTS: 180/ DEGREE: BACHELOR OF SCIENCE

## Study program content

Studies on the Computer Science undergraduate academic study program last 6 semesters and take 180 EST credits. Study program of undergraduate studies of Computer Science provides the students with general education in mathematics, computing and information, and knowledge of new information technologies.

The purpose of the program is to provide the students with comprehensive knowledge of classical and modern branches of computer science and information technology, and thus the competence to work in commercial, educational and development institutions.

## Study program goals

The main objectives of the Computer Science study program are to enable all the students to acquire knowledge to apply the knowledge gained in economic, educational and development institutions, as well as to prepare them for further education at higher levels of studies and learning throughout life. The program is designed in the way that the acquired knowledge and skills enable the students to work in the fields of computer science and informatics, and in relating fields within the industry, development, and scientific institutions or educational institutions, and other fields of work.

## Study program outcomes

By completing the studies of Computer Science undergraduate academic study program the students acquire a general ability to govern the terms and rules in the fields of mathematics, computing and information or astronomy, covered in the program, to be able to make an optimal selection of literature for solving specific problems, to calculate, simulate, process and present the results using computers and apply their knowledge in practice, to think critically about the phenomena related to their profession, to critically perceive and analyze the facts, to shape their findings in an orderly fashion, and respect the ethical principles of the profession.

## Admission requirements

Admission requirements are completed four-year secondary education and passed entrance exam.

## Contact

Head of the study program:  
**Prof. Dr. Miodrag Živković**

Contact e-mail: [ezivkovm@matf.bg.ac.rs](mailto:ezivkovm@matf.bg.ac.rs)

# Astronomy and Astrophysics

at Faculty of Mathematics, 16 Studentski trg, 11000 Belgrade, [www.matf.bg.ac.rs](http://www.matf.bg.ac.rs)

ECTS: 240/ DEGREE: BACHELOR

## Study program content

The Astronomy and Astrophysics undergraduate academic study program provides the students with general education in the field of astronomy (and its more contemporary form astrophysics) which is the oldest science, generally speaking, and which integrates the fields of astronomy, mathematics, physics, and from recently, computer science, chemistry, biology, and archeology through its basic disciplines. With acquiring knowledge from the fields of astronomy and astrophysics, the students become able to comprehend the physical regularities relating to celestial objects, and to understand the mathematical grounds with which the positions, movements, and interrelations between the celestial objects are described.

Along with the theoretical knowledge, through a large number of lab exercises and astronomical observations the students acquire practical knowledge and skills, and also the ability to independently organize and carry out a series of experimental measurements, because they become profoundly familiar with the principles on which the functioning of the cutting edge technology is based. In this way, a profile is formed of experts who can work competently in most diversified fields of scientific research, but who can also teach in primary and secondary schools, and work in corporate business and finance because they have very good ground knowledge of information technologies.

## Study program goals

The objective of Astronomy and Astrophysics undergraduate academic study program is to provide students with general and profession specific skills and abilities that include mastering the concepts and rules from all fields of astronomy and astrophysics, as well as from the relevant parts of similar sciences such as mathematics, physics, computer science, chemistry, biology, and archeology covered in the program; to enable them to use literature, to calculate, simulate, process and present the results; to think critically and analyze the facts about the phenomena related to their profession, to critically perceive and analyze the facts, to shape their findings in a

comprehensible fashion, using modern modes of processing and presenting the findings; to perceive the importance of ethical principles in science; to gain routine in applying astronomical methods and techniques in theoretical and experimental domains of astronomy, astrophysical, physical, computer science, chemical, biological, archeological, and other systems; and to interpret their status, structure, and processes starting from the level of elemental particles to the structure of the cosmos as a whole.

A relevant aspect of a study program conception is mastering the theoretical principles or astronomical and astrophysical methods which enable a creative approach to using modern equipment for astronomical observation based on modern optics, electronics, and automation, as well as on efficient maintenance of the equipment, keeping it operable at all times.

Finally, the program provides a basis for the continuations of education in order to engage in scientific research work in a wide specter of natural and technical sciences.

## Study program outcomes

Mastering the Astronomy and Astrophysics undergraduate academic study program the students acquire general abilities to:

- Master the concepts and rules in the fields of astronomy and astrophysics, as well as in similar sciences – mathematics, physics, and computer science covered in this program,
- Make an optimal choice of literature for solving concrete astronomical problems, calculate, simulate, process, and present the findings using computers, and apply the gained knowledge in practice,
- Think critically about the phenomena relating to their profession, critically perceive and analyze the facts, and shape the obtained findings in a comprehensible fashion using the modern modes of processing and presenting the results,
- Present their findings to the domestic and international public in a comprehensive fashion and thus convey their knowledge to others,



- Respect ethical principles of the profession,
- Through the undergraduate studies of astronomy and astrophysics the students also acquire the following specific professional competence:
- They have the routine in applying the astronomical methods and techniques in theoretical and experimental domains of astronomical, physical, computer scientific, chemical, biological, archeological, and other systems, and interpret their status, structure, and processes at micro and macro level.
- They apply in practice numerous analytical methods such as photometric, spectroscopic, polar-metric, and radio-astronomical,
- They creatively perceive the possibilities of using modern equipment for astronomical measurements intended for nonspecific purpose and efficiently keep the equipment in an operational state, teach astronomy, astrophysics, physics, and other subjects similar to astronomy and astrophysics at schools of high education, higher and high schools, as well as secondary and primary schools in compliance with the Codebook of professional education required for teachers and educators in secondary and primary schools.

### Admission requirements

Admission requirements are completed four-year secondary education and passed entrance exam.

### Contact

Head of the study program:

**Prof. Dr. Dejan Urošević**

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# Faculty of Physics

# Theoretical and Experimental Physics

at Faculty of Physics, 12 Studentski trg, Belgrade, [www.ff.bg.ac.rs](http://www.ff.bg.ac.rs)

ECTS: 240/ DEGREE: PHYSICIST - BACHELOR WITH HONORS

## Study program content

Study program "Theoretical and Experimental Physics" prepares students for research work in physics and neighboring technical and technological disciplines. These are the basic academic studies that last four years (8 semesters) with a total of 240 ECTS. The content of the program consists of courses in physics and related disciplines, which gradually, from the basic (first two years) than methodological (mainly in the third year) and systemic (last year), comes to the level of knowledge that enables modern scientific understanding of the physics trends, and approximately the research level through master and doctoral studies. Methods of teaching are lectures, computational and experimental exercises, seminars and homework assignments. The high level of scientific and pedagogical teaching staff of the Faculty of Physics and their direct contact with students, and the permanent checking of students knowledge, leads to high-quality educational process with high student transience.

## Study program goals

The aim of the study program "Theoretical and Experimental Physics" is to educate physicists to work in scientific research and education, especially higher education. Students in the program acquire a broad range of knowledge in physics and related disciplines. But more importantly, they are trained to think creatively, to monitor and make selection of relevant scientific literature, to understand and to solve complex physical problems, and than apply and present the results. Also, through specific experimental exercises and homework they are preparing for teamwork.

## Study program outcomes

Completing this program, students acquire basic knowledge in theoretical and experimental physics. They are qualifying for an analytical and creative thinking, and to monitor the literature and newspapers in the area, which is necessary for subsequent participation in scientific research. Special attention is paid to the independence of the work, also to the presentation

and to their IT skills, necessary at a later scientific collaboration and teaching. Courses in the final year gives an introduction to the field of modern physics are intertwined with new technologies, so that the program prepares students for the technological implementation and operation of technology transfer.

## Admission requirements

Finished high school and passed the entrance examination in physics or math.

## Contact

Head of the study program:  
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# Applied and Computer Physics

at Faculty of Physics, 12 Studentski trg, Belgrade, [www.ff.bg.ac.rs](http://www.ff.bg.ac.rs)

ECTS: 240/ DEGREE: PHYSICIST - BACHELOR WITH HONORS

## Study program content

Courses of study program "Applied and Computer Physics" can be classified into several groups that reflect its structure and contents. One group consists general physics courses that should provide students with the basic knowledge of physics and to prepare them to master the special physics areas. The second group consists general education courses that include both the other natural sciences (mathematics and chemistry) and the general courses such as foreign languages and philosophy of physics. Overcoming these two groups of subjects, students are willing to acquire a higher level of professional teaching knowledge in the field of applied physics. Those fields can be divided into two groups of which one group consists of objects that represent the fields of applied physics (related industries, laboratory accreditation, experimental physics etc.) while the second group consists items related to the programming and use of computers in physics, science experiment, and industry. The methods of teaching are lectures, experimental and theoretical exercises. Taking into account all the specificities of this program, independent work is scheduled in the laboratory exercises, which includes the use of modern equipment and appliances. Faculty of Physics offers the most modern instruments to the students of this program. A high level of scientific and pedagogic level of teaching stuff of the Faculty of Physics and their direct contact with students, with continuous reinforcement tools and knowledge tests, will lead to the definition of high quality educational process with high student transience, but also highly trained to overcome various challenges in the field of applied physics, technology and multidisciplinary sciences.

## Study program goals

The rapid development of technology, industry and multidisciplinary science has created the need for a growing number of physicists whose knowledge and skills can be applied in these areas. Program Applied and Computer Physics was set up to train professionals in the field of applied physics and computer science, able to cope with the specific problems of industry and

technology. It is anticipated that in addition to the general knowledge of physics they possess knowledge of electronics, telecommunications and programming, in order to fully review the complex, multidisciplinary tasks.

This broad knowledge and versatility will provide them a variety of employment opportunities. The main objective of the study program "Applied and Computer Physics" is a comprehensive education experts in the field of applied physics and computer, capable of solving complex and specific technology and energy problems in the industry and the multidisciplinary sciences, and in the fundamental research, innovation and development projects.

## Study program outcomes

Completion study at the study program "Applied and Computer Physics" basic knowledge of physics is acquired, but also the knowledge in the field of applied physics that enables applications in industry, energy, science and multidisciplinary research. The program enables training and mastering modern instrumental techniques. Students who complete the program of studies " Applied and Computer Physics " is creative and capable of independent work in physical and laboratory profiles and different purposes (research and development, quality control, standardization, process monitoring, etc.). In addition, graduates are eligible to participate in the fundamental-research, development and innovation projects and tasks.

## Admission requirements

Finished high school and passed the entrance examination in physics or math.

## Contact

Head of the study program:  
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# General Physics

at Faculty of Physics, 12 Studentski trg, Belgrade, [www.ff.bg.ac.rs](http://www.ff.bg.ac.rs)

ECTS: 180/ DEGREE: PHYSICIST - BACHELOR

## Study program content

This study program educates students to become professors of physics in elementary and secondary schools. Through basic studies students are trained to implement all of physics programs as a general educational courses.

## Study program goals

The study program goal is to educate the students for teaching physics in elementary and secondary schools. Also, this study program is the first part of the program that educates teachers for physics in high schools. The study program goal is to give students the knowledge of general physics and different scientific fields as basics for planning the teaching curriculum. Student acquires the skills of experimental work in the laboratory and the ability to design, planning and setting up and executing experiments. The goal of the program is to prepare students for the organization and implementation of classes in accordance with the teaching methods and content, as well as systematic monitoring, assessment and evaluation of knowledge of pupils. Also, application of knowledge gained from the psychology of the individual characteristics of the pupil's age, the development and adoption of new knowledge and application of knowledge in pedagogy of the organization, completion and monitoring of the education process. Goal of the program is also to prepare students for improving teaching through professional development, popular lectures on current research and prepare their pupils for the physics competitions.

## Study program outcomes

Good knowledge and understanding of physics, both the content of lessons and the modern research trends; ability to transfer knowledge to pupils on the level of language, facts, theories and methodologies; teacher should teach pupils the scientific view of the world, particularly the nature; the choice of the lesson subject should highlight the importance of understanding the physics of the phenomena of everyday life; the

teacher should know the interdisciplinary nature of physics, and transfer that knowledge to the pupils associated with similar skills that occurs in other natural sciences; create an open, flexible and supportive environment in which the pupils can use different learning strategies, through research, discovery, solving theoretical and experimental problems, etc.; the teacher helps the pupils understand the learning process and take responsibility for their own learning; the teacher builds the transfer of knowledge on facts that the pupils already know and understand; the teacher's ability to monitor changes and evaluate pupils' progress, to choose the appropriate instruments for assessing pupils' knowledge and skills, to organize and carry out tests, and to give appropriate feedback to the pupils; to make good lesson plans.

## Admission requirements

Finished high school and passed the entrance examination in physics or math.

## Contact

Head of the study program:  
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# Meteorology

at Faculty of Physics, 12 Studentski trg, Belgrade, [www.ff.bg.ac.rs](http://www.ff.bg.ac.rs)

ECTS: 240/ DEGREE: METEOROLOGIST - BACHELOR WITH HONORS

## Study program content

The purpose of the study program "Meteorology" is to transfer to the students the necessary knowledge and skills that are defined in the objectives of the program. Meteorology is an exact science with the basics of physics, mathematics, numerical methods, information technology, statistics, physical chemistry and others. The purpose of the studies is, first, to convey to students the basics of these courses, and then meteorological courses.

Meteorology as a profession becomes more popular because of the global warming of the atmosphere and climate changes. This study program fully monitors such trends. Meteorological courses are well designed and include the latest knowledge need to deal with this profession.

Students in this program are trained in creative thinking, in monitoring of relevant scientific literature and the Internet. They are trained to understand and solve complex meteorological problems and present the results. Through specific exercises, assignments and seminars students are preparing for teamwork.

The purpose of this program is to enable experts to work in the public or private institutions, as well as educational work in the specialized geological and meteorological high schools. Also, the purpose of this program is to provide students with the necessary skills to continue to engage in scientific research through master and doctoral studies.

## Study program goals

The aim of the study is to educate graduate meteorologists. Meteorology is an inexact science with the natural basics of physics, mathematics, numerical methods, information technology, statistics, physical chemistry and others. Study program primarily aims to convey to students the basics of these courses, and then the meteorological courses. Meteorology as a profession becomes more popular because of the global warming of the atmosphere and climate changes. This study program fully monitors that inter-

national trends and meets those goals. Meteorological courses are well designed and includes the latest knowledge needed to deal with this profession. Students in this program are trained in creative thinking, in monitoring of relevant scientific literature and the Internet. They are trained to understand and solve complex meteorological problems and present the results. Through specific exercises, assignments and seminars students are preparing for teamwork.

## Study program outcomes

Capacity to work in meteorological institutions, and the institutions which employs meteorologists, and also in meteorological and geological schools. Students acquire the necessary skills for further scientific development through master and doctoral studies.

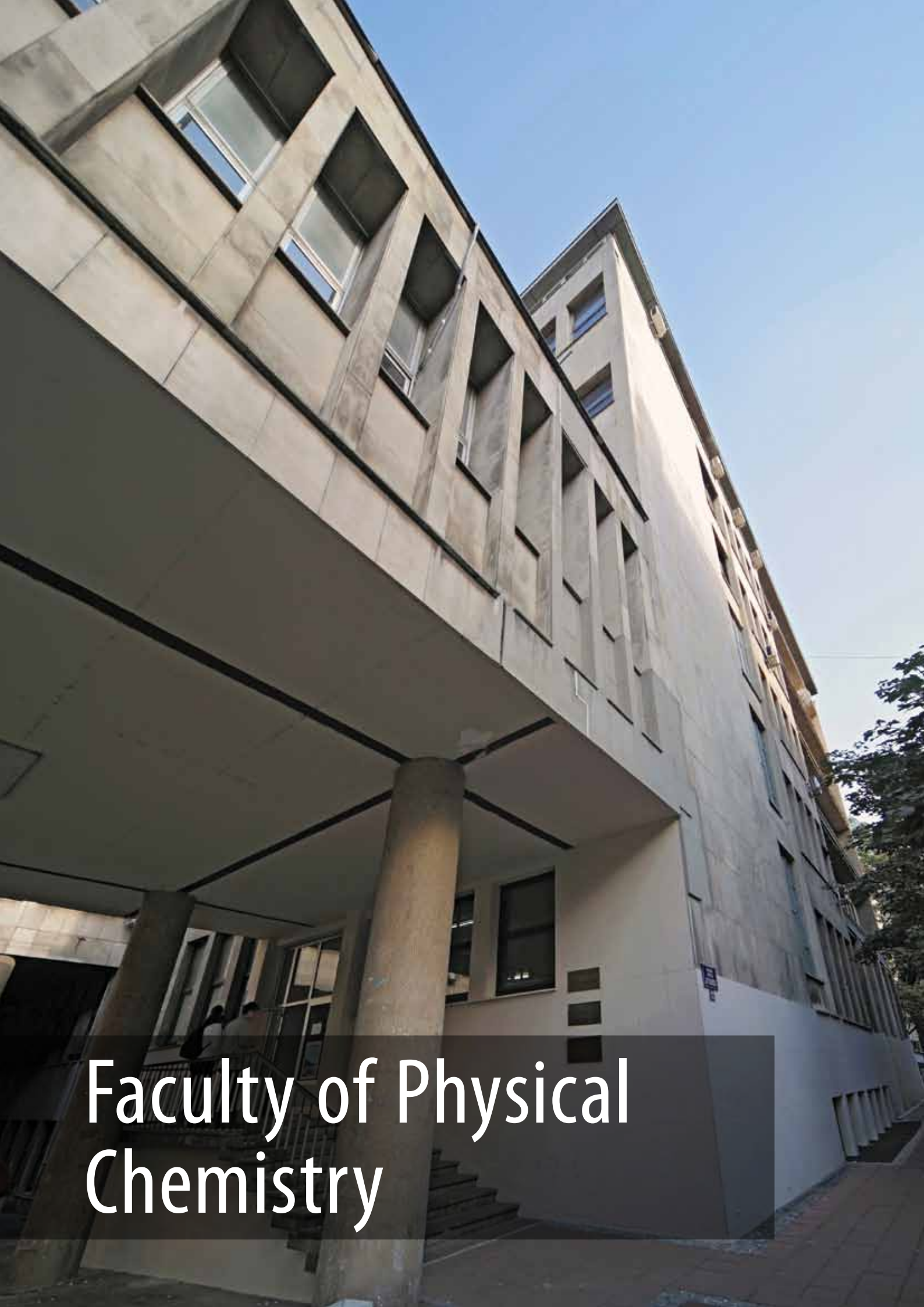
Completing this program, students acquire basic knowledge of meteorology. Students in this program are trained in creative thinking in monitoring of relevant scientific literature which is necessary for subsequent participation in scientific research through master and doctoral studies. Special attention is paid to the independence of the work, and the presentation and IT skills, necessary at a later scientific cooperation or business. Courses in the final year gives an introduction to the field of modern meteorology intertwined with new technologies, so that the program prepares students for the technological implementation and operation of technology transfer.

## Admission requirements

Finished high school and passed the entrance examination in physics or math.

## Contact

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# Faculty of Physical Chemistry

# Physical Chemistry

at Faculty of Physical Chemistry, 12 Studentski trg–16, 11000 Belgrade, [www.ffh.bg.ac.rs](http://www.ffh.bg.ac.rs)

ECTS: 240/ DEGREE: BACHELOR IN PHYSICAL CHEMISTRY

## Study program content

Undergraduate studies in Physical Chemistry last for four academic years and upon completion, it is equivalent to 240 ECTS points. The Study Program consists of one semester long mandatory and elective courses, which have more than 20 hours of active teaching classes per week.

The aim of Undergraduate studies in Physical Chemistry is to provide general knowledge of physical chemistry, which is one of the oldest interdisciplinary sciences, and which through its core areas integrate chemistry and physics. By gaining knowledge in the field of physical chemistry students will be able to understand physical principles that lead to chemical changes and to understand the mathematical basis that is used in description of chemical processes. Based on the knowledge that integrate essential aspects of mathematics, physics and chemistry, acquired through the group of courses: Mathematics, Physics, Inorganic Chemistry, Organic Chemistry, Analytical Chemistry and Biochemistry and more specialized knowledge acquired through the group of courses: General Course of Physical Chemistry 1 and 2, Chemical Thermodynamics, Statistical Thermodynamics, Introduction to Structure of Matter and Introduction to Experimental Skills, students will be able to expand their understanding of the structure, properties of matter and the course of chemical and biochemical processes through series of scientific, technical and applicative courses from the field of physical chemistry (Atomistics, Atomic Spectrochemistry, Molecular Spectrochemistry, Radiochemistry and Nuclear Chemistry, Quantum Chemistry, Solid State Physical Chemistry, Physicochemical Analysis, Chemical Kinetics, Electrochemistry, Biophysical Chemistry). In addition to theoretical knowledge, a large amount of time devoted to laboratory practice enable students to attain practical knowledge and skills. The students will be able to independently organize, perform and interpret the experimental data and to become familiar with the principles underlying the operation of modern instruments. In this way, students become capable professionals who are competent to work in various industries in order to control processes or to de-

velop new materials and methods, in education, in health care facilities and in institutions dealing with environmental control and protection, etc. The purpose of this Study Program is to provide students with comprehensive knowledge of classical and modern branches of physical chemistry which will allow them to work in commercial, educational and research institutions in which the physicochemical principles are applied in practice. Knowledge and skills that are provided through the Undergraduate studies in Physical Chemistry are specific and consistent with the needs of professionals who know the principles and are trained to use the most advanced methods to analyze and control vast variety of materials and processes.

## Study program goals

The main objectives of the Undergraduate studies in Physical Chemistry are to enable students to acquire knowledge and skills and to apply the acquired knowledge in a specific area of physical chemistry in industry, educational and research institutions and prepare them for further education at higher levels of study and training throughout life.

The Study Program is designed in a way that the acquired knowledge and skills enable students to work in physical chemistry and related fields in the industry, research and scientific organizations or educational institutions.

The aim of the Undergraduate studies in Physical Chemistry is to provide students with general and specific knowledge and skills which include understanding of concepts and principles of areas of physical chemistry and related sciences: physics, chemistry and mathematics covered by the Study Program; enable them to use literature, calculate, simulate, process and present data, think critically and analyze the facts, present the data in an understandable manner using modern means for data-processing and presentation; perceive the importance of ethical principles in science, gain the routine in application of methods and techniques of physical chemistry and related science in the domains of theoretical and experimental physicochemi-



cal, physical, chemical, biological, ecological and other systems, and to interpret system states, structures and processes from atomic, nuclear and molecular aspects.

### Study program outcomes

Upon completion of Undergraduate studies in Physical Chemistry students will be able to:

- understand the concepts and principles in the areas of physical chemistry and related sciences - physics, chemistry and mathematics covered by the Study Program,
- perform a literature search in order to solve a specific physicochemical problem; calculate, simulate, process and present the obtained results using computer and apply attained knowledge in practice,
- think critically about phenomena related to their profession, critically assess and analyze the facts, present the data in an understandable manner using modern means for data processing and presentation,
- present results in an understandable way to both domestic and international public, and in this way transfer knowledge to others,
- respect the ethical principles of the profession.

During Undergraduate studies in Physical Chemistry, students attain the following specific professional competencies:

- a routine in the application of methods and techniques of physical chemistry and related sciences in the theoretical and experimental domains of physicochemical, physical, chemical, biological, ecological and other systems; ability to interpret their states, structures and processes from the atomic, nuclear and molecular aspects,
- practical use of instrumental methods of analysis, such as chromatography (gas, liquid, ion, gel-permeable, capillary electrochromatography, etc.), spectroscopy (atomic emission, absorption, infrared, Raman, nuclear magnetic resonance, spin resonance, mass, X-ray, fluorescence, luminescence,

etc.), electrochemical (potentiometric, coulometric, voltammetric, and others), methods of electron microscopy and electronic microanalysis, thermal methods (thermogravimetry, differential scanning calorimetry) and in particular radiochemical methods (spectroscopy of alpha, beta and gamma radiation, neutron spectroscopy, radiation dosimetry, and others),

- creatively consider the potentials of utilization of modern equipment for non-specific physicochemical measurements and maintain equipment in effective operating condition,
- teach physical chemistry, physics, chemistry and physical chemistry related subjects in higher education institutions, senior high schools, secondary and primary schools, in accordance with the Regulations for mandatory qualification of teachers and professionals in primary and secondary schools.

Graduates of the master program in Physical Chemistry can continue education at the PhD level.

### Admission requirements

Candidates must have completed four-year high school.

### Contact

Head of the study program:

**Prof. Dr. Šćepan Miljanić**

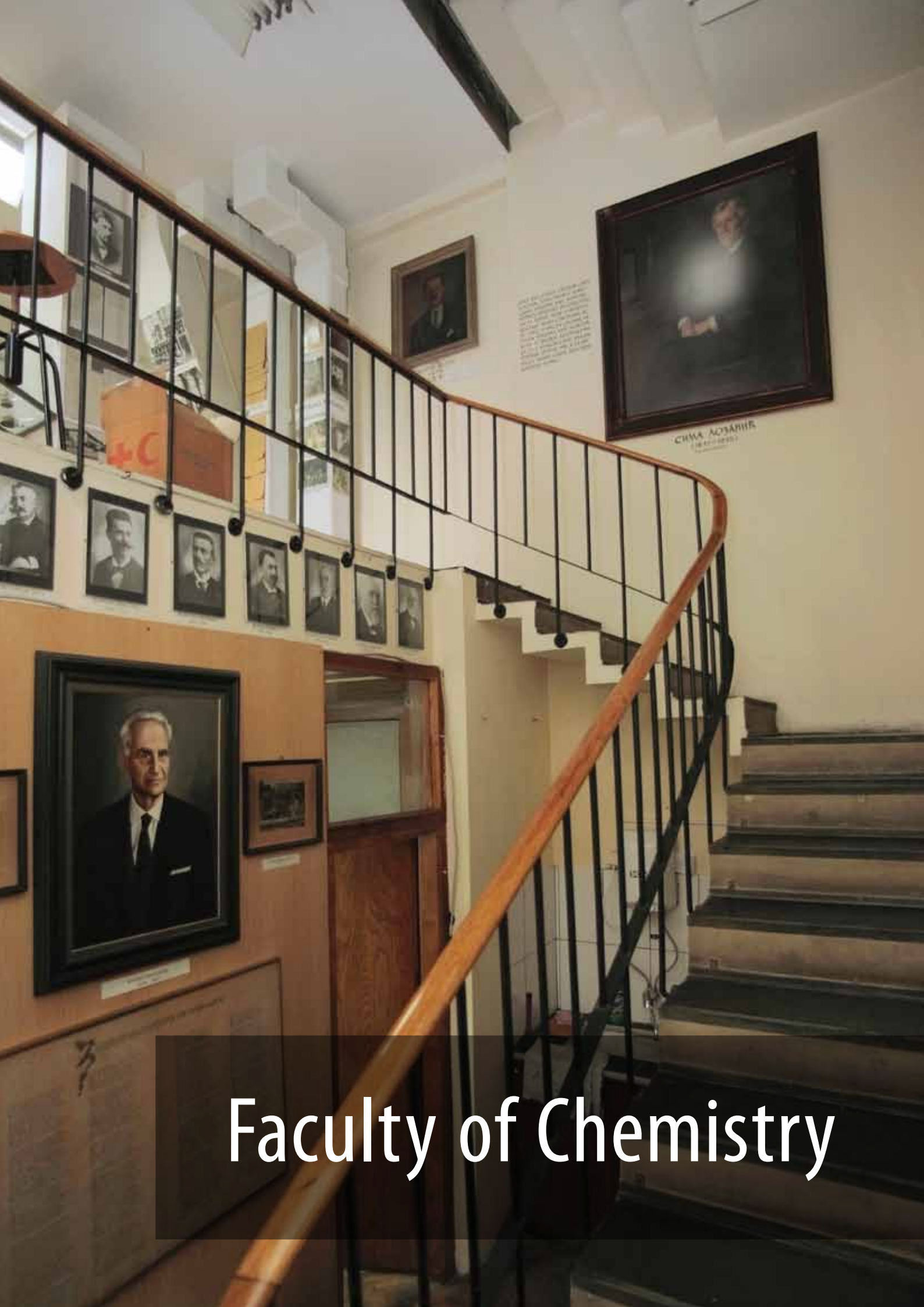
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# Faculty of Chemistry

# Chemistry

at Faculty of Chemistry, 12-16 Studentski Trg, 11000 Belgrade, [www.chem.bg.ac.rs](http://www.chem.bg.ac.rs)

ECTS: 240/ DEGREE: GRADUATE CHEMIST

## Study program content

The courses within the "Graduate Chemist" study program which characterize its structure, i.e. its content, can be classified into several groups.

One group includes the courses through which students acquire some basic knowledge in the field of the most important natural sciences (primarily physics and physical chemistry) and mathematics. The next group includes basic courses in chemistry - in the fields of general, inorganic, organic and analytical chemistry, biochemistry, the chemistry of natural products, applied (industrial) chemistry and environmental chemistry.

With the knowledge acquired from these two groups of courses, students attend the courses on which they acquire a higher level of knowledge in the most important fields of chemistry (organic syntheses, stereochemistry, structural instrumental methods, modern instrumental methods, inorganic reaction mechanisms, coordination chemistry, etc.). The ESP course enables students to keep up with up-to-date scientific and professional literature. Students then work on their final thesis, during which they are enabled to solve the given problem on their own. The planned methods of teaching are lectures, laboratory (experimental) and theoretical practice. Bearing in mind the specific features of this study program, the laboratory practice includes independent work which includes the use of the latest instruments and equipment. The Faculty of Chemistry has the latest instruments which will be at students' disposal during their studies.

## Study program goals

The final goal of the "Graduate Chemist" study program is to create professionals with a high level of fundamental and applied knowledge in various fields of chemistry and with a developed ability to "think in a chemical way", which includes capability to notice, understand and efficiently solve complex chemical problems which they will inevitably face while working on

fundamental research, innovation and development projects, in laboratories for research and development, quality control, standardization, process monitoring, etc.

## Study program outcomes

By completing the "Graduate Chemist" study program, a student acquires fundamental and practical knowledge in various fields of chemistry, which enables him to understand chemical processes and to actively participate in scientific and research work in the field of fundamental and applied research. During the studies, students become thoroughly familiar with the mechanisms of chemical reactions and master the modern synthesis methods and instrumental methods.

The student who completes the "Graduate Chemist" study program is able to work creatively and independently in chemical laboratories of different profiles and purposes (research and development, quality control, standardization, process monitoring, etc). Apart from this, a graduate student is qualified to participate in fundamental research and development projects and tasks.

## Admission requirements

An entrance condition for enrollment in a Bachelor's study program is to have graduated high school, approved entrance examination scores, and acceptance to study program.

## Contact

Head of the study program:

**Prof. Dr. Miloš Milčić**

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# Biochemistry

at Faculty of Chemistry, 12-16 Studentski Trg, 11000 Belgrade, [www.chem.bg.ac.rs](http://www.chem.bg.ac.rs)

ECTS: 240/ DEGREE: GRADUATE BIOCHEMIST

## Study program content

The "Graduate Biochemist" study program has 240 ECTS credits and it includes compulsory (192 ECTS credits) and elective (48 ECTS credits) courses in the field of mathematics, physics, chemistry, biology, biochemistry, molecular biology, molecular genetics and biotechnology and a final thesis. The program is based on the extensive study of basic branches of chemistry (68 ECTS credits) and biology (21 ECTS credits) which are necessary for biochemistry studies. The branches of chemistry covered by this study program are: inorganic, analytical, physical and organic chemistry, while the branches of biology covered by this program are: cell biology, physiology and microbiology. Compulsory biochemistry courses (66 ECTS credits) include all basic branches of biochemistry, as well as an introduction to basic biochemical experimental methods. This subject matter is studied within the following courses: Biochemistry of Proteins and Nucleic Acids, Enzymology, Chemistry of Natural Products (lipids, carbohydrates, alkaloids, antibiotics, etc.), Biochemistry of Metabolism, Biochemical Regulatory Mechanisms, Pathobiochemistry, Immunochemistry and Methods in Biochemistry. Courses Fundamentals of Molecular Biology and Molecular Genetics (13 ECTS credits altogether) deal with modern knowledge of organization, expression, regulation and evolution of genes. Within the Microbial Chemistry and Basic Biotechnology course (11 ECTS credits) students become familiar with the application of biochemistry in technology. There are elective courses during all four years of study, so students can choose among a wide range of courses in the field of fundamental and applied branches of biochemistry, chemistry, biology and other fields (e.g. mathematics, physics, psychology). Students complete their education in the field of biochemistry by writing an independent, experimental, research final thesis (16 ECTS credits) in the field of fundamental and applied branches of biochemistry.

## Study program goals

The primary goal of this study program is to enable students to get a first degree in biochemistry which will be recognized by all European

institutions and which will enable students to find a suitable employment or to continue their education (if they have adequate grades) within the Biochemistry Master program or in some other related branches at Serbian or some other European universities.

## Study program outcomes

At the basic level of biochemistry studies, students should become familiar with the subject matter of chemistry (organic, inorganic, physical and analytical chemistry), biology (cell biology, microbiology, physiology), core biochemistry (including the structure and function of macromolecules (proteins and enzymes, nucleic acids, lipids, carbohydrates), metabolic pathways and signal transduction pathways), and they should acquire the basic knowledge of certain branches of biochemistry (immunochemistry, pathobiochemistry, biotechnology). Students will be able to perform standard biochemical laboratory procedures and to use basic laboratory instruments. They will possess basic knowledge in bioinformatics and they will be able to use a computer to process the data obtained by experiments and to search databases, etc. Students will be able to work with biological material and various chemicals safely by applying the appropriate safety measures. They will be able to perform a part of a research, describe their results in the form of a final thesis and present and discuss the thesis orally. Students will be trained for their further professional development, which includes independent work.

## Admission requirements

An entrance condition for enrollment in a Bachelor's study program is to have graduated high school, approved entrance examination scores, and acceptance to study program.

## Contact

Head of the study program:

**Prof. Dr. Ljuba Mandić**

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# Chemistry Teacher

at Faculty of Chemistry, 12-16 Studentski Trg, 11000 Belgrade, [www.chem.bg.ac.rs](http://www.chem.bg.ac.rs)

ECTS: 240/ DEGREE: CHEMISTRY TEACHER

## Study program content

This study program prepares students to become chemistry teachers in primary and secondary schools. During the basic academic studies they are trained to implement all types of syllabi of chemistry as a general education subject and special chemistry syllabi in secondary vocational schools.

## Study program goals

The goals of the "Chemistry Teacher" study program are:

- building up knowledge in the field of general chemistry, inorganic chemistry, analytical chemistry, physical chemistry, organic chemistry, applied chemistry and biochemistry, which will be a basis for planning and teaching the subject matter of the above-mentioned fields in chemistry teaching in primary and secondary schools;
- developing the skill of experimental work in a laboratory and the ability to plan, set up and conduct experiments;
- building up psychological knowledge of age characteristics of students, how children develop and learn and how to ensure the development of students through teaching and pedagogical knowledge of the requirements which should be met by organizing, realizing, monitoring and evaluating the effects of teaching;
- enabling students to organize and teach a lesson according to the set goals and subject matter, as well as to critically evaluate their own practice and to conduct activities in order to improve the process of chemistry teaching/learning;
- understanding the pedagogic role of monitoring and evaluating students' progress, teaching them how to select the appropriate method for monitoring and evaluating students' progress, to prepare the instruments (tests) for testing the students' achievement and to organize and conduct the testing.

## Study program outcomes

The outcomes of this study program are:

- the ability to apply the knowledge of general chemistry, inorganic chemistry, analytical chemistry, physical chemistry, organic chemistry, applied chemistry and biochemistry to the process of planning, organizing and conducting chemistry teaching;
- the ability to apply procedural knowledge and experimental skills to the process of selecting, setting-up and conducting demonstration experiments, choosing the experiments for students' independent laboratory work and organizing their workplaces;
- the ability to define the lesson goals, the ability to select the subject matter and methods of teaching/learning chemistry according to the set goals;
- the ability to enable students to acquire the needed knowledge, abilities, skills and attitudes through interaction;
- the ability to equip the space in which the teaching process is carried out (a chemistry classroom, a laboratory);
- the ability to adapt the teaching process to students' age and previous knowledge;
- the ability to develop a good rapport with students and encourage teamwork among students;
- the ability to create the conditions for students to develop analytical, critical and productive thinking through chemistry teaching and to develop students' ability to solve problems;
- the ability to motivate students to learn chemistry;
- the ability to monitor and evaluate students' progress using the appropriate methods;
- the ability to monitor one's own practice from a critical point of view and to initiate activities which can improve it;
- the ability to communicate with parents, fellow workers and the local community in order to provide widespread support for teaching students and a harmonized influence on the teaching process.

## Admission requirements

An entrance condition for enrollment in a Bachelor's study program is to have graduated high school, approved entrance examination scores, and acceptance to study program.

## Contact

Head of the study program:

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# Environmental Chemistry

at Faculty of Chemistry, 12-16 Studentski Trg, 11000 Belgrade, [www.chem.bg.ac.rs](http://www.chem.bg.ac.rs)

ECTS: 240/ DEGREE: GRADUATE ENVIRONMENTAL CHEMIST

## Study program content

The courses within the study program "Graduate Environmental Chemist" which characterize its structure, i.e. its content, can be classified into several groups. One of the groups includes courses through which students acquire some basic knowledge in the field of the most important natural sciences (primarily physics, physical chemistry and ecology) and mathematics. The next group includes some basic courses in chemistry, such as general, inorganic, organic and analytical chemistry, biochemistry, chemistry of natural products and applied, i.e. industrial, chemistry. Bearing in mind the goals of this study program, special attention is given to instrumental analysis within analytical chemistry. With the basic knowledge gained on the courses from these two groups, students attend the courses which are closely related to environmental chemistry and which deal with the nature of the pollutants of soil, surface, ground and waste water, air (i.e. atmosphere) and food and pollutants from some industrial processes, i.e. plants. This third group of courses includes the ones which deal with various ways in which the problem of pollution, i.e. pollutants, can be solved. The English Language Course constitutes a separate group of courses in this classification.

## Study program goals

The final goal of the study program "Graduate Environmental Chemist" is to educate professionals who will be able to completely understand the essence of the environment and the nature of the many problems which have been created in it. In this way, such a professional will be able to distinguish between natural and anthropogenic forms in the environment, which is a prerequisite for nature conservation and for stopping the processes which have already been started and which disturb ecochemical balance on Earth. The general estimate is that the number of such professionals in Serbia is not sufficient at this moment. It is in the state's best interest to educate professionals who will be able to contribute to solving the piled-up problems in the near future.

## Study program outcomes

Students are trained to perform the tasks of controlling chemicals and pollutants in the environment. They acquire basic knowledge of analytical approach to sample preparation and data processing. Apart from this, they become familiar with modern analytical methods for pollutant determination through practical work. The final outcome is the student's ability to control pollutants. They are enabled to be a part of the teams which prevent pollution in industrial processes. The final outcome is the student's ability to do the chemical part of solving the problem of pollution prevention.

## Admission requirements

An entrance condition for enrollment in a Bachelor's study program is to have graduated high school, approved entrance examination scores, and acceptance to study program.

## Contact

Head of the study program:

**Prof. Dr. Goran Roglić**

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Contact e-mail: [groglic@chem.bg.ac.rs](mailto:groglic@chem.bg.ac.rs)



# Faculty of Architecture



# Architecture

at Faculty of Architecture, 73/II Bulevar kralja Aleksandra, 11000 Belgrade, [www.arh.bg.ac.rs](http://www.arh.bg.ac.rs)

ECTS: 180/ DEGREE: ARCHITECTURAL ENGINEER

## Study program content

The program of first-degree studies represents the fundament for higher levels of education for architects who, after completing the studies have opportunity to pursue higher degrees of professional education in various fields as well as different scientific specializations. In this respect, the first-degree studies are conceived as comprehensive education in the field of technical-technological sciences, arts, history, sociology, economics, social sciences and humanities in general which provides fundamental basis for further professional and scientific education.

## Study program goals

The concept of first degree basic academic studies is based on the following set of general objectives:

- to offer architects the basic education in accordance with the principals of European university education in general, and especially with European education requirements for professional architects.
- the program of basic academic studies is designed to offer education and qualification needed for general professional profile and thus provide basis for further education and qualification in different specialized professional fields.
- The structure of the study program should clearly reflect the gist of pedagogical approach and enable distinction of different specialized professional fields included in the profession of an architect.
- The structure of the study program should stimulate changes in disciplinary milieu by introduction of contemporary cultural and professional concepts.

The special goals taken into account in structuring the study program are:

- To preserve fields of education and forms of instruction already established at the faculty.
- To enable development of new and specialized fields of instruction.

- To enable international recognizability through development of specific, distinctive study program
- To enable application of contemporary concepts and methods of education
- To optimize the degree of burdening the students and the existing teaching staff

The operative goals of basic academic studies of architecture are:

- To enable the students to understand and recognize scientific, professional and artistic achievements and activities in the field of architecture and urbanism, architectural engineering and technology.
- To enable the students to acquire knowledge on basic theoretical concepts and methods of architectural and urban design and creation of architectural buildings.
- To enable the students acquire specific professional skills for the purpose of application for jobs of architects-associates.
- To enable the students to continue education on graduate academic studies in the field of architecture, urbanism and similar domains in the country and abroad.

## Modules

The study program includes more than 5 study fields -modules, depending on the type and contents of the courses included : 1. cultural and historical fundaments; 2.elements of architecture, urbanism and construction statics; 3. space organization, planning and renewal of cities and architectural construction; 4. studio project and 5. professional practice, study tour and summer workshop.

## Study program outcomes

The result of studying process is acquisition of basic qualification needed for the profession of the architect which enables continuation of studies and access and participation in the market in fields and professions in accordance with acquired knowledge and skills. By completing basic academic studies of architecture a student,

pursuant to EU regulations does acquire professional status of an architect but is able to work as associate in different professions from the field of architecture, urbanism and architectural technologies. The diploma acquired at basic academic studies enables further education on graduate studies at the Faculty of Architecture, University of Belgrade, as well as on other faculties in the country and abroad with similar study programs.

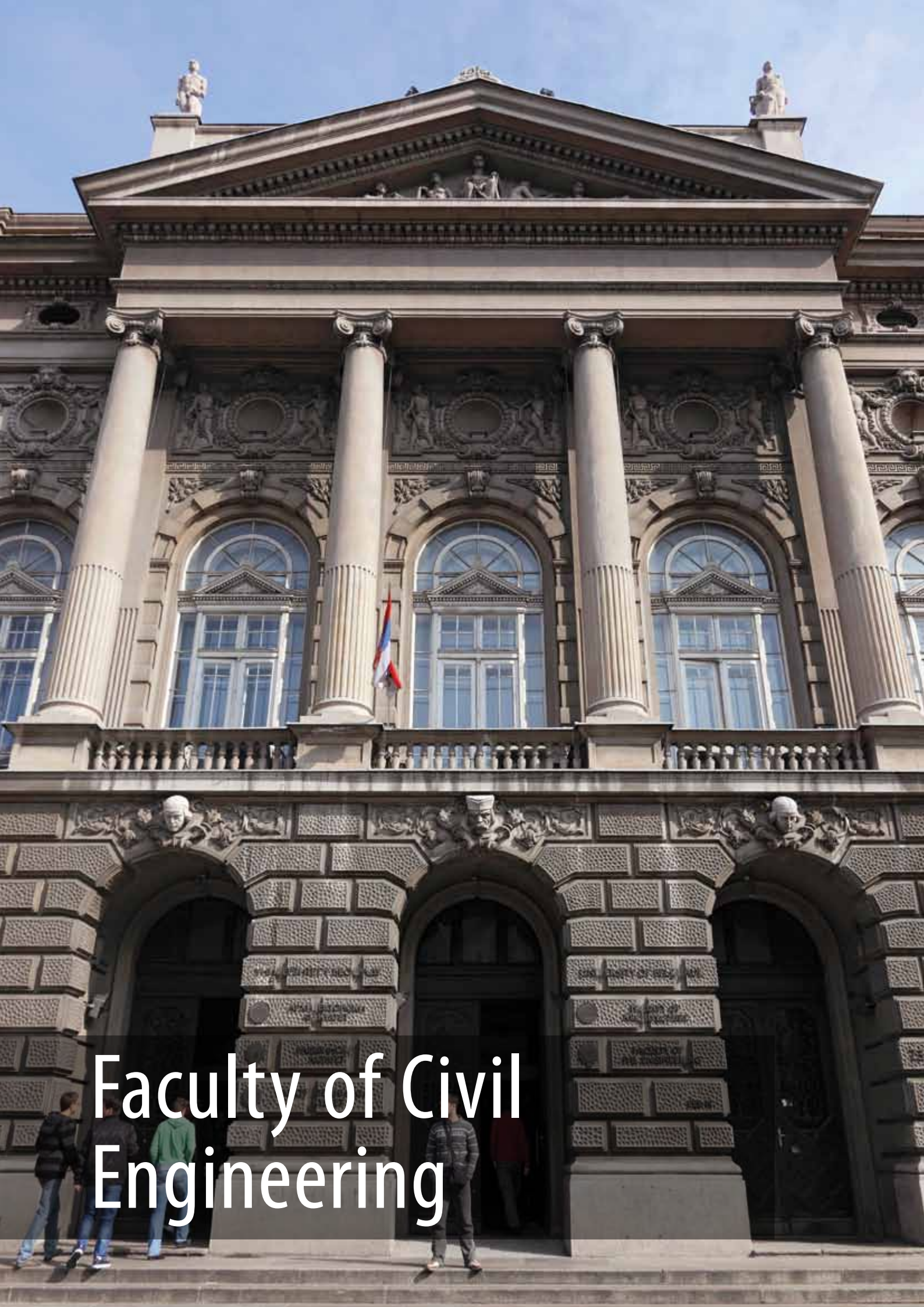
### Admission requirements

Four-year secondary education. All candidates are obliged to pass entry examination.

### Contact

Head of the study program:  
**Senior Lecturer. Arch. Miloš Nenadović**  
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# Faculty of Civil Engineering

# Geodesy

at Faculty of Civil Engineering, 73 Bulevar kralja Aleksandra, 11000 Belgrade, [www.grf.bg.ac.rs](http://www.grf.bg.ac.rs)

ECTS: 180/ DEGREE: BACHELOR IN GEODESY

## Study program content

The first-degree studies in Geodesy comprise of the general courses (Mathematics, Engineering Physics, Computational Geometry, Fundamentals of Geosciences, Fundamentals of Management, Informatics and Programming) and the courses covering geodetic sciences: Surveying Techniques, Surveying, Geodetic Metrology, Theoretical Geodesy, Satellite Geodesy, Engineering Geodesy, Photogrammetry and Remote Sensing, Geoinformatics, Real Estate Cadastre, Land Consolidation and Cartography. Particular attention is paid to practical work which aims at acquainting the student with the field work. The compulsory training in industry and preparation of the final project (bachelor thesis) are scheduled for the sixth semester. The scope of the study program provides a solid basis for continuation of education in the second-degree (master) academic studies in the field of geodesy and geoinformatics at the Serbian and European universities.

## Study program goals

Main goal of the studies is to acquire knowledge, expertise and skills to work on creative, practical and specific activities in state survey and real estate, engineering and technical fields.

Apart from these study programs will contribute to achieving the following objectives:

- achieving the necessary level of knowledge in the field of geodesy and geoinformation
- acquiring the necessary practical skills in solving specific technical problems
- developing tendency of team work,
- providing facilities for continuing further education and
- preparation of professional personnel engaging in domestic and foreign markets.

## Study program outcomes

By completion of the first-degree academic studies in Geodesy the student is able to:

- perform geodetic measurements for the establishment of geodetic reference networks and geodetic reference planes,
- prepare the terrain for photogrammetric work and data processing,
- collect geo-spatial data using various surveying methods,
- develop and maintain digital geo-spatial databases,
- develop geodetic plans based on the survey data,
- perform geodetic works in a process of land consolidation and expropriation,
- manage, develop and maintain real estate cadastre and infrastructure cadastre,
- develop topographic maps and thematic maps,
- participate in construction of different engineering structures,
- participate in preparation of design documentation.

## Admission requirements

For the first year of undergraduate studies are eligible candidates who have completed four years at Grammar school or high school of technical department.

## Contact

Head of the study program:  
**Doc. Dr. Vladan Kuzmanović**

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Contact e-mail: [nastava@grf.bg.ac.rs](mailto:nastava@grf.bg.ac.rs)

# Civil Engineering

at Faculty of Civil Engineering, 73 Bulevar kralja Aleksandra, 11000 Belgrade, [www.grf.bg.ac.rs](http://www.grf.bg.ac.rs)

ECTS: 240/ DEGREE: BACHELOR IN CIVIL ENGINEERING

## Study program content

First-degree academic studies start with the Introductory Module in the first three semesters, after which the students choose one of four available modules:

- Structural Engineering (KON),
- Hydraulic and Environmental Engineering (HVE),
- Road, Railway and Airport Engineering (PŽA),
- Management, Technology and Informatics in Civil Engineering (MTI).

The Introductory Module includes a range of fundamental courses in mathematics, physics, descriptive geometry, geology and mechanics. The core courses are followed by general introduction to environmental engineering and two important courses on building materials. Through optional courses students also acquire basic practical skills in computer aided drawing and in programming. All courses of the study program are one-semester courses and most of them consist of lectures and exercises. Some courses also include laboratory exercises (Physics, Building Materials, Fluid Mechanics, and other). In addition to lectures and exercises, during the sixth semester a student goes for a two-week training in the civil engineering industry (either in the consulting companies or at construction sites), which brings him/her 2 ECTS credits. The bachelor thesis, which takes form of a compulsory synthesis project, is worth 12 ECTS credits.

## Study program goals

By completing the first-degree academic study program in Civil Engineering the student is able to:

- recognize, describe and analyze practical engineering problems,
- exchange information, ideas, problems and solutions with colleagues and other professionals,
- work in a team,

- take an ethical stance on the engineering problems,
- use common computer tools for preparing documents and presentations and for running simulation models,
- continue education on master academic studies in civil engineering.

## Study program outcomes

By completing the first-degree academic studies in Civil Engineering the student acquires competences to:

- design and manage construction of buildings and associated infrastructure facilities,
- design and manage construction of hydraulic engineering structures and hydraulic infrastructure facilities of moderate capacity,
- design and manage construction of roads, streets, railways and airports,
- analyze and forecast traffic flow and plan various types of traffic infrastructure systems,
- plan and organize activities and technologies on the construction sites,
- manage construction of all common types of civil engineering structures,
- recognize and use various building materials and apply appropriate construction technologies,
- apply different computational procedures and software packages in analyzing civil engineering problems,
- recognize procedures to be applied in the environmental impact assessment of the civil engineering structures.

## Modules

- Structural Engineering (KON),
- Hydraulic and Environmental Engineering (HVE),
- Road, Railway and Airport Engineering (PŽA),
- Management, Technology and Informatics in Civil Engineering (MTI).

## Admission requirements

For the first year of undergraduate studies are eligible candidates who have completed four years at Grammar school or high school of technical department.

## Contact

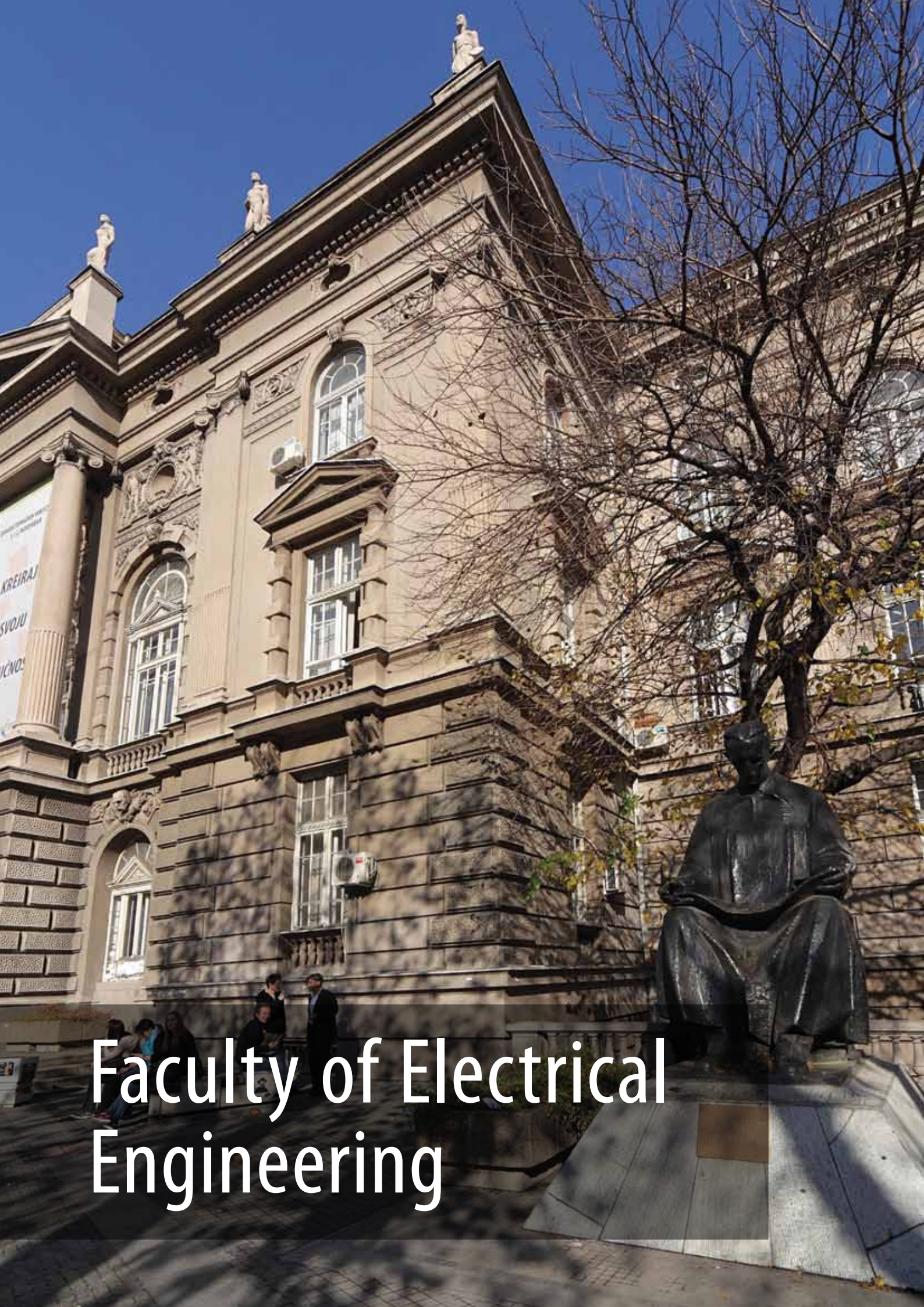
Head of the study program:

**Doc. Dr. Vladan Kuzmanović**

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Contact e-mail: [nastava@grf.bg.ac.rs](mailto:nastava@grf.bg.ac.rs)





# Faculty of Electrical Engineering

# Electrical and Computer Engineering

at School of Electrical Engineering, 73 Bulevar kralja Aleksandra, 11000 Belgrade, [www.etf.bg.ac.rs](http://www.etf.bg.ac.rs)

ECTS: 240/ DEGREE: BACHELOR OF ELECTRICAL AND COMPUTER ENGINEERING

## Study program content

The aim of the electrical engineering and computer science curriculum is to educate students for electrical engineering and computer science profession. This education should be based on the experience of the best universities in the world and should be in accordance with the needs of our economy and industry.

Curriculum of electrical engineering and computer science is designed so as to provide the acquisition of competences which are socially justified and useful. The realization of the curriculum designed in such a way will create engineers of electrical engineering and computer science having state-of-the-art knowledge both in the European framework and worldwide. Only such engineers will provide competitiveness of technological and research potential of Serbia in the field of electrical engineering and computer science.

## Study program goals

- Educating future engineers in order to make them competent for analyzing, maintaining and designing the systems parts as well as complex systems,
- Qualifying for team work and results presentation,
- Providing the fundamental knowledge necessary for following lectures at postgraduate academic studies (i.e. Master and Doctoral Studies), as well as following the fast technological development trends in the field of electrical engineering and computer science,
- Acquiring high competence, academic and practical skills in the field of electrical engineering and computer science,
- Developing creative skills, considering different problems, and promoting critical thinking skills,
- Acquiring habits in connection with permanent education and advancement in the field of electrical engineering and computer science.

## Study program outcomes

Students, who have successfully completed this academic curriculum in the field of electrical engineering and computer science, are able to:

- Understand and implement the fundamental knowledge pertaining to electrical engineering,
- Implement the knowledge acquired in the field of: mathematics, physics and engineering subjects and subfields,
- Understand, notice, formulate and solve engineering problems,
- Use techniques, skills and contemporary program tools in the engineering practice,
- Design and perform engineering experiments, and then analyze and interpret the obtained results,
- Design systems, components and processes based on tasked specifications,
- Work independently or within the team composed of different profile experts and communicate efficiently,
- Possess the professional and ethical responsibility pertaining to engineers of electrical engineering and computer science and understand the influence of engineering solution on society and the environment,
- Improve their knowledge and follow technology development in the life-long manner.

## Modules

Electrical Engineering and Computer Science curriculum is comprised of six study modules (departments):

1. Electronics,
2. Power Engineering,
3. Computer Science and Information Technology,
4. Signals and Systems,
5. Telecommunications and Information Technologies,
6. Physical Electronics.



## Admission requirements

The expected enrollment requirement implies the adequate secondary education level as well as passing satisfactorily either the entrance examination in mathematics or in physics.

## Contact

Head of the study program:

**Prof. Dr. Miodrag Popović**

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# Software Engineering

at School of Electrical Engineering, 73 Bulevar kralja Aleksandra, 11000 Belgrade, [www.etf.bg.ac.rs](http://www.etf.bg.ac.rs)

ECTS: 240/ DEGREE: BACHELOR OF ELECTRICAL AND COMPUTER ENGINEERING

## Study program content

The curriculum of basic academic studies in Software Engineering covers basic mathematical and engineering subjects, as well as technical and general education subjects which provide basic and field-specific knowledge necessary for an academically educated expert of software engineering. All subjects are one-term subjects.

The number of credits pertaining to the subjects per year equals 60, and the total number of the undergraduate studies curriculum credits equals 240.

## Study program goals

- Educating future engineers for independent and team work within software and computer industry performing the jobs pertaining to design, implementation and maintenance of complex systems and products,
  - Providing the fundamental knowledge necessary for attending postgraduate lectures (such as: Master and Doctoral studies), as well as promoting following the fast technological development trends in the field of computing,
  - Qualifying for jobs in education in the field of computer science and information technology,
  - Qualifying for providing the specialized technical support in software and equipment selling,
  - Developing creative skills for considering problems and critical thinking ability,
  - Acquiring habits in connection with permanent education and advancement in the field of software engineering.
- Design and implement modern monolithic, client-server and multilayer applications, databases and information systems,
  - Design and implement the system software components, computer networks and distributed computer systems,
  - Educate users through courses, educate in secondary schools and academic setting in the field of computer science and information technology,
  - Perform consultation job and technical support in commercial disposal of software and hardware products,
  - Work independently or in team composed of different profile experts and communicate efficiently,
  - Possess the professional and ethical responsibility pertaining to engineers of electrical engineering and computer science and understand the influence of engineering solution on society and the environment,
  - Improve their knowledge and follow technology development in the life-long manner.

## Admission requirements

Completed four-year secondary or grammar school and passing the entrance examination.

## Study program outcomes

Students, who have successfully completed this academic curriculum in the field of software engineering, are able to:

- Determine, analyze and model user requests, design and implement software in different application domains,

## Contact

Head of the study program:  
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Contact e-mail: [dekanat@etf.bg.ac.rs](mailto:dekanat@etf.bg.ac.rs)



# Faculty of Mechanical Engineering

# Mechanical Engineering

at Faculty of Mechanical Engineering, 16 Kraljice Marije, 11000 Belgrade, [www.mas.bg.ac.rs](http://www.mas.bg.ac.rs)

ECTS: 180/ DEGREE: BACHELOR OF SCIENCE IN MECHANICAL ENGINEERING

## Study program content

B.Sc. (undergraduate) academic study program lasts for three years and is equal to 180 ECTS credits. Methods of teaching include lectures and exercises. Depending on the course, exercises can be: auditory, laboratory, solving calculation examples, guidelines and consultations for design projects, guidelines and consultations for seminar papers, discussions and workshops, professional excursions etc.

## Study program goals

Study program goal is to produce mechanical engineers who have the necessary theoretical knowledge and practical skills, sought after for work in economy and industry, whose work should foster the development and continuous progress of their work environment, along with transferring of expert knowledge and skills in the field of mechanical engineering.

## Study program outcomes

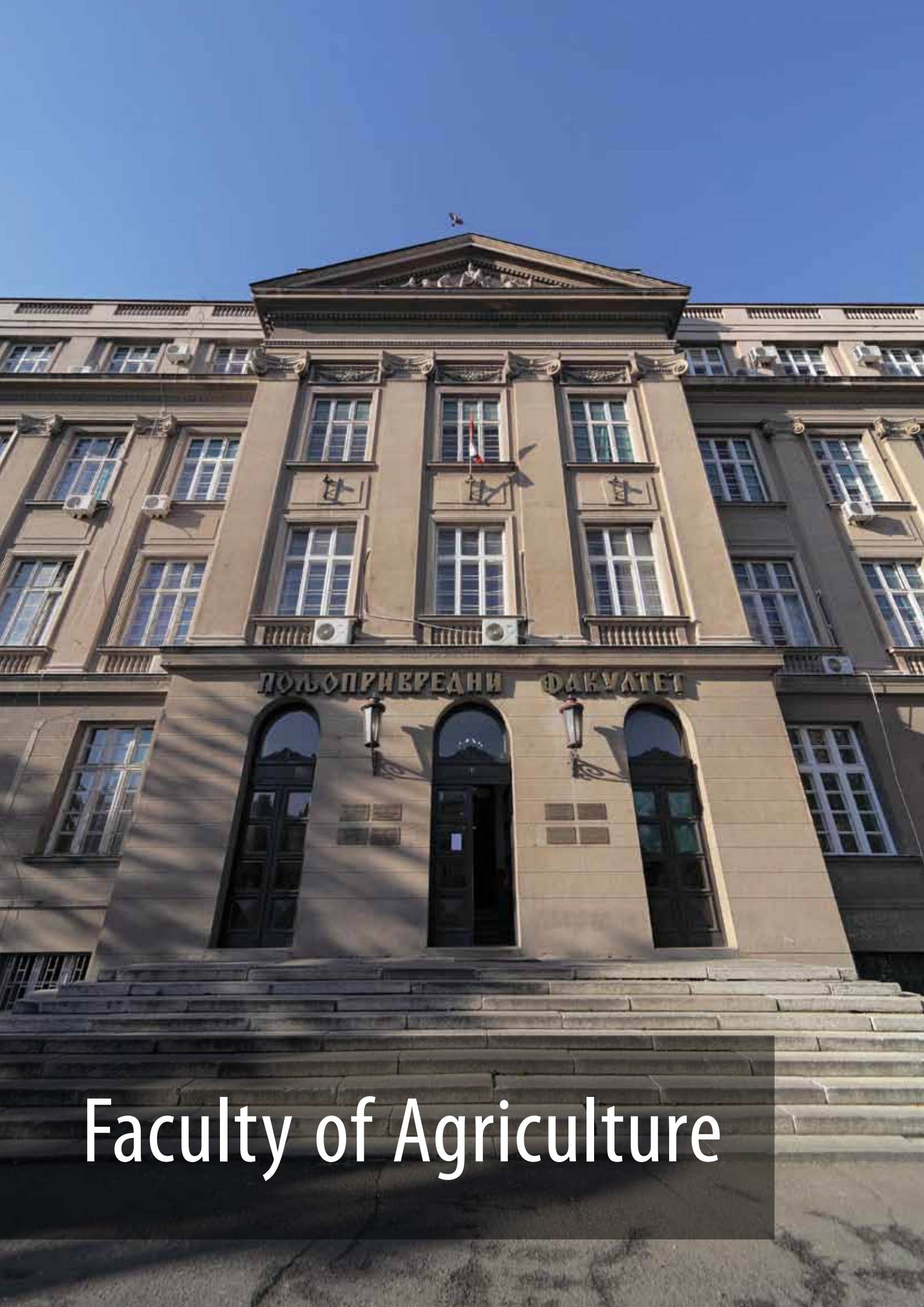
Having mastered the curriculum, students become educated and formed mechanical engineers, sought after for work in economy and industry with the aim of development of our country. Generally speaking, these are engineers who have mastered research methods, procedures and processes at the appropriate level of their education, who are proficient in applying their knowledge in practice and using computer software, with a thorough knowledge and understanding of the physical nature of the investigated concepts, with a developed ability of linking basic knowledge in different fields and then applying it – in a nutshell, these are engineers ready for work in economy and industry. More generally speaking, the expected outcomes of studying refer to education and formation of generations of engineers whose task is to become the driving force of the environment in which they would work tomorrow, owing to the knowledge acquired here.

## Admission requirements

Candidates with completed four year secondary education can apply for admission to the first year of undergraduate studies accomplished by the University, i.e. the Faculty. Appropriate previously acquired education is specified by the study program to which the candidate is to be admitted.

## Contact

Head of the study program:  
**Prof. Dr. Milorad Milovančević**  
Telephone: +381 11 337 03 50  
Contact e-mail: [dekan@mas.bg.ac.rs](mailto:dekan@mas.bg.ac.rs)



ПОЉОПРИВРЕДНИ ФАКУЛТЕТ

Faculty of Agriculture

# Plant Production

at Faculty of Agriculture, 6 Nemanjina, 11080 Zemun, [www.agrif.bg.ac.rs](http://www.agrif.bg.ac.rs)

ECTS: 240/ DEGREE: GRADUATE ENGINEER IN AGRICULTURE

## Study program content

The study program of the first degree of higher education entitled Plant Production represents the study program of undergraduate academic studies. This program lasts for 4 years, that is, 8 semesters and comprises 4 modules. Basic areas of technical expertise within undergraduate academic study program are: general bases of crop science, genetics, breeding and selection of plants, growing of cereals, legumes, forage and industrial plants, cultivation and maintenance of meadows and pastures, growing of vegetables, flowers and medicinal plants, seed production of crops and horticultural plants, biology and ecology of fruits and grapevine, technology of fruit and grapevine growing, beekeeping, specific fruit science and viticulture, bio-ecological characteristics of harmful organisms in plant production (pests and pathogens), agricultural entomology and zoology, phytopathology, herbology, phytopharmacy, toxicology, integrated plant protection, mechanization of plant production, organization and management of plant production as well as application of informatics in agriculture. This study program comprises the courses Organic Plant Production and Environmental Protection. There is a possibility for students to choose from the list of elective courses the courses of other study programs and modules, which will supplement knowledge of the related disciplines.

## Study program goals

The main goal of the study program is to transfer the latest scientific and technical knowledge and skills of the field of plant production. The following important goal is a continuous and comprehensive development of all aspects of agricultural field based on modern principles and standards. One of the goals of the study program is directing of studies towards acquiring knowledge and skills necessary for profitable plant production, use of renewable natural resources along with environmental protection, conservation of resources of rural areas and cultural heritage. The main goals of the study program comprise offering possibilities for acquiring very different practical knowledge of all branches and areas of plant production, such as

growing crops, vegetables, meadow and pasture plants, forage plants, flowers and medicinal, aromatic and spice plants, fruits, grapevine, production of seeds and planting material, animal feed and other products, identification and diagnostics of harmful organisms, application of measures for the control of harmful organisms in accordance with the principles of environmental conservation.

One of the primary goals is a further development of the concept of the education of the students which offers the experts ready to meet all challenges in plant production of the new age, while simultaneously creating the conditions for obtaining specialist knowledge, which is necessary for competitive agricultural production. Basically, this study program is aimed at modifying the education system in accordance with the Bologna Process, that is, involving the students in the European Higher Education Area and realisation of European Common Agricultural Policy.

## Modules

Crop and Vegetable Sciences, Fruit Science and Viticulture, Horticulture and Phytomedicine

## Study program outcomes

Upon the completion of the undergraduate academic studies the students acquire the general and course-specific applicable technical and scientific knowledge, and they are able to manage plant production, as well as to continue their education at graduate academic studies.

The students acquire the following general competences: ability to apply acquired knowledge in practice, mastery of research methods, ability to develop critical and self-critical thinking, trained to use the literature and transfer knowledge, that is, to show communication skills and collaborate with narrow social and international environment, with a full appreciation of professional ethics.

At this study program the students acquire course-specific knowledge of the fields of: crop science, vegetable science, fruit science, viticulture, horticulture and phytomedicine. On the

basis of acquired knowledge, they are trained to solve specific problems in the production of crops and horticultural plants, organization of production, processing and trade of seeds, production of planting material of fruit trees and grapevine, raising and care of the orchards and vineyards, development and implementation of programs of protection within plant production, valid assessment of the risk of the occurrence and spread of harmful organisms, as well as the risk of application of chemical control measures to humans and the environment. Students are thoroughly prepared for the application of combined basic knowledge of various areas, keeping pace with and implementation of innovations, adoption of modern technologies in plant production, use of information and communication technologies in gaining knowledge of the corresponding areas.

### Admission requirements

Admission requirements for the undergraduate academic studies are successfully completed four-year secondary education and successfully passed entrance exam in the subjects adopted by the Teaching and Scientific Council of the Faculty.

### Contact

Head of the study program:

**Prof. Dr. Goran Delibašić**

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# Zootechnics

at Faculty of Agriculture, 6 Nemanjina, 11080 Zemun, [www.agrif.bg.ac.rs](http://www.agrif.bg.ac.rs)

ECTS: 240/ DEGREE: GRADUATE ENGINEER IN AGRICULTURE

## Study program content

Study program of undergraduate academic studies - Zootechnics is established in accordance with the principles defined by Law on Higher Education as well as by the Bologna Declaration. The programs of all courses are defined so as to describe modern scientific and technical achievements of the given area, but in a way that they are acceptable and applicable to this level of a higher education. Teaching in the study program is organized through: lectures, sessions, laboratory sessions, field sessions, seminar papers as well as interactive teaching. Methods of interactive teaching in the study program include individual, group and cooperative methods of active learning. Interactive methods are used in and out of the classroom (in the equipped library and computer centre, University Library and National Library of Serbia) within individual or group work. Within each course of undergraduate academic study program, a continuous monitoring of acquiring knowledge and skills of students is envisaged during the semester by using tests and knowledge tests as well as a final exam at the end of the semester.

## Study program goals

The main goal of the study program of undergraduate academic studies – Zootechnics is to enable students to acquire the latest scientific and technical knowledge and skills in the field of livestock production. The second important goal is a continuous and comprehensive development of all aspects of animal husbandry profession based on modern principles and standards. The study program offers possibilities for acquisition of very different practical knowledge of all branches and areas of livestock production, such as breeding farm animals, fish, bees and wildlife, production of meat, milk, honey and other animal products. The study program is aimed at directing studies towards the acquisition of knowledge and skills necessary for profitable and sustainable livestock production, primarily by using renewable natural resources, along with environmental protection, conservation of the resources of rural areas and cultural heritage.

One of the primary goals is a further development of the concept of the education of the students which offers the expert ready to meet all challenges in livestock production in the future, while simultaneously creating the conditions for obtaining specialist knowledge, which are necessary for competitive livestock production, that is, agricultural production.

The goal of the study program is the development of learning skills, as well as general and technical competences, which will enable the continuation of education and a certain degree of specialization at the next level of studying.

The study program aims at enabling its students to join the European Higher Education Area and realizing European Common Agricultural Policy, while gradually harmonizing the education system with the Bologna Process.

## Study program outcomes

Upon the completion of the undergraduate academic studies the students acquire the applicable knowledge of the field of zootechnics, and they are able to use literature and transfer knowledge, as well as to continue the education at master's academic studies.

Upon the completion of the study program the student acquires the following general competences (skills) of:

- analysis, synthesis and forecasting solutions and consequences in livestock production;
- mastering the methods, procedures and processes of research in zootechnics;
- development of critical and self-critical thinking and approach;
- application of knowledge to zootechnics practice - development of communication competences and skills, as well as the cooperation with a narrow social and international environment;
- professional ethics.

Upon the completion of the study program the students acquire the following course-specific competences of:



- thorough knowledge and understanding of zootechnics disciplines;
- solving of specific problems in livestock production using scientific methods and procedures;
- connecting of basic knowledge from different areas of zootechnics and its application;
- keeping pace with and application of innovations in zootechnics;
- development of skills and competences in using knowledge of the relevant field of zootechnics;
- use of information and communication technologies in gaining knowledge of the corresponding field of zootechnics.

### Admission requirements

Admission requirements for the undergraduate academic studies are successfully completed four-year secondary education and successfully passed entrance exam in the subjects adopted by the Teaching and Scientific Council of the Faculty.

### Contact

Head of the study program:

**Doc. Dr. Zlatko Skalicki**

Contact e-mail: [skalicki@agrif.bg.ac.rs](mailto:skalicki@agrif.bg.ac.rs)



# Soil Management

at Faculty of Agriculture, 6 Nemanjina, 11080 Zemun, [www.agrif.bg.ac.rs](http://www.agrif.bg.ac.rs)

ECTS: 240/ DEGREE: GRADUATE ENGINEER IN AGRICULTURE

## Study program content

The program lasts for 4 years, that is, 8 semesters, and comprises a total of 40 courses, of which 31 are obligatory and 9 are elective. The elective courses are grouped into sets of 2 to 4 courses. Practical teaching is performed within work, technical and technological and organizational training as special multidisciplinary courses at the third and fourth years of studies.

The main purpose of the study program is education of cadres who will be working the jobs in the arrangement of agricultural land, for the purpose of satisfying the main needs which labour market impose in this field as a dynamic category which is constantly changing along with new achievements in the science of soil and its use. In this sense, the purpose of the study program is to develop general and professional competences.

With developing of general competences (instrumental, interpersonal and systematic competences), a special place is occupied by the competence of independent learning and developed awareness of the necessity of constant modernization of knowledge.

## Study program goals

The goal of the study program is acquisition of knowledge and skills necessary for profitable agricultural production, by rational use of renewable natural resources of soil and water, along with environmental protection, conservation of the resources of rural areas and cultural heritage.

The main goal of the study program is offering possibilities for acquiring various practical knowledge of all branches and areas of soil conditioning as hydrotechnical amelioration, agrotechnical amelioration, application of information systems in agriculture, and so forth, and all this is aimed at the rational use of soil in the process of production of safe food.

The goals of this study program are to achieve competences that signify the completion of undergraduate academic studies (knowledge in

the field of soil science, collecting data on the physical, chemical and biological properties of soil and other relevant facts related to the processes of degradation and land protection and arrangement of water and air regime, interpretation of the obtained results, proposing and implementation of some measures within the problem area of a complex arrangement of land and so forth.

## Study program outcomes

The outcomes upon the completion of the studies are detailed knowledge of methods for determining physical, chemical and biological properties of the soil; the student's ability to analyze data on soil, climate, agricultural production, and so on, according to the instructions, by applying relevant principles and methods of classification; to conduct assessment and evaluation of data reliability by means of defined methods or instructions, to consider the state of soil and propose the measures of soil protection for the purpose of sustainable development and corresponding measures for soil amelioration in accordance with determined chemical, physical, biological and other properties of soil; to apply rationally organic and mineral fertilizers in accordance with a system of control of soil fertility and plants requirements, to participate in the design of the parts of project documentation of ameliorative systems, taking into account the solutions which, on the one hand, should meet the requirements for more cost-effective and profitable agricultural production, and on the other hand, requirements for conservation of environment; to participate in maintenance and use of agromeliorative and hydromeliorative systems and their exploitation; to work at less specialized jobs in inspection services of the cities, municipalities, regions and the Republic, in the field of arrangement and use of soil and water resources; to participate as a member of the team in designing, maintaining and implementing of information system in the field of soil amelioration, to use literature and other information sources, to use computer technologies in accordance with the needs within one's competences.

## Admission requirements

Admission requirements for the undergraduate academic studies are successfully completed four-year secondary education and successfully passed entrance exam in the subjects adopted by the Teaching and Scientific Council of the Faculty.

## Contact

Head of the study program:

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# Agricultural Engineering

at Faculty of Agriculture, 6 Nemanjina, 11080 Zemun, [www.agrif.bg.ac.rs](http://www.agrif.bg.ac.rs)

ECTS: 240/ DEGREE: GRADUATE ENGINEER IN AGRICULTURE

## Study program content

The program of undergraduate academic studies which lasts for 4 years, that is, 8 semesters comprises a total of 37 courses, of which 29 are obligatory and there are 8 groups of elective one-semester courses. The elective courses are studied starting from the third semester, one or two per semester. From a total of 25 elective courses, the student chooses 8. Teaching is both theoretical and practical regarding all courses. Practical Training is planned as a special and technically applicative course which is studied in the eighth semester.

Work Training is planned upon the completion of the sixth semester, Production Training upon the completion of the seventh semester, and Technological and Organization Training is planned upon the completion of the eighth semester. The main purpose of the study program is achieving of educational, technical and research goals and tasks in the field of agricultural engineering. The type and the method of studies are adapted to the needs of the strategic development of agricultural engineering, as the most significant part of agricultural production.

## Study program goals

The main goal of the study program is a transferring of the latest scientific and technical knowledge and skills in the field of agricultural engineering applied to agricultural production.

The second significant goal is a continuous and comprehensive development of all aspects of the agricultural engineering profession based on modern principles and standards. The study program is aimed at directing the studies towards acquiring knowledge and skills needed for profitable agricultural production primarily by using renewable natural resources along with environmental protection, conservation of the resources of rural areas and cultural heritage.

The next main goal of the study program is providing possibilities for acquiring various practical knowledge of all branches and areas of agricultural engineering, such as crop, vegetable, fruit and viticultural and animal mechanization.

One of the high priority goals is a further development of the concept of students' education which offers a qualified expert ready for all challenges in the field of agricultural engineering of the new age, along with creating the conditions for obtaining specialized knowledge needed for a competitive agricultural production. Basically, this study program is aimed at harmonization of the education system in accordance with the Bologna Process, that is, gradually enabling the students to join the European Higher Education Area and realization of European Common Agricultural Policy.

## Study program outcomes

Upon the completion of the studies, the student possesses basic knowledge of the field of mathematics, informatics and statistics disciplines; basic knowledge of the field of technical disciplines; basic knowledge of the field of agronomic disciplines; basic knowledge of the field of organizational and economic disciplines; expertness of agricultural engineering: machinery, devices and systems in the field of crop, fruit and viticultural and animal production, transport and storing; knowledge of the possibilities for aggregating of self propelled machines and implements for the purpose of rational use of aggregates; expertise in agricultural engineering for the purpose of adapting - adjusting for performing some technological operations; expertness and assessment of the condition of the machinery and equipment for the purpose of preventing breakdowns and delays and providing a timely and proper maintenance; knowledge of agricultural production facilities from the point of rational construction and exploitation; knowledge, gaining and rational use of all forms of energy in agriculture; expertise in organization of purchase and sale of agricultural machinery.

At the end of the studies, the student is qualified for the selection of machinery and assembling the aggregates for performing tillage operations as well as warehousing and storage of agricultural products, application of organizational and technical procedures and measures for the rational and optimal use of agricultural engineering; successful work in the direct production in ag-

riculture: crop, fruit and viticultural, animal, and in the contact areas, that is, parts of production which immediately ensue; control and adjustment of machines and equipment before and during the exploitation; taking measures for proper handling, maintenance and keeping of agricultural machinery, application of standards and regulations of protection at work; keeping pace with technical literature, teamwork and transferring of knowledge and experience.

## Contact

Head of the study program:  
**Prof. Dr. Dušan Radivojević**  
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## Admission requirements

Admission requirements for the undergraduate academic studies are successfully completed four-year secondary education and successfully passed entrance exam in the subjects adopted by the Teaching and Scientific Council of the Faculty.



# Food Technology

at Faculty of Agriculture, 6 Nemanjina, 11080 Zemun, [www.agrif.bg.ac.rs](http://www.agrif.bg.ac.rs)

ECTS: 240/ DEGREE: GRADUATE ENGINEER IN AGRICULTURE

## Study program content

The program of undergraduate academic studies lasts for 4 years, that is, 8 semesters. The first two years are common to all elective groups-modules, but after that the programs vary according to the requirements of the module which the student has chosen. During these 4 years the students attend 29/31 obligatory and 8/10 elective one-semester courses. Within the module Technology of Animal Products the following are studied: expertness of meat, chemistry and physics of milk, meat processing, milk processing, ancillary products in the meat industry, ancillary products in the dairy industry, dairy technology, meat technology, microbiology of animal products and quality management.

Within the module Technology of Preservation and Fermentation the following are studied: preserving by means of cooling, preserving by means of heat, technology of fruits and vegetables, technology of fruit juices, cooling and freezing of food products, technology of ready-made food, technology of malt, technology of beer, technology of wine, technology of spirits.

Within the module Technology of Crop Products the following are studied: rheological properties of food, technology of oils and fats, sensory analysis of products based on crop raw materials, modification of fats and oils, toxicology of products based on crop raw materials, technology of confectionery products, technology of tobacco processing, technology of malt and beer, technology of cereals, technology of flour, technology of sugar and starch.

Within the module Management of Food Safety and Quality the following are studied: basics of technology of fruits and vegetables, fermentation technologies, technologies of crop products, basics of meat technology, basics of dairy technology, management and statistical quality control.

## Study program goals

The main goal of the study program is a transferring of the latest scientific and technical knowl-

edge and skills in the field of food industry. The second important goal is a continuous and comprehensive development of all aspects of food technology based on modern principles and standards.

The study program is aimed at directing studies towards the acquisition of knowledge and skills necessary for profitable production of food, primarily by using renewable natural resources, along with environmental protection, conservation of the resources of rural areas and cultural heritage. The following main goal of the study program comprises offering possibilities for acquiring very different practical knowledge of all branches and fields of food technology, that is, processing of all agricultural products which are used as raw foodstuffs for nutrition and first of all for processing for the purpose of obtaining ready-made food products.

One of the primary goals is a further development of the concept of the education of the students which offers the expert ready to meet all challenges in food industry of the new age, while simultaneously creating the conditions for obtaining specialist knowledge, which is necessary for competitive food production by using specific raw materials.

## Modules

Technology of Animal Products; Technology of Preservation and Fermentation; Technology of Crop Products; Management of Safety and Quality in Food Production.

## Study program outcomes

Upon the completion of the undergraduate academic studies the students acquire the applicable knowledge of the field of food technology, and they are able to use literature and transfer knowledge, as well as to continue the education at master's academic studies. Apart from that, students acquire general and course-specific skills for the purpose of quality performance of their activities in the economy - food industry. The course-specific competences are reflected in expertise in: basic biological, rheo-

logical, nutritional and technological properties of raw materials of plant and animal origin which are stored for later processing in the process of food production, modeling of the processes responsible for later optimization of technological procedures of food production so as to keep or improve nutritional value, organoleptic acceptability, health safety and economic justification along with the possibility of creating closed technologies that would reduce the amount of waste and avoid pollution of the entire biosphere.

Upon the completion of the studies, the student is trained for: rapid inclusion in mastering of the corresponding issues and management of technological procedures of food production in the field - module that the student studied.

### Admission requirements

The completion of four-year secondary education and passing of an entrance exam.

### Contact

Head of the study program:  
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# Agricultural Economics

at Faculty of Agriculture, 6 Nemanjina, 11080 Zemun, [www.agrif.bg.ac.rs](http://www.agrif.bg.ac.rs)

ECTS: 240/ DEGREE: GRADUATE MANAGER

## Study program content

The program of undergraduate academic studies which lasts for 4 years, that is, 8 semesters comprises a total of 40 one-semester courses, of which 32 are obligatory and 8 are elective courses. The primary areas of expertise in the undergraduate study program for agricultural economics are studying concepts, categories, theories, methods, procedures and practical solving of problems in the areas of: accounting, agrarian finance, planning and assessment of investments, commercial transactions and foreign exchange operation, business systems in agriculture and food industry, agricultural economics and food industry, rural sociology and rural development, cooperatives, trade market and marketing of agricultural and agro-industrial products, organizations, economics, management, supervision, planning, designing, development and consulting of business systems of agriculture and food industry and use of computer software for data processing.

## Study program goals

The main goal of the study program is a transferring of the latest scientific and technical knowledge and skills in the field of agricultural economics. Another important goal is a continuous comprehensive development of all agro-economic aspects of agricultural production and food industry based on modern principles and standards.

The study program is aimed at directing studies towards the acquisition of knowledge and skills necessary for the profitable agricultural production and food industry by using of renewable natural resources, along with environmental protection, conservation of the resources of rural areas and cultural heritage.

One of the priorities is a further development of the concept of students' education that offers a complete expert, ready for all challenges of agricultural production of the new age, while creating conditions for the acquisition of the specialized knowledge needed for competitive agricultural production (of all its branches and forms).

During this cycle of studies not only is theoretical knowledge difficult to apply in practice provided, but some practical knowledge relevant for labour market is acquired as well. Basically, this study program is aimed at modifying the education system in accordance with the Bologna Process, that is, gradually enabling the students to join the European Higher Education Area and realization of European Common Agricultural Policy.

## Study program outcomes

Upon the completion of the undergraduate academic studies the students acquire applicable knowledge in the field of agricultural economics, and they are able to use literature and transfer knowledge, as well as to continue their education at graduate academic studies.

Apart from that, students acquire general and course-specific skills for the purpose of quality performance of technical activities in the field of agricultural economics.

The course-specific competences are reflected in expertise in: concepts, categories, methods and procedures in planning and developing and resolving accounting and financial aspects of agriculture and assessment of investment, commercial and foreign exchange operation of business systems of agriculture and food industry, including organizational and economic aspects of rural development, cooperatives and markets, transportation and marketing of agricultural products.

Here, the contents of management, leadership, planning, designing and consulting of business systems of agriculture and food industry are also included.

Upon the completion of the studies, the student is trained for: performance of the tasks of organization of production and processing, marketing and transportation of agricultural and food products, raw materials, ancillary materials and means for production intended for agricultural and business systems of food industry. Students are also trained for performing activities in banks, insurance companies, branches, development



and customs services, agencies, governmental agencies, cooperative extension services as well as managers in the field of agribusiness.

In addition, the student is trained for: collecting and classifying ideas and data in a set, defined and standard format, analysing data according to the instruction by applying appropriate principles and methods of classification, assessing and evaluating the reliability of data by means of defined methods or instructions and applying principles and methods for precise and careful solving of specific technical issue.

Upon the completion of undergraduate academic studies, the student masters the methods of teamwork, uses literature and other information sources, evaluates oneself and others in an appropriate way, uses methods for data and information, ranks and selects data, shows independence and responsibility for one's own learning, masters the methods of communication in a form adjusted to the professional discipline and writes the report on practical procedures in a clear and concise manner.

Upon the completion of these studies, students are able to transfer knowledge and conclusions of agricultural economics to professional and general public.

### Admission requirements

Admission requirements for the undergraduate academic studies are successfully completed four-year secondary education and successfully passed entrance exam in the subjects adopted by the Teaching and Scientific Council of the Faculty.

### Contact

Head of the study program:

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# Faculty of Mining and Geology

# Geology

at Faculty of Mining and Geology, 7 Đušina, 11000 Belgrade, [www.rgf.bg.ac.rs](http://www.rgf.bg.ac.rs)

ECTS: 180/ DEGREE: GEOLOGIST

## Study program content

The scope of undergraduate study program of geology is three years (six terms, namely 180 ECTS points) whereby two program units can be singled out clearly. The first two terms comprise compulsory, both general education subjects and subjects directed towards acquiring general competence in geoscience. In the second term, already, students can select an optional subject to widen their general education competence or prepare more thoroughly for further studies in specialized subjects.

Fundamental education in geology is completed by compulsory subjects during the third and fourth terms, whereby students are offered optional subjects from other study programs provided at the Faculty of Mining and Geology. These subjects give students opportunities to widen their knowledge in disciplines of geology and engineering. The fifth and the sixth terms comprise a certain number of compulsory subjects as well as four elective modules.

## Study program goals

Graduates of the undergraduate study program in geology acquire fundamental geological education which enables them to apply their knowledge in drawing of geological maps and participating in exploration and exploitation work in resource industry as well as in processes of industrial waste characterization and disposal.

They have acquired the capability to understand problems of geohazard and environmental protection, and the significance of geotourism. The aim is that, on the basis of acquired knowledge, a holder of a bachelor's degree in geology can comprehend, adequately, possible extra-terrestrial perturbations of the Earth's dynamics, as well as those changes of geological ambient that are caused by the human factor.

## Study program outcomes

a) Capability to understand basic characteristics of our planet's system and the transformation process of natural ambient in time and space, b) Possibility to use terminology and the systems of nomenclature and classification used in geosciences in the world, c) Competence to use methods for gaining and analyzing data necessary to interpret and generate new information, d) Competence to complete assignments concerning geological mapping, the investigation of structure and composition of various materials, the study and exploration of mineral resources, the evaluation and protection of geoheritage, to solve problems of environmental protection and the advancement of the society as a whole.

## Modules

Four different modules to elect are:

1. Geology and Paleontology,
2. Mineralogy and Crystallography,
3. Petrology and Geochemistry and
4. Economic Geology.

Each module is defined by adequate combination of optional subjects.

## Admission requirements

A secondary school diploma and accomplished admission test.

## Contact

Head of the study program:

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# Geotechnics

at Faculty of Mining and Geology, 7 Đušina, 11000 Belgrade, [www.rgf.bg.ac.rs](http://www.rgf.bg.ac.rs)

ECTS: 240/ DEGREE: GRADUATED ENGINEER OF GEOLOGY

## Study program content

This study program is the only one in the academic network of Serbia offering fundamental academic education from the field of geotechnics. This program has been designed to develop skills and competence with students to carry out various kinds of research by which there are determined geotechnical properties and the terrain behavior in interaction with various engineering activities from space and urban planning, the construction of various kinds of buildings, the study of natural geological hazards to environmental protection and preservation.

## Study program goals

One of the aims with reformed study program for geotechnics, is also to enable students, to participate continually during the whole production process of planning, design, (in all phases), construction, exploitation and maintenance of a facility. The realization of the study program also aims to enable students to acquire abilities and skills related to doing jobs in the field of geotechnics in accordance with university education in Europe. The aim of the study program is also to enable sufficiently general academic education to continue work in related fields (civil engineering, mining, urbanism, space planning, ecology).

## Study program outcomes

Students studying at the study program in geotechnics are qualified to design geotechnical research to conduct qualitative field explorations, and laboratory investigation. They are qualified to conduct an analysis and interpretation of obtained results, and, on the basis of carried out exploration, to reaching particular design solutions. Only engineers in geotechnics are competent in designing and carrying out geotechnical exploration, as well as working of geotechnical bases and design bases. It is only them that are competent in conducting geotechnical monitoring and the control of geotechnical constructions.

## Admission requirements

A secondary school diploma and accomplished admission test.

## Contact

Head of the study program:  
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# Geophysics

at Faculty of Mining and Geology, 7 Đušina, 11000 Belgrade, [www.rgf.bg.ac.rs](http://www.rgf.bg.ac.rs)

ECTS: 180/ DEGREE: ENGINEER OF GEOLOGY

## Study program content

The studies last three academic years, namely six terms, and the overall study scope covers 180 ECTS points. Undergraduate students have field work which is mandatory, as well as professional practice carried out in economic enterprises and scientific-research institutes whereby more complete education and the acquisition of work competence in the profession are provided. The basic purpose of the study program of Geophysics is to educate qualitative and competent engineers in the field of geophysics bearing the professional title: an engineer in geology. The study program aims to offer graduates all elements required, thus, at the level of field surveying, as well as in a laboratory, they collect sufficient qualitative data for processing, interpretation and application of exploration results in various domains in which geophysics contributes significantly to understanding of problems which are solved and related to the Earth as a working environment (including natural processes and anthropogenic impacts, as well as both theoretic and practical aspects of problems).

## Study program goals

The aim of studies is the acquisition of theoretical knowledge and practical skills from the field of geophysics (via various forms of teaching, field work and professional practice) whereby there is provided the acquisition of competence and academic skills required for geophysical exploration within various fields in which geophysics is applied. There is also provided the acquisition of theoretical knowledge and practical skills from the number of various fields, that geology and related sciences deal with, whereby the acquisition of competence and academic skills for understanding and solving of various geological and other problems is provided, the acquisition of theoretical knowledge from various fields (mathematics, physics, chemistry, etc.) which is a necessary precondition to overcome theoretical and practical problems from the field of geology and geophysics, a foreign language acquisition (the English language) enabling students to read professional and scientific literature in the foreign language, and further advancement within

various professional and scientific programs where English is the language of instruction.

## Study program outcomes

A student acquires knowledge, skills, and professional competence to carry out geophysical measurements, both in the field and in the laboratory, to conduct the measurement data analysis and processing, to make geophysical maps, profiles etc. A student is capable to conduct basic interpretation of exploration results and present results in the form of a report and in other ways of presentation, thereby he is capable of using knowledge acquired in general education and theoretic-methodological subjects, as well as the knowledge from other geologic disciplines via numerous scientific-professional subjects which enables him to apply knowledge from geophysics in various research areas. A student acquires knowledge from the application of information-communication technologies, environmental protection and the foreign language which is a necessary condition for qualitative work in the profession.

## Admission requirements

A secondary school diploma and accomplished admission test.

## Contact

Head of the study program:  
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# Hydrogeology

at Faculty of Mining and Geology, 7 Đušina, 11000 Belgrade, [www.rgf.bg.ac.rs](http://www.rgf.bg.ac.rs)

ECTS: 240/ DEGREE: GRADUATED ENGINEER OF GEOLOGY

## Study program content

Undergraduate studies last four academic years (eight terms) within the scope of 240 ECTS points. Special attention is paid to more contacts with practice and particular assignments which future engineers in hydrogeology will encounter in their professional work. First of all, it refers to monitoring of all phases in designing and working of test-production wells and other hydrogeological facilities, terrain work, and the use of terrain methods, such as pumping test, injection, tracing, sampling for chemical analyses, etc. In addition to compulsory subjects, there are offered numerous optional subjects in the study program, whereby students are given an opportunity to create their own education in accordance with their capabilities and needs.

A coordinator-tutor is available to students for electing optional subjects and his/her main task is to get students acquainted with the content of the study program and offer them suggestions while they make decisions of optional subjects. Field work is anticipated within compulsory subjects.

## Study program goals

The purpose of undergraduate studies of hydrogeology is education of future engineers and making of competent experts with the title: an engineer in geology (in hydrogeology) qualified to design fundamental and detailed hydrogeological explorations for all sorts of groundwaters and geothermal energy, to make hydrogeological and other proposal maps from the field of hydrogeology, to investigate groundwater quality, to complete a feasibility study for the production of bottled natural groundwater, groundwater sources and geothermal energy, groundwater protection, protection from groundwater flooding, etc.

## Study program outcomes

After completing undergraduate studies graduates, really, acquire competence to do various kinds of jobs in the field of hydrogeology, on their own or in a team. Practical skills also include the

qualification for numerical data processing and the utilization of current information technologies. That means that after the study program completion, graduates will have the knowledge and skills to process and store data taking into account selection, representative quality and relevance of data as well as the accuracy and precision of analytical procedures in order to provide the required level of reliability.

Thus, a student is encouraged to think independently about possibilities of advancement of hydrogeology as a professional-scientific discipline via interpretation and contemporary survey of obtained results, numerical modeling of the terrain in interaction with facilities, to compare calculation results with the results of measurements during and after the construction of the facilities, etc.

## Admission requirements

A secondary school diploma and accomplished admission test.

## Contact

Head of the study program:

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# Petroleum Engineering

at Faculty of Mining and Geology, 7 Đušina, 11000 Belgrade, [www.rgf.bg.ac.rs](http://www.rgf.bg.ac.rs)

ECTS: 240/ DEGREE: GRADUATED ENGINEER OF MINING

## Study program content

The undergraduate study program is covered by 240 ECTS points spanning four academic years. During first two years of studies students get mathematics and science education: physics, chemistry, mathematics, mechanics, and informatics. They also get education in general engineering disciplines such as thermodynamics, fundamentals of mechanical engineering and electrical engineering, material technology and specific geological disciplines such as basics of geology, mineralogy, petrography, and mineral deposits.

The third year of studies is comprised of subjects profiling oil and gas engineering, while at the fourth year of studies there are compulsory and optional subjects according to two modules of the study program: Oil and Gas Exploitation and Gas Technique. Field work and summer practice is anticipated after the sixth and the eighth terms spanning 120 hours.

## Study program goals

The undergraduate study program of the Oil and Gas Engineering should educate a future expert to do jobs in the field of oil mining and natural gas engineering competently aiming to acquire professional qualifications for a possible independent performance of executive jobs at drilling rigs and overhaul plants, oil and gas fields, simulation and research centers, companies dealing with oil and gas equipment design, gas-distribution companies, etc. At the same time students are prepared to continue studies at a higher academic program independently of major courses, and to perform engineers' jobs in the field of oil and gas profession and other professions using oil/mining facilities as well as the knowledge and research results realized in the profession.

## Modules

Two modules of the study program are Petroleum exploitation process and Natural gas Engineering.

## Study program outcomes

Completing the undergraduate academic studies, student should be able to explain geological processes of geological structures' forming, especially oil and natural gas reservoirs, to analyze chemical and morphological structure of rocks, to explain the fundamentals of geochemical and geophysical surveys, to plan, track and manage mining works from the area of petroleum mining (to define oil and gas reservoir engineering, drilling of oil and gas wells and exploitation method), to plan the process of oil, natural gas and reservoir water processing, to plan, track and manage the work of installations for the oil and natural gas transport, to apply the safety measures for petroleum mining and gas installations, to understand the environmental impact of oil and gas mining works and installations, to plan, track and manage the work of production systems, oil and natural gas transport and storage, as well as installations for natural gas distribution, to manage the system for maintenance of oil-gas installations and equipment and to take care of the safe disposal of waste materials.

Considering the nature of this study program, knowledge and skills acquired on this level include the idea of economical using of natural resources in Serbia, due to of principles of sustainable development.

## Admission requirements

A secondary school diploma and accomplished admission test.

## Contact

Head of the study program:

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# Mining Engineering

at Faculty of Mining and Geology, 7 Đušina, 11000 Belgrade, [www.rgf.bg.ac.rs](http://www.rgf.bg.ac.rs)

ECTS: 240/ DEGREE: GRADUATED ENGINEER OF MINING

## Study program content

The undergraduate study program is realized by 240 ECTS points spanning four academic years. The study program is designed to qualify students to apply the acquired knowledge in practice and realize long-term professional advancement. The courses are adjusted to establish the connection between theory and practice.

The teaching process anticipates project work, as a basis for completing a final paper. This enables students to understand the significance and establish the connection of theoretical bases, practical engineering (solution of particular problems) and good engineers' reasoning. Interactive teaching provides active role of students.

The program includes field work and summer practice after the sixth and eighth terms spanning 120 hours.

## Study program goals

The aim of the study program is the acquisition of knowledge, qualifications and skills to work on creative, executive jobs in mining, power supply, in the field of surface and underground mining, mineral raw material exploitation, underground constructions, mine surveying, mechanization in mining, and mineral dressing.

Experts who have completed this study program can work successfully as project and program managers in the fields of development research, designing, production, logistics, planning, risk evaluation, computing, and system engineering, security and other posts where mining engineering knowledge is required while creating solutions and making efficient managerial decisions.

## Modules

The third and the fourth years of studying comprise compulsory and optional subjects distributed in seven modules: Surface Mining of Mineral Deposits, Underground Mining of Mineral Deposits, Underground Construction, Mine Surveying, Mine Mechanization, Mineral Processing, Computing and Systematic Engineering in Mining.

Each module is defined by adequate combinations of compulsory and optional subjects, closely profiling a particular module while providing students with necessary knowledge of the exploitation technology of mineral deposits and professional discipline.

## Study program outcomes

Completing the undergraduate study program, students acquire knowledge, abilities and competence such as :detailed knowledge and understanding of technological processes of both surface and underground mining of mineral raw materials, mastering the techniques in surface and underground mine design, work organization, system running and managing, mastering skills in designing and building of underground constructions, traffic and communal facilities, as well as special purpose facilities, becoming acquainted with instruments and equipment for geodesic surveying, engineering geodesy, computation of adjustment, mine surveying, plan completion, photogrammetry, etc:

Completing the study program also implies the sublimation of knowledge of mining, mechanical engineering, electrical engineering, as well as of system sciences for the needs of machinery maintenance, mine mechanization exploitation and design, mastering of methods and procedures of mineral dressing and processing, as well as recycling of secondary raw materials, with particular reference to environmental protection; a high level of competence in computing, computer integrated technologies, system sciences, and system engineering, the knowledge of application and use of computer, measuring, regulating and other accompanying equipment; relating and combining the computing knowledge and system engineering in designing, the knowledge of basic creative engineer tools (methods), characteristics and possibilities of their application, the knowledge of system approaches in solving particular problems, the development and advancement of skills and dexterity of the use of knowledge of mineral raw material exploitation in practice, the development of habits to be permanently informed, keeping pace with and application of innovations in profession, the development of commu-



nicative competences with immediate working environment, the development of professional ethics, responsibility and accuracy at work.

### Admission requirements

A secondary school diploma and accomplished admission test.

### Contact

Head of the study program:

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# Environmental and Safety Engineering

at Faculty of Mining and Geology, 7 Đušina, 11000 Belgrade, [www.rgf.bg.ac.rs](http://www.rgf.bg.ac.rs)

ECTS: 240/ DEGREE: GRAD. ENGINEER OF ENVIRONMENTAL ENG. / GRAD. ENGINEER OF SAFETY ENG.

## Study program content

The undergraduate study program is covered by 240 ECTS points spanning four academic years. During the first two years of studies students get mathematics and science education including: physics, chemistry, mathematics, mechanics, and informatics. They also get education in general engineering disciplines such as thermodynamics, fundamentals of mechanical engineering and electrical engineering, material technology and specific geological disciplines such as basics of geology, mineralogy, petrography, and mineral deposits. The third and the fourth years of studies comprise compulsory and optional subjects as well as two elective modules: 1) Environmental Protection Engineering, 2) Work Safety Engineering.

## Study program goals

The purpose of the undergraduate study program Engineering of Environmental Protection and Work Safety is the education of competent experts with the qualification an engineer in environmental protection or a safety engineer.

The aims of the study program Engineering of Environmental Protection and Work Safety, via the elective module Environmental Protection Engineering, are: acquiring of the competence and academic skills in the sphere of waste management, remediation and recultivation of degraded surfaces, of industrial waste processing and recycling, waste water purification, air pollution and protection, noise, and vibration, living environment monitoring, planning and design of environmental protection system.

Also, the study program Engineering of Environmental Protection and Work Safety via the elective module Work Safety provides the acquisition of competence and academic skills in the spheres of machine and device protection, fire and explosion protection, security, and technical protection in mining technological processes, work safety management, the economic analysis of a protection process.

## Modules

The Environmental Protection Engineering module includes the study of exploitation technologies of mineral deposits and professional disciplines such as waste characterization and management, degraded land remediation and reclamation, industrial waste processing and recycling, physical and colloid chemistry, waste water purification, air pollution and protection, noise and vibrations, living environment monitoring, design of environmental protection system, ecological management. The third and the fourth years of studies at the Work Safety module, besides the study of technologies of mineral deposits, also include professional disciplines such as: working environment air pollution and protection, machine and device protection, fire and explosion protection, security and technical protection in mining technological processes, automation and process management, system of work safety management, anti-explosive protection of electrical devices, the economic analysis of a protection process.

## Study program outcomes

Graduates from this program will acquire practical knowledge and skills to do jobs in waste management, reclamation design and working, industrial waste recycling, waste water purification, the air protection system design, the noise and vibration protection design and working. Students of the elective module Work Safety Engineering are qualified to plan and organize machine and device protection, fire and explosion protection, to organize security and protection in mining technological processes.

Graduates will be qualified to carry out field and laboratory investigations with full responsibility as to possible risks and impacts on an environment, namely with mandatory protection measures. Practical skills also include qualifications for numerical data processing and advanced utilization of information technologies, which means that students will have skills for data processing taking into account the accuracy and precision of analytical procedures.

## Admission requirements

A secondary school diploma and accomplished admission test.

## Contact

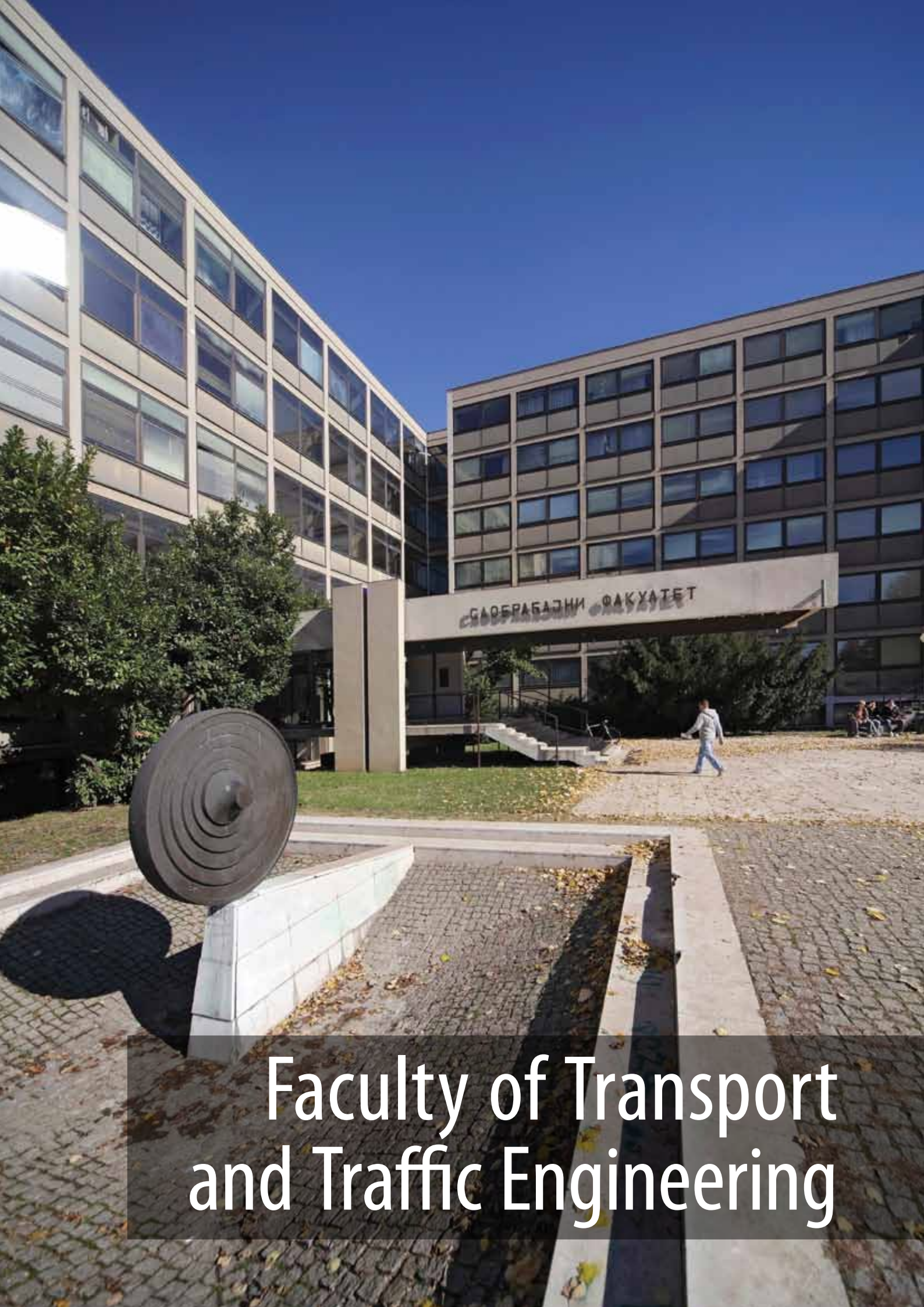
Head of the study program:

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САДБРАБАДНИ ФАКУЛТЕТ

# Faculty of Transport and Traffic Engineering

# Traffic Engineering

at Faculty of Transport and Traffic Engineering, 305 Vojvode Stepe, 11000 Belgrade, [www.sf.bg.ac.rs](http://www.sf.bg.ac.rs)

ECTS: 240/ DEGREE: GRADUATE TRAFFIC ENGINEER

## Study program content

The Traffic Engineering study program lasts for four years. In the first two years of study students acquire general engineering skills. Teaching takes the form of lectures, seminar classes and laboratory classes. Setting high standards in the quality of teaching, the Traffic Engineering study program aims at educating students for the profession of Traffic Engineering in accordance with the demands of economy, economics and society at large. This study program produces outstanding engineers who are ready to take an active part in regional development and assume responsibility for the Republic of Serbia's participation and significant role in the European economy and traffic system.

## Study program goals

The Traffic Engineering study program has a clear goal of educating engineers who can plan, design, manage, and control processes and systems in their various forms, fields, technologies of traffic, transport, communications, and logistics. Consequently, it is of paramount importance that they gain basic knowledge which will enable them to continue their studies to post-graduate level as well as acquire practical knowledge and skills which will provide them with an opportunity of undertaking traffic, transport, and logistics activities.

## Modules

1. Railways Transport and Traffic Engineering;
2. Road and Urban Transport and Traffic Engineering, Major: Traffic;
3. Road and Urban Transport and Traffic Engineering, Major: Transport;
4. Road and Urban Transport and Traffic Engineering, Major: Road Safety;
5. Waterways Transport and Traffic Engineering;
6. Air Transport and Traffic Engineering;
7. Logistics;
8. Postal Traffic and Networks;
9. Telecommunications Traffic and Networks.

## Study program outcomes

Mastering the Traffic Engineering study program students gain competencies to analyze and forecast demands on the transport market, plan and design, manage, exploit and control processes and systems which enable the flow of people, goods, cargo, and information in various forms of: modal (road, railways, waterways, air) and multimodal transport and traffic, communications, and logistics.

## Admission requirements

Four-year secondary education.

## Contact

Head of the study program:

### Railway traffic and transport

**Prof. Dr. Miloš Ivić**

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### Traffic engineering

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### Waterway traffic and transport

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### Transport engineering

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### Road traffic safety

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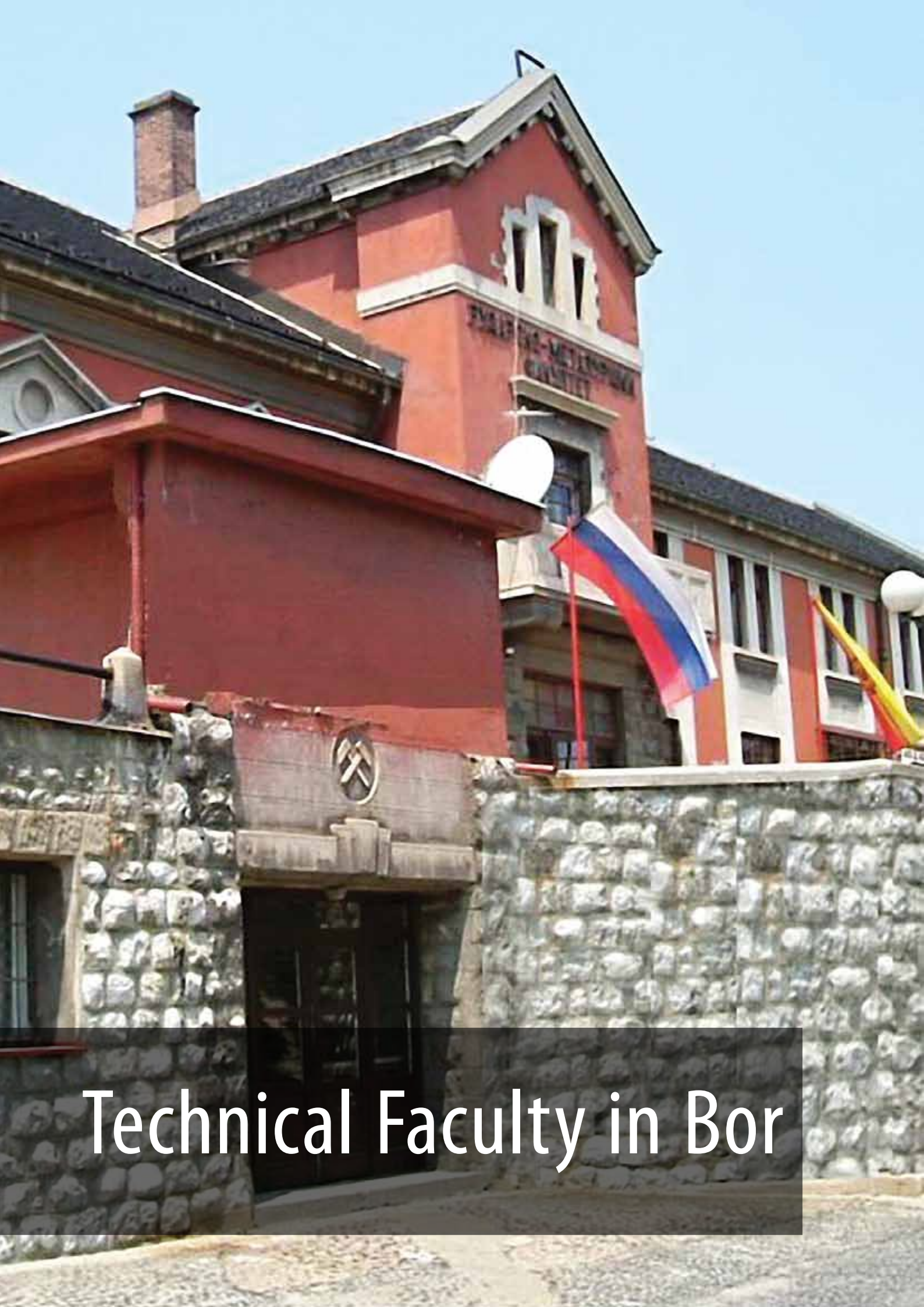
**Air traffic and transport**  
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**Telecommunication traffic and networks**  
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**Postal traffic and networks**  
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Technical Faculty in Bor

# Industrial Management

at Technical Faculty In Bor, 12 Vojske Jugoslavije, 19210 Bor, [www.tf.bor.ac.rs](http://www.tf.bor.ac.rs)

ECTS: 240/ DEGREE: B. SC. MANAGEMENT

## Study program content

Industrial Management is an area of study intended for the students who are interested to deal with the following activities in their professional career: planning, organizing, leading, staffing and controlling as heads of companies or company departments for the purpose of improving their performances. The first degree of academic studies in the field of industrial management is designed to provide a good basis for both the professional engagement in manufacturing and service companies and for a continuation on one-year studies in the field of industrial engineering (level II study).

## Study program goals

The main objective of this study program is introducing a wide range of theoretical and practical principles of management to students. Students will be able to comprehend the key functions of management, and they will also have opportunities to apply basic management skills such as problem solving, teamwork, communicating, decision making in the conditions of uncertainty, etc. The study program also includes behavioral approach, which emphasizes qualitative aspects of management. A special aim of this study program is acquiring knowledge in engineering and behavioral disciplines which provide an opportunity for better understanding of social relationships concerning a company and the surroundings.

## Study program outcomes

By completing the program of industrial management, a student acquires general competences for analyzing, synthesizing and predicting possible solutions for the problems with corresponding consequences. These skills provide engineers of management with the competences to perceive the needs of a company both through short-term and long-term (strategic) development planning, as well as to deal with everyday practical programs and keep real-time processes; then to use multi-criteria decision making techniques in the conditions of uncertainty and lead complex projects based on

the principles of project management through projecting, organizing and production control.

## Admission requirements

Admission requirements are completed four-year secondary education and passed entrance exam.

## Contact

Head of the study program:

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# Metallurgical Engineering

at Technical Faculty In Bor, 12 Vojske Jugoslavije, 19210 Bor, [www.tf.bor.ac.rs](http://www.tf.bor.ac.rs)

ECTS: 240/ DEGREE: B. SC. METALLURGY

## Study program content

The study program of undergraduate study entitled Metallurgical Engineering, which is performed at the Technical Faculty in Bor, is from the scope of the educational and scientific field of engineering with the same first two years of study.

The students are trained in the field of natural sciences, mathematics and general engineering disciplines, and at the third year fundamental problems of the profession are taught, especially the theoretical aspects of metallurgical processes, physics of metals and thermal technique. In the fourth year courses are divided into two modules: Extractive Metallurgy and Metals Processing, defined through an appropriate combination of scientific and technical - vocational subjects of metallurgical applications in the field of non-ferrous and ferrous metallurgy, metals casting, processing of metals in plastic state, powder metallurgy, metal recyclables, etc, which profile a particular module and provide students with the necessary knowledge about the technology of obtaining and processing of metals.

The course also includes selected articles from the field of information technology, environment protection, economics and engineering management, which are implemented jointly with other programs of study, and are a necessary part of complete education of contemporary engineers.

The program is implemented through a four-year study - in eight semesters with 240 ECTS credits. The graduates acquire the title: Metallurgical Engineer.

## Study program goals

The aim of the study program of undergraduate studies of Metallurgical Engineering is acquiring adequate competencies - knowledge, expertise and skills to perform creative, operational and managerial activities in the field of extractive metallurgy and processing.

These competences can be also applied in other industries where knowledge in metallurgical engineering is essential for designing solutions, making effective management decisions in the area of research, development, design, logistics, production, planning, risk assessment, and so on, in accordance with the basic tasks and goals of education at the Technical Faculty in Bor, which are related to continuous improvement and modernization of the educational process, transfer of the acquired knowledge in the economy and society, and the convergence of the world achievements.

## Modules

Extractive and Processing Metallurgy

## Study program outcomes

Graduates of this program of study should have a good basis for the possibility of easy professional upgrading of the acquired knowledge, developed through the need for systematic and continuous learning, the ability to plan and organize, the basis for good oral and written communication, computer skills, ability to obtain and analyze information, problem-solving and decision making.

The structure of the study clearly points out the competencies and learning outcomes.

The students are expected, despite the good fundamentals in the field of natural sciences, mathematics and general engineering disciplines, to possess the theoretical, fundamental knowledge in the field of metallurgy and applied practical knowledge of engineering profession, including: the knowledge of basic metallurgical aggregates; detailed knowledge, understanding and mastering the techniques of managing technological processes in manufacturing and extractive metallurgy; the knowledge of using measurement, regulation and other ancillary equipment; the knowledge of basic engineering tools and their applicability, and mastering the skills of design, work organization, management and control systems, in accordance with the basic economic, energy, environmental requirements, and quality system requirements.

## Admission requirements

Admission requirements are completed four-year secondary education and passed entrance exam.

## Contact

Head of the study program:  
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# Mining

at Technical Faculty In Bor, 12 Vojske Jugoslavije, 19210 Bor, [www.tf.bor.ac.rs](http://www.tf.bor.ac.rs)

ECTS: 240/ DEGREE: B. SC. MINING

## Study program content

The first two years of study include course subjects belonging to academic and general education group (English, computer science, engineering graphics), as well as theoretical-methodological subjects (mathematics, physics, chemistry, etc.) which are common to all the students studying Mining Engineering program. The third and fourth year of study include the largest number of subjects belonging to a group of scientific and professional, as well as professionally applicable, divided into three modules. The educational process includes lecturing, computing and laboratory exercises. Special attention is paid to particular forms of teaching such as seminars, studies, projects and other activities with mentoring teachers as well as professional practice in the manufacturing and service companies.

## Study program goals

The main objective of the study program of Mining Engineering is a process of continuous improvement of education at all levels and development of the study program which is tailored to the modern world achievements in science and development of the educational process, which is one of the main objectives of the Technical Faculty in Bor. Also, one of the aims of the study program Mining engineering is to use the achievements of fundamental, natural and technical sciences to make mining, as applied science, more up-to-date and efficient. The objective of the study program is to develop the competencies of students in accordance with the best international practice. In this way they could integrate into modern science, further development of mining, energetics, preparation of mineral raw materials, recycling of technogenic, technical, communal and other waste and other secondary raw materials, reclamation of degraded land, waste water treatment, environmental protection and others.

## Study program outcomes

Graduates of the study program Mining Engineering possess sufficient knowledge and skills to perform different tasks in this field. Also, they

will have a good professional basis for upgrading the acquired knowledge, the capacity for analysis and synthesis, the capacity for planning and organizing, good written and oral communication, problem-solving ability and decision making. By studying subjects in the field of natural, technical and geological sciences, graduates of this program of study will have competences for good communication, which is of great importance for the improvement of applied science in the field of mining.

## Modules

- Module M1 - The exploitation of mineral deposits - ELMS,
- Module M2 - Minerals Processing - PMS
- Module M3 - Recycling Technologies and Sustainable Development – RTOR.

With clearly defined compulsory and optional subjects from the first to the last year of academic study, students acquire quality education and more professional knowledge. 25% (60 ECTS) is provided with these three modules, enabling students to choose not only modules, but also subjects according to their preferences and interests in order to acquire more specific knowledge and skills.

## Admission requirements

Admission requirements are completed four-year secondary education and passed entrance exam.

## Contact

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# Chemical Engineering

at Technical Faculty In Bor, 12 Vojske Jugoslavije, 19210 Bor, [www.tf.bor.ac.rs](http://www.tf.bor.ac.rs)

ECTS: 240/ DEGREE: B. SC. TECHNOLOGY

## Study program content

In the first and second year students are trained in the field of natural sciences, mathematics, physics, chemistry, computer science. Also, students acquire knowledge in general engineering disciplines, such as thermodynamics and engineering graphics. In addition to these disciplines, students gain knowledge of statistics, quality management and entrepreneurship, as well as English. The third year of study consists of several compulsory and two optional subjects. The compulsory subjects include the necessary knowledge for understanding the theoretical basis of technological processes. The optional subjects (ecology, environment protection, electrochemistry, and toxicology), students learn the basics of environment protection, no matter which module they will choose later. In the fourth year, students in this degree program have three common subjects, where they study inorganic chemical technology, materials and corrosion protection, economics and business organization. In addition to these subjects, the students can choose a module according to their interests.

## Study program goals

The objectives of the Engineering program, through elective courses for Inorganic Chemical Technology, including the achievement of competencies and academic skills development and monitoring of technological processes in certain areas of the chemical industry (production of acids, bases, salts, fertilizers, manufacture of building materials - lime, gypsum, cement, glass, porcelain, ceramic materials, refractory materials, preparation of drinking water, testing of corrosion processes, apparatus designing). This program also provides the achievement of competencies and skills in the areas of academic research of soil pollution, controlling impacts on the environment, planning, selection and application of relevant technologies for environment protection. In addition, the program provides acquiring competences for dealing with the problems of waste water, waste gases, testing and monitoring of the environment quality in order to prevent environmental pollution.

## Modules

In this study program has two modules:

- Inorganic Chemical Technology, and
- Engineering Environment, with the first three years common to both modules.

## Study program outcomes

The objectives of the Engineering program, through elective courses for Inorganic Chemical Technology, including the achievement of competencies and academic skills development and monitoring of technological processes in certain areas of the chemical industry (production of acids, bases, salts, fertilizers, manufacture of building materials - lime, gypsum, cement, glass, porcelain, ceramic materials, refractory materials, preparation of drinking water, testing of corrosion processes, apparatus designing). This program also provides the achievement of competencies and skills in the areas of academic research of soil pollution, controlling impacts on the environment, planning, selection and application of relevant technologies for environment protection. In addition, the program provides acquiring competences for dealing with the problems of waste water, waste gases, testing and monitoring of the environment quality in order to prevent environmental pollution.

## Admission requirements

Admission requirements are completed four-year secondary education and passed entrance exam.

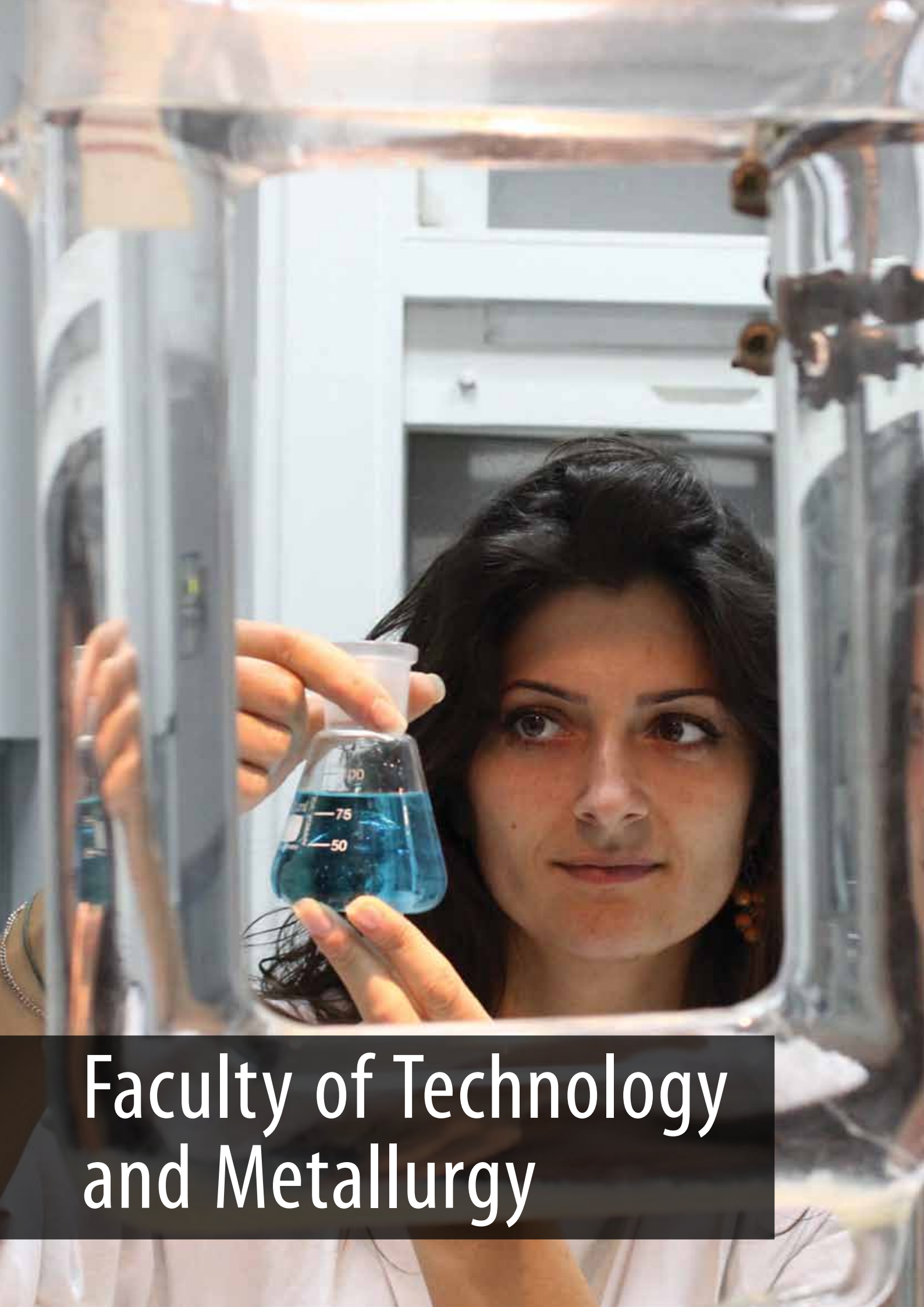
## Contact

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# Faculty of Technology and Metallurgy

# Biochemical Engineering and Biotechnology

at Faculty of Technology and Metallurgy, 4 Karnegijeva, 11000 Belgrade, [www.tmf.bg.ac.rs](http://www.tmf.bg.ac.rs)

ECTS: 240/ DEGREE: BACHELOR

## Study program content

The study program Biochemical engineering and biotechnology educates engineers for professional activities in the field of technical-technological sciences, specifically biochemical engineering and biotechnology. The study program provides the education of engineers recognized by the job market, originating from the real needs of the economy for highly qualified engineers competent in biotechnological processes and operations.

## Study program goals

The basic goal of the study program Biochemical engineering and biotechnology is to educate experts for the broader field of biotechnology capable of transferring their theoretical and professional knowledge to industrial practice. Engineers from this study program are also capable of working in research and development by optimizing and developing new biotechnological processes. Biotechnology is exceptionally complex and its dynamic development has been enabled mostly by the development of its fundamental disciplines and their integration in the unique multidisciplinary field of biotechnology.

## Study program outcomes

By completing the academic bachelor study program Biochemical engineering and biotechnology, students gain the following general knowledge and competences:

- knowledge and social and ethical competences to analyze the influence of biotechnological processes on the environment and human health,
- communication and social skills to clearly formulate problems and address their solution,
- competencies for independent work and the capability for team work,
- communication and other skills to convey and present results in the field of biotechnology to the professional and general public.

## Admission requirements

Completed secondary four-year education and passed entry exam in chemistry, physics or mathematics.

Serbian and English (study materials and consultations in English).

## Contact

Head of the study program:  
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# Materials Engineering

at Faculty of Technology and Metallurgy, 4 Karnegijeva, 11000 Belgrade, [www.tmf.bg.ac.rs](http://www.tmf.bg.ac.rs)

ECTS: 240/ DEGREE: BACHELOR

## Study program content

Materials engineering is an academic bachelor study program for the education and training of materials engineers for employment in industry through involvement in the design, organization, management and control of mechanical and chemical processes and procedures in the production, processing and utilization of materials.

## Study program goals

The study program Materials engineering has as a basic goal the education of engineers competent to assess the complete process of production, processing and application of materials, thus creating an engineer capable of responding to the challenges of working in multidisciplinary teams and competently cooperating with other engineers. Students thus acquire basic general chemical engineering knowledge, as well as a solid basis in fundamental sciences. This knowledge enables them to assess the specificity of the material from the fundamental level - atoms, molecules and super-molecular structure, as well as to determine the interrelations of these parameters with the macroscopic properties of the material. The student is qualified to successfully detect and resolve possible problems during the production process, and also assess the influence of various parameters on the material properties and its behavior during application. It is especially important at this level of study that the student is completely familiar with the principles of environmental protection and the influence of various materials on the environment. The goal is to educate an engineer that from the beginning of his professional career is familiar with the principles of production that is sustainable and energy efficient.

## Study program outcomes

Graduates completing the academic bachelor study program Materials engineering have the following qualifications:

- the competence to work with a wide variety of materials and knowledge of their behavior

during production, processing and application,

- expertise in the field of ceramic, polymeric, metallic and composite materials,
- the capability to work in multidisciplinary teams in industry,
- the capability to work efficiently and effectively in different business and work environments,
- the possibility of further education either in Materials engineering or other related fields,
- the capability to contribute to society by utilizing knowledge about domestic and regional business trends.

## Admission requirements

Completed secondary four-year education and passed entry exam in chemistry, physics or mathematics.

Serbian and English (study materials and consultations in English).

## Contact

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# Chemical Engineering

at Faculty of Technology and Metallurgy, 4 Karnegijeva, 11000 Belgrade, [www.tmf.bg.ac.rs](http://www.tmf.bg.ac.rs)

ECTS: 240/ DEGREE: BACHELOR

## Study program content

The study program educates engineers that are able to apply their theoretical and practical knowledge to industrial practice in the broader field of chemical engineering. Graduates are trained for employment in research and development institutions in the field of chemical engineering, in the optimization and development of new technological processes.

## Study program goals

The goal of the study program is to educate chemical engineers with professional knowledge for active involvement in the economy and in society as process engineers, design engineers, engineers in quality control, in maintenance, as well as in research and development. The study program provides students with a strong basis in fundamental sciences, especially mathematics, physics and chemistry, accompanied by engineering basics with an emphasis on chemical engineering. The goal is also to provide students with professional and in-depth knowledge of various areas of chemical engineering such as chemical process engineering, pharmaceutical engineering, polymer engineering, electrochemical engineering, organic and inorganic chemical technology and quality control, as well as basic knowledge in process design. The study program trains students in the fundamentals of sociology, economics and management and in skills to assess the role of chemical engineers in economic and social development. The study program provides the communication and social skills required to work in an engineering team. Finally, the goal of the study program is to provide a theoretical and practical basis for professional advancement, as well as the development of analytical and critical capabilities required for possible involvement in scientific research.

## Study program outcomes

By completing the academic bachelor study program Chemical engineering, students acquire the following general capabilities and competences:

- the capability to analyze problems and independently devise solutions based on problem-solving skills by integrating knowledge from various disciplines and their own judgement,
- communication, organizational and social management skills,
- the capability to apply research methods and procedures,
- the capability to apply new ideas and solutions in practice,
- knowledge of professional ethics.

The students also acquire professional skills in the field of chemical engineering:

- specialized theoretical and professional knowledge in various fields of chemical engineering such as chemical process, pharmaceutical, polymer and electrochemical engineering, organic and inorganic technology and quality control,
- the capability to solve complex problems in chemical engineering practice,
- professional knowledge and skills required to follow, critically analyze and apply innovations in the field of chemical engineering, as well as the development of new skills in accordance with the development of new technologies,
- competences to create and implement the principles of sustainable development.

## Admission requirements

Completed secondary four-year education and passed entry exam in chemistry, physics or mathematics.

Serbian and English (study materials and consultations in English).

## Contact

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Contact e-mail: [tmf@tmf.bg.ac.rs](mailto:tmf@tmf.bg.ac.rs)



# Environmental Engineering

at Faculty of Technology and Metallurgy, 4 Karnegijeva, 11000 Belgrade, [www.tmf.bg.ac.rs](http://www.tmf.bg.ac.rs)

ECTS: 240/ DEGREE: BACHELOR

## Study program content

The study program educates engineers that are able to apply their theoretical and practical knowledge to industrial practice in the broader field of environmental engineering. Graduates are trained for employment in research and development institutions in the field of environmental engineering through the implementation of the concepts of sustainable development and green industry.

## Study program goals

The goal of this study program is to provide the graduate with knowledge that may be applied to monitor the quality of the environment, reduce the level of pollution of living and work environments, design systems to purify and remediate polluted waters, air and soil and treat solid and hazardous waste. The graduates are able to understand the causes of environmental pollution and implement preventive measures, as well as to implement purification or remediation procedures. The study program covers the following professional areas: quality control of underground and surface waters, the preparation of water for various applications, the purification of waste waters, the management of solid and hazardous waste, the recycling of waste materials, the quality control of air, the purification of waste gases, the monitoring of soil quality and soil remediation, energy efficiency, renewable energy sources and sustainable development. Based on knowledge in economics, management and environmental legislation, the graduates are able to provide proper environmental protection at minimal costs. The goals of the study program are directed toward mastering academic skills and knowledge in accordance with current global standards.

## Study program outcomes

Graduates of the academic bachelor study program Environmental engineering are competent and qualified to recognize and solve environmental problems in practice.

During their studies the graduates obtain a broad education that enables them to assess the influence of technological processes on the environment at the global, regional and local level.

The graduates are able to plan and perform experiments, as well as to analyze and interpret data regarding air, water and soil quality, waste management, resource maintenance and material utilization. They are familiar with the newest developments in the field and are able to continuously refresh their knowledge and contribute to the profession.

They are able to plan, design and supervise environmentally optimized systems, processes and equipment.

## Admission requirements

Completed secondary four-year education and passed entry exam in chemistry, physics or mathematics.

Serbian and English (study materials and consultations in English).

## Contact

Head of the study program:

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# Metallurgical Engineering

at Faculty of Technology and Metallurgy, 4 Karnegijeva, 11000 Belgrade, [www.tmf.bg.ac.rs](http://www.tmf.bg.ac.rs)

ECTS: 240/ DEGREE: BACHELOR

## Study program content

Metallurgical engineering is an academic bachelor study program for the education and training of metallurgical engineers for employment in industry through involvement in the design, organization, management and control of metallurgical processes and procedures in the production, processing and utilization of metallic and related materials.

## Study program goals

The goals of the academic bachelor study program Metallurgical engineering are:

- the adoption and mastering of scientific and professional knowledge and specific practical skills in the courses constituting the study program Metallurgical engineering,
- to provide quality professionals in the field of metallurgy,
- to provide highly skilled experts that possess organizational capabilities, independence and self-initiative in organizing and managing production processes in the field of metallurgy,
- to motivate students to think logically and creatively,
- to train future metallurgical engineers to apply acquired professional knowledge and specific practical skills in solving complex problems,
- to establish stronger ties between academia and industry in order to obtain specialized metallurgical experts,
- the efficient adoption of new technological developments in various areas of metallurgy.

## Study program outcomes

Graduates completing the academic bachelor study program Metallurgical engineering have the following qualifications:

- they have shown extensive knowledge, understanding and specific professional skills in the properties, production and development of new, modern and advanced metallic materials and products,
- they are able to analyze and predict certain

situations and states that could have various consequences in metallurgy, as well as possible solutions,

- they have gained knowledge and skills for team work in the solution of complex problems,
- they are able to efficiently follow and adopt new developments in metallic materials and products,
- they are able to successfully utilize research methods and procedures,
- they are able to correlate and apply multidisciplinary knowledge,
- they are able to simulate and optimize certain processes of manufacturing new metallic materials using models,
- they are able to apply the statistical processing of experimental results to the quality control of raw materials, semi-products and final products in metallurgy,
- they are able to convey their acquired knowledge in the field of metallurgy to the professional and general public,
- they are willing and able to improve the existing conditions in metallurgical practice,
- they are able to use information and communication technology in acquiring knowledge to solve metallurgical problems,
- they are able to further their education in metallurgical or related engineering fields,
- they have adopted professional ethics in their profession,
- they are capable of critical thinking in order to advance their profession.

## Admission requirements

Completed secondary four-year education and passed entry exam in chemistry, physics or mathematics.

Serbian and English (study materials and consultations in English).

## Contact

Head of the study program:

**Prof. Dr. Ivanka Popović**

Telephone: +381 11 337 05 03

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# Textile Engineering

at Faculty of Technology and Metallurgy, 4 Karnegijeva, 11000 Belgrade, [www.tmf.bg.ac.rs](http://www.tmf.bg.ac.rs)

ECTS: 180/ DEGREE: BACHELOR

## Study program content

Textile technology is an academic bachelor study program for the education and training of textile engineers for employment in industry through involvement in the design, organization, management and control of mechanical and chemical processes and procedures in the production, processing and utilization of textile fibers and materials.

## Study program goals

The study program Textile technology is based on the general principles of applying academic knowledge, skills and competences in the manufacturing of textile materials and garments by respecting existing and adopting new standards and trends in the advancement of technological processes and maintaining the environment. The goal of the study program is to acquire and develop skills for creative problem solving in industrial practice, management and optimization, as well as in the design of new processes in accordance with contemporary standards of environmental protection and sustainable development.

## Study program outcomes

Graduates completing the academic bachelor study program Textile technology have the following qualifications in the textile and garment industry:

- the competence to work with textile materials and knowledge of their behavior during production, processing and application,
- the capability to work in multidisciplinary teams in industry,
- the capability to work efficiently and effectively in different business and work environments,
- the possibility of further education in Textile technology or other related fields,
- the capability to contribute to society by utilizing knowledge about domestic and regional business trends.

## Admission requirements

Serbian and English (study materials and consultations in English).

## Contact

Head of the study program:  
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Contact e-mail: [tmf@tmf.bg.ac.rs](mailto:tmf@tmf.bg.ac.rs)



# Faculty of Organizational Sciences

# Information Systems and Technologies

at Faculty of Organizational Sciences, 154 Jove Ilića, 11000 Belgrade, [www.fon.bg.ac.rs](http://www.fon.bg.ac.rs)

ECTS: 240/ DEGREE: ENGINEER OF ORGANIZATIONAL SCIENCES

## Study program content

Information systems and technologies is an accredited undergraduate program. Job offer, market trends, as well as economic, social, public administration and other public institutions trends, undoubtedly point to the fact and are the best justification for the study program Information Systems and Technologies at the Faculty of Organizational Sciences.

This study program offers students knowledge and competencies in accordance with the dynamics of job offer on the market. The goal of the study program Information Systems and Technologies is for the students to acquire the most recent knowledge and skills in the field of information systems and information technologies, to be familiarized with and master modern methods and techniques which enable students to successfully apply acquired knowledge and skills in their profession and to continue further education on higher levels of studies.

First year classes are the same for both Faculty study programs and they encompass courses which serve as an introduction to studying information systems and technologies, as well as introduction courses in management, psychology, sociology, basics of organization, mathematics, economics, production systems and foreign languages.

Courses on the second, third and fourth year focus on further study of theory and practice of information systems and information technologies, with teaching content covering fields of business functions, application of quantitative methods (mathematics, statistics, operations research...) and general courses. Each successive year contains more specialized courses, but they still include all aspects of study in the fields studied on previous years. This way, students acquire knowledge which helps them first see a broader image and different aspects of specific areas, followed by more detailed studies of details and problem solving. Each year contains mandatory and elective courses.

With elective courses, students choose one of the two or more offered courses. In the final

year, depending on the module, students also choose three of several available courses. In addition, students do internship in companies, where they apply the acquired knowledge.

The program lasts for eight semesters and provides students with 240 ECTS points during four years and awards the title of Engineer of Organizational Sciences.

## Study program goals

The goals of the program are in accordance with the basic tasks and goals of the Faculty of Organizational Sciences as a higher education institution:

- Developing creative abilities and mastering specific practical skills required for a profession in the field of information systems and technologies;
- Educating professionals for work in software industry with comparative advantage of students who have completed undergraduate studies at the Faculty of Organizational Sciences, which includes knowledge in business organization, management and related disciplines which are taught through some of the courses at the study program Information Systems and Technologies on undergraduate studies of the Faculty;
- Continual education in the field of information systems and technologies from undergraduate to postgraduate studies.

Students who complete undergraduate studies at the study program Information Systems and Technologies are competent to:

- collect, analyze and specify customer demands;
- work independently on developing information systems, having knowledge on the current information technologies and development tools;
- be a part of teams working on development of information systems of various types and purposes;
- provide consultant services in demand analysis, design, implementation, maintenance, managing development and operation of

- information systems;
- participate in research in the field of information systems and technologies and related computer disciplines, as well as in teaching in the field of computers in secondary and higher education;
- participate in teamwork and provide professional and technical support in software sales, negotiate and cooperate with users of software products, as well as manage projects concerning information systems development;
- have an analytical approach to problem-solving based on the acquired knowledge in the field of information systems and information technologies.

In addition, students also gain the following subject-specific competences:

- design, use and administration of databases;
- efficient use of various methodological approaches and tools in developing information systems;
- develop modern multilayer information systems in a modern technologies environment;
- select, create, apply, integrate and administer information technologies.

### Study program outcomes

The outcome of the learning process are competent undergraduate engineers of information systems who have a developed multidisciplinary view and who can use the acquired theoretic and practical knowledge to effectively and efficiently work in a dynamic business environment. The Faculty of Organizational Sciences is in charge of this field at the University of Belgrade and has been educating students for several decades for recognized and clearly defined professions in the field of information systems and information technologies. Demand for engineers in the area is constantly growing, in both the national framework and the environment, and the world.

### Admission requirements

Admission requirements are completed four-year secondary education and passed entrance exam.

### Contact

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# International Business and Management

at Faculty of Organizational Sciences, 154 Jove Ilića, 11000 Belgrade, [www.fon.bg.ac.rs](http://www.fon.bg.ac.rs)

ECTS: 240/ DEGREE: ENGINEER OF ORGANIZATIONAL SCIENCES

## Study program content

Management and Organization is one of the three accredited study programs of the Faculty undergraduate studies. First year classes are the same for both Faculty study programs and they encompass courses which are an introduction to studying information systems and technologies, as well as introduction courses in management, psychology, sociology, basics of organization, mathematics, economics, production systems and foreign languages. Courses on the second, third and fourth year focus on further study of theory and practice depending on the module, with equal presence of teaching content covering fields of business functions, application of quantitative methods (mathematics, statistics, operations research...) and general courses. Each subsequent year has more specialized courses, but they still encompass all aspects of study of fields from previous years. This way, students acquire knowledge based on which they first see a broader image and different aspects of specific areas, followed by more detailed studies of details and problem solving. Each year contains mandatory and elective courses. With elective courses, students choose one of two or more offered courses. On their final year, depending on the selected module students also choose elective courses (three – four) from the available courses. In addition, students do internship in companies, where they apply the acquired knowledge. Undergraduate study program Management and Organization is designed to educate engineers of organizational sciences in a modern way, who would be able to successfully apply the acquired knowledge and skills in practice, as well as to enable them to attend further schooling on appropriate graduate studies, specialist and doctoral studies. The success of this program and its justification is seen in the constant growth of interest of high school students in management and organization studies at the Faculty of Organizational Sciences. It is also seen in the success in applying the acquired knowledge and skills of engineers of organizational sciences who work in various economic and non-economic organizations in our country and in the world. The program lasts for eight semesters and it enables students to acquire 240 ECTS points and the degree of

Engineer of Organizational Sciences. The content of the study program is based on the current trends in development and business of the national and international environment. It is directed towards educating competent engineers through a combination of education in the field of social and technical sciences; students have the ability to acquire specific and specialized knowledge and skills in the field they are interested in through elective courses and internship.

## Study program goals

The goal of the study program is acquiring the most recent knowledge and skills in the field of management and organizational sciences, familiarizing with and mastering modern methods and techniques, enabling students to successfully apply acquired knowledge and skills in their professions and to continue further improvement on higher study levels:

- Educating students for a successful application of acquired contemporary theoretic and practical knowledge in their profession and for the continuation of further improvement on higher study levels;
- Enabling students to, through a range of courses they attend throughout their studies, see different methodological approaches in problem-solving processes and be able to apply acquired knowledge in an appropriate way;
- Enabling students to develop their creative abilities, critical approach towards results of work and master different practical skills, indispensable for their profession;
- Integrating various knowledge and skills in accordance with the needs of practicing the profession in different economic and non-economic organizations;
- Developing students' ability for independent understanding and formulating a problem, its modeling, analysis and solving;
- Enabling students for teamwork in a multicultural environment;
- Shaping future business people who would be responsible and ethical in their conduct;
- Sharing the best experiences from domestic and foreign practice;
- Acquiring knowledge for work in accor-

- dance with domestic and international regulations and standards;
- Training for specific tasks through elective courses in the final year;
- Educating highly educated experts with managerial, leadership and entrepreneurial characteristics.

The study program Management and Organization helps student acquire general skills such as:

- Application of methods, actions and procedures of research and analysis;
- Conducting problem analysis and synthesis, predicting and proposing a solution;
- Taking initiative in achieving goals and active participation in processes;
- Making complex decisions, delegating responsibility, implementing tasks and efficiently using employee potentials;
- Written and oral communication through a clear display or communication adjusted to needs;
- Independent application of acquired knowledge and solving practical problems;
- Identifying problems, critical thinking, creative and independent action;
- Following the principles of ethic implications of business decision-making and actions.
- Subject-specific abilities a student acquires through study program Management and Organization are:
  - Research, analysis, design and implementation of business processes and organization;
  - Planning, organization, managing and inspection of business processes, ventures, functions and organizations;
  - The ability to solve problems by using specialized methods and procedures;
  - Thorough knowledge and understanding of disciplines they are engaged in;
  - Connecting knowledge in different fields acquired through education and its application;
  - Monitoring and application of modern knowledge in subject areas;
  - The use of the latest information and communication technology and software support;

- Insight in political, economic, social, technological and legal environment of a company;
- Independent experimenting, statistical analysis of results as well as formulating and reaching appropriate conclusions.

### Modules

1. Management,
2. Quality management,
3. Operations management

### Study program outcomes

Management and Organization study program outcomes are:

- Decision-making through developing alternative courses of action, considering resources, limitations and organizational values;
- Ability to work in a team as well as to communicate with different cultures and professions.

The curriculum of the undergraduate study program Management and Organization is designed to achieve the set goals of the study program as well as those of the accreditation criteria. The study program consists of academic-general, theoretic-methodological, scientific-professional and professional-applicative courses. Management and Organization study program lasts for four years (eight semesters). Upon graduation, the student has 240 ECTS points. Management and Organization study program is comprised of three groups: 1. Management, 2. Quality management, 3. Operations management

### Admission requirements

Admission requirements are completed four-year secondary education and passed entrance exam.

### Contact

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# Information Systems and Technologies - distance learning studies

at Faculty of Organizational Sciences, 154 Jove Ilića, 11000 Belgrade, [www.fon.bg.ac.rs](http://www.fon.bg.ac.rs)

ECTS: 240/ DEGREE: ENGINEER OF ORGANIZATIONAL SCIENCES

## Study program content

Distance learning studies allow the processes of teaching and attending classes to be separated in space and time. This means that the time and space of classes and the time and space where the students attend classes are completely separated. The main participants of the distance learning studies are:

- teachers and associates who prepare the course materials and put it on the distance learning system and who use the system during the course of the classes
- students who use the material in the process of attending classes
- administrator who maintains the distance learning system.

With traditional studies, teachers directly give lectures to students on the premises of the Faculty. With distance learning studies, teachers design course materials, which they then record in audio and video format, and put on the distance learning system which is set up within an appropriate computer network infrastructure. With distance learning studies, students attend classes at home or at a place dislocated from the location of the distance learning system, which is one of the main advantages of the this system. In addition, students can significantly organize the dynamics of classes on their own, since they are not constrained by the time of the classes, except in the cases of on-line classes.

The distance learning system provides students with the same level of knowledge as the traditional form of studies. Knowledge is also tested through the distance learning system which enables automatic monitoring of the students' progress through various forms of knowledge testing: tests, quizzes, essays and homework. This way, it is possible to assess and grade the students' pre-exam requirements. The final exam and colloquium are taken at the Faculty and are the same both for the students who attend traditional classes and for those who attend distance learning studies.

The distance learning system provides various reports which monitor students' activities in

the course of distance learning studies. Based on this, it is possible to take certain measures to motivate students to participate in the teaching process more actively.

Undergraduate studies – distance learning studies last for four years or eight semesters. Each year holds the same number of ECTS grades – 60, which is a total of 240. The total number of courses on this study program is 44 (counting internship and final paper). All courses last for one semester.

## Study program goals

The goal of the study program Information Systems and Technologies – distance learning studies, is to provide the most recent knowledge and skills in the field of information systems and technologies, through the use of contemporary methods and techniques of distance learning.

The acquired theoretic and practical knowledge regarding information systems and technologies can successfully be applied in different business systems as well as in continuing education on higher levels of studies.

Distance learning system provides the undergraduates with knowledge, the efficiency in studying and the quality of a diploma on the same level as the traditional way of delivering study programs. Distance learning studies are implemented through the use of the Moodle system which allows students to access the course content and interact with teachers and other students from their home computers.

The system is based on the following characteristics:

- each subject is divided in 15 teaching weeks, with 30 hours of course material,
- students are able to choose between different learning methods within the very courses, as well as within individual units,
- students have access to online discussions and the opportunity to exchange ideas, which is a fundamental part of knowledge acquisition,
- students get online feedback from teachers

and associates for all the activities they take part in,

- students are awarded points-grades for all pre-exam requirements which are a part of the exam, and which can be in the form of tasks, term papers, discussions.

The experience of teachers and associates who have been using this platform for years in traditional classes in the form of blended learning are aware of the fact that preparation of electronic materials asks for more time and a different attitude towards the curriculum. Grading and assessing the students over DL system enables familiarization with each student during a semester and an individual relationship towards their activities in the course. This prevents mistakes in assessing the level of knowledge acquisition and enables the development of a more sophisticated view on the scientific area where the teacher/associate develops their competences together with the student.

### Study program outcomes

The outcome of the learning process are competent undergraduate engineers of information systems who have a developed multidisciplinary

view and who can use the acquired theoretic and practical knowledge to effectively and efficiently work in a dynamic business environment. The Faculty of Organizational Sciences is the leader in the field at the University of Belgrade and has been educating students for several decades for recognized and clearly defined professions in the field of information systems and information technologies. The demand for engineers in the area is constantly growing, in both the national framework and the environment, and the world.

### Admission requirements

Admission requirements for distance learning studies are a completed four-year secondary education and a passed entrance exam. The candidate can either take only mathematics test or mathematics and general knowledge test on the entrance exam.

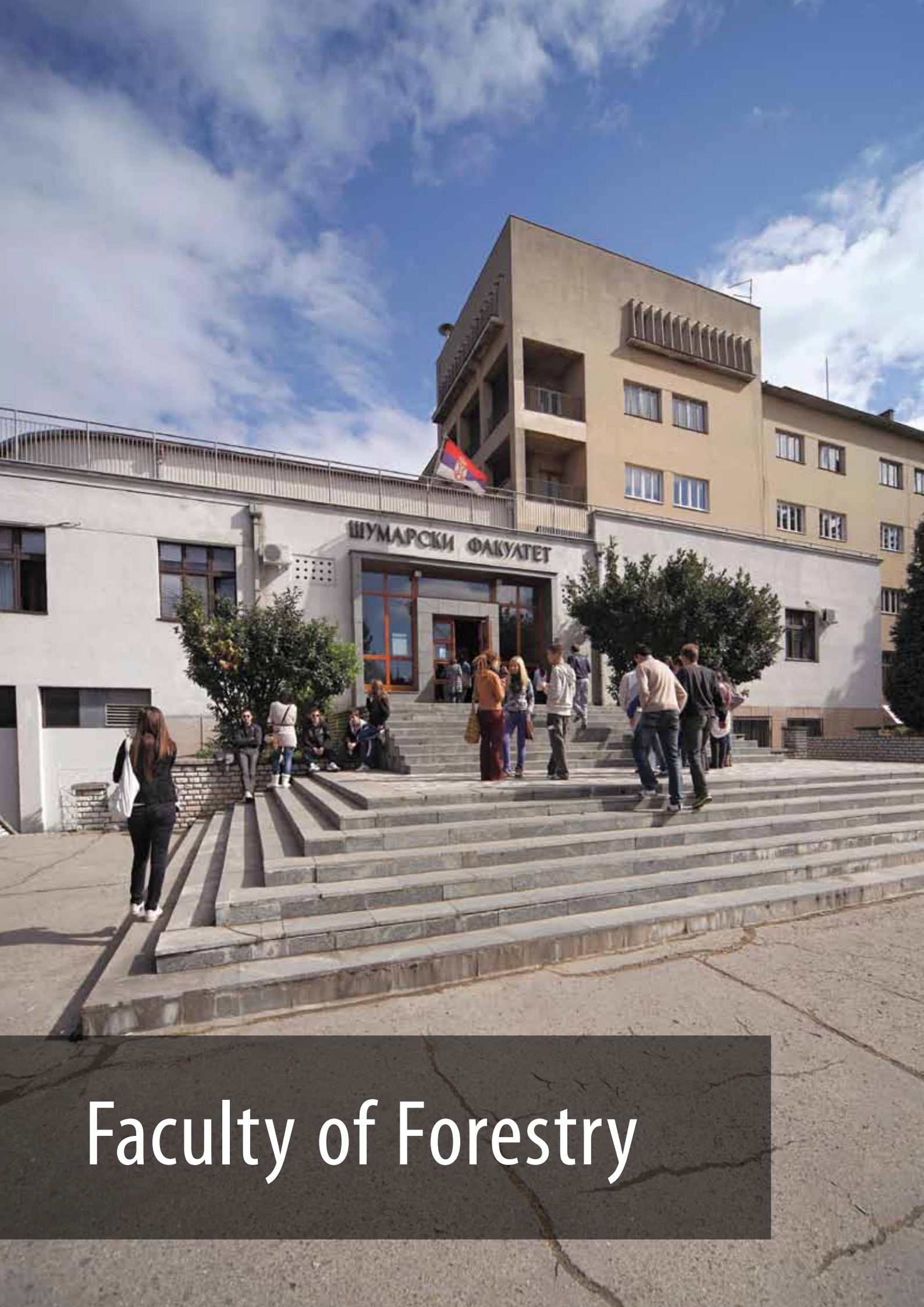
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# Faculty of Forestry

# Forestry

at Faculty of Forestry, 1 Kneza Višeslava, 11000 Belgrade, [www.sfb.rs](http://www.sfb.rs)

ECTS: 240/ DEGREE: GRADUATE FOREST ENGINEER

## Study program content

The purpose of this study program is training of the students to perform all important tasks in forestry pertaining to forest economy and services and contribute to the improvement of the present state of forests with their professional work and activities. The students of forestry, who are trained to solve specific problems on the way to defined goals, get ready for a more demanding „battle“ in the labor market of professional forestry. The acquisition of knowledge regarding the above issues enables forest engineers to be employable in the labour market because of their formal qualifications. In addition to these specific competencies and in accordance with this level of education, students also acquire a more general competence in compliance with the generally accepted academic standards.

## Study program goals

The aim of this study program is to produce fully trained forest engineers through theoretical and practical training. Students of this study program are supposed to acquire knowledge, skills and ability to perform the following tasks of forest engineers: forest establishment and silviculture, improvement and amelioration of forest areas, protection of forests from harmful biotic and abiotic effects, polyfunctional forest utilization, planning and implementation of the plans and programs of management that include all natural resources of forest ecosystems (drafting of the plans and programs of management of forests and hunting grounds - organization of hunting grounds), production of environmental studies, participation in the development of spatial plans, technics and technology of forest road construction, jobs of professional management and supervision in nature conservation and environmental protection, the organization of production in forestry, production and sales of wood assortments in the market and utilization of forest resources. A forest engineer is prepared for professional and scientific training through various seminars and workshops, and at the undergraduate level they are fully qualified to continue into graduate academic studies (educational streams: A - Silviculture, plant production, protection and ecology; B - Economics, planning

and organization of forest management; V - Utilization of forest and hunting resources) and doctoral studies in the field of forestry.

## Study program outcomes

Graduates solve specific problems using scientific methods and procedures. The candidates are fully qualified for most jobs in the establishment of forests and silviculture, improvement and amelioration of forest areas, protection of forests from harmful biotic and abiotic effects, polyfunctional forest utilization, planning and implementation of the plans and programs of management that include all natural resources of forest ecosystems, production of environmental studies, participation in the development of spatial plans, technics and technology of forest road construction, organization of production in forestry, production and sales of wood assortments in the market and utilization of forest resources.

Upon graduation the students are fully competent to work in the following labour organizations: forest management units and forest administrations, public enterprises and municipalities (inspection), nurseries and greenhouses in planting stock production, institutes and departments of nature conservation and environmental protection, national parks, design offices, forest tourist and hunting organizations, institutes and organizations involved in scientific research, faculties of forestry and forestry secondary schools, state inspection services and bodies, primary wood processing and trade in timber and other forest products.

## Admission requirements

Undergraduate studies can be enrolled by candidates who completed their high school education and passed the entrance exam.

## Contact

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# Wood Processing

at Faculty of Forestry, 1 Kneza Višeslava, 11000 Belgrade, [www.sfb.rs](http://www.sfb.rs)

ECTS: 240/ DEGREE: FOREST ENGINEER - IN THE FIELD OF WOOD PROCESSING

## Study program content

Undergraduate studies in WOOD PROCESSING last four years i.e. eight semesters, and students of this study program obtain 240 credits. There are 37 one-term courses within this study program, of which 8 are elective. These eight elective courses can be chosen from a total of 33 subjects offered.

This study program is organized so that during the studies students can observe recommendations in the selection of subjects required by specific educational streams starting from the third year of this study program. In the course of this study program the students attend working, processing and technological-organizational practices in the form of field study within the intended courses with a total of 228 lessons.

## Study program goals

The aim of the undergraduate studies of WOOD PROCESSING is the acquisition of professional knowledge and skills for professional work in the field of wood processing.

Achievement of this goal would help increase the competitiveness of enterprises engaged in the design, manufacturing and trade in wood products, furniture and joinery. In the course of this study program, the main attention is paid to the acquisition of key theoretical and practical knowledge as the basis for understanding and development of critical thinking in dealing with the following issues:

- Wood Technology: wood products construction, design and management of production processes in primary and final wood processing, production of particle boards and plywood and the process of wood and wood products protection;
- Design of furniture and interiors: Candidates learn about the design, modeling and construction of wooden products, interior design and furnishing.
- Management in wood processing: Candidates learn about the organization and management of production in wood processing and furniture production.

- Marketing and business in wood processing enterprises: Candidates acquire the knowledge of commercial jobs (business deals, conclusion of contracts and negotiation skills), internal and foreign trade in wood and wood products. A special aspect of the knowledge acquired pertains to financial activities of companies in wood processing and furniture production.

## Modules

- Module 1 - Furniture and Interior Design;
- Module 2 - Wood Technology;
- Module 3 - Management and Marketing - a student can choose between:
  1. Group 1 - Management in Wood Processing
  2. Group 2 - Marketing and Business Practice of Wood Processing Enterprises

## Study program outcomes

The professional qualifications of forest engineers in the field of wood processing allow them to work in all companies involved in wood processing, production of furniture and interior elements, companies for timber and wood products trade, scientific, educational and other institutions.

Candidates learn about the management of companies and the organization and management of enterprises in wood industry. Students are trained to produce certain parts of a project required by the responsible designer. Also, the students are trained for jobs in research and analysis of the market of wood products, as well as for jobs in the field of foreign trade in wood products and representation.

These qualifications of forest engineers in the field of wood processing allow them to continue with their professional development in specialist and master studies in the field of biotechnical science, including the courses at foreign universities with which the Faculty of Forestry has signed a contract on cooperation.

## Admission requirements

Undergraduate studies can be enrolled by candidates who completed their high school education and passed the entrance exam.

## Contact

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# Landscape Architecture and Horticulture

at Faculty of Forestry, 1 Kneza Višeslava, 11000 Belgrade, [www.sfb.rs](http://www.sfb.rs)

ECTS: 240/ DEGREE: FOREST ENGINEER - IN THE FIELD OF LANDSCAPE ARCHITECTURE AND HORTICULTURE

## Study program content

The duration of studies is eight semesters i.e. four academic years - 240 ECTS. Students of this study program do not produce a final paper, but finalize their studies with a synthesis in the profile area in the form of professional practice defined as a subject. The study program consists of 35 subjects, of which 27 are compulsory. The list of elective subjects contains 25 subjects, of which 8 are chosen by the student. The structure of the study program is common and unique, with no optional modules or elective areas. However, the elective subjects make up 25% of the total program.

## Study program goals

The aim of this study program is to educate qualified professionals for a number of jobs in Landscape Architecture and Horticulture, in accordance with the general and economic requirements of our country, and in compliance with European conventions i.e. the standards of the common European academic area. The aim of this study program is to educate qualified professionals for a number of jobs in Landscape Architecture and Horticulture in conformity with the first level of academic studies, which implies the following:

- Acquisition of the necessary knowledge and skills for practical work in Landscape Architecture and Horticulture
- Development of creative skills for jobs in Landscape Architecture and Horticulture
- Mastering of practical skills for different jobs in Landscape Architecture and Horticulture
- Mastering of modern methods and techniques in the field of Landscape Architecture and Horticulture
- Creation of socially beneficial professionals and persons with a sense of responsibility towards the environment and the natural resources of their country, as well as the development of culture, economy and the entire society
- Acquisition of the knowledge and skills required for obtaining the right to continue into master's degree studies.

## Study program outcomes

- Working in teams for the planning of open space systems, recreational and touristic areas and nature conservation
- Individual or team work on the designing of gardens, open green spaces and recreational areas, parks, garden and park facilities and equipment
- Organization of the production of seedlings of ornamental trees, shrubs and flowers for landscape and horticultural decoration
- Organization of works aimed at the establishment of different categories of green spaces
- Organization of works aimed at maintenance, tending and protection of greenery
- Protection of ornamental plants from pests and diseases during the production process and in various categories of green spaces
- Work in the fields of nature conservation and environmental protection

Employment prospects: in urban design directorates, planning and urbanistic organizations, architectural design offices, in construction companies, communal companies for the maintenance of urban greenery, cemeteries, nurseries and green houses working on ornamental plant material production, private garden design companies, garden centres, institutes and services for nature conservation and environmental protection, national parks, tourist organizations, educational and scientific institutions, inspection services etc.

## Admission requirements

Undergraduate studies can be enrolled by candidates who completed their high school education and passed the entrance exam.

## Contact

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# Ecological Engineering for Soil and Water Resources Protection

at Faculty of Forestry, 1 Kneza Višeslava, 11000 Belgrade, [www.sfb.rs](http://www.sfb.rs)

ECTS: 240/ DEGREE: FOREST ENGINEER - IN THE FIELD OF ECOLOGICAL ENGINEERING FOR SOIL AND WATER RESOURCES PROTECTION

## Study program content

Undergraduate studies in Ecological Engineering for Soil and Water Resources Protection last 4 years, and students of this study program obtain 240 credits. The study program includes compulsory and elective courses, field study and a final paper. Development of disciplines in the field of ecological engineering occurred in response to the growing need to provide technical solutions for social and economic development, while protecting natural resources (soil and water) and the environment. Ecological engineering involves the design and construction of sustainable systems in accordance with ecological principles that integrate human society with its natural environment, stressing the diversity, flexibility and adaptation in terms of sustainable development.

Bearing the above in mind, ecological engineering involves the application of the principles of engineering to improve human and natural systems, and it includes the following: watershed management, protection of soil and water from degradation and prevention of natural disasters, preservation of bio and geodiversity, restoration of ecosystems and design of habitats at different levels, phytoremediation and bioremediation, mitigation of soil and water pollution from point sources and industrial ecology.

## Study program goals

1. Provision of stimulating, multidisciplinary education in engineering that takes place in accordance with a combination of ecological / biological and engineering disciplines.
2. Understanding of the basic principles of engineering and science that are required for the development of lifelong and continuous professional success.
3. Knowledge of factors affecting the systems of planning and decision making, such as resource limitations, restrictions of the system ( man-made or caused otherwise) and recognition of engineering problems to be solved.
4. Provision of highly skilled professionals, with the ability to influence the application of ecological principles in engineering jobs

needed by the employers in the economic sector (water resources, forestry, agriculture) and other organizations that manage natural resources, companies that offer consulting services in ecological engineering and government agencies.

## Study program outcomes

The students are expected to be able to:

1. select and apply the solutions based on the knowledge of natural, biological and environmental and technical sciences in the field of protection of soil and water resources and natural resources associated with them;
2. describe, formulate, analyze, plan and solve systems in accordance with ecological principles that connect the society with the environment;
3. design sustainable systems for soil and water protection based on the principles of ecological engineering, or certain components of the watershed management system, and plan and carry out works in soil and water protection;
4. effectively apply their knowledge as individuals, in teams and multidisciplinary teams, with the life-long ability to learn;
5. effectively communicate with the engineering community and society in general.

## Admission requirements

Undergraduate studies can be enrolled by candidates who completed their high school education and passed the entrance exam.

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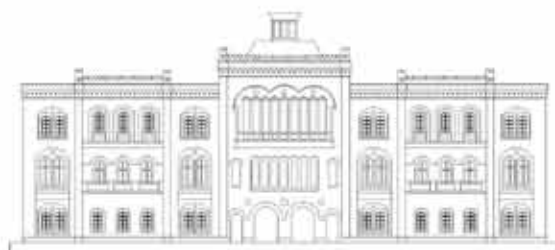
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