Faculty of Chemistry

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Chemistry

at Faculty of Chemistry, 12-16 Studentski Trg, 11000 Belgrade, www.chem.bg.ac.rs

ECTS: 60/ LANGUAGE OF INSTRUCTION: SERBIAN/ DEGREE: MASTER

Study program content

Study program of master academic studies in Chemistry has the workload of 60 ECTS credits and includes elective courses (25 ECTS credits), research work (15 ECTS credits) and a master's thesis (20 ECTS credits).

Within the scope of elective courses student can choose courses which they have not attended during their basic studies and/or advanced courses of the basic courses. Through individual work with a supervisor, students are guided, within research work and writing a master's thesis, towards independent research work.

Study program goals

The primary goal of this study program is to educate experts with high level of fundamental and applied knowledge in various areas of chemistry, whose master's degree (along with the bachelor degree) will be recognized/accepted by all European institutions and which will enable students to find appropriate employment or to continue their doctoral studies in chemistry or related disciplines at Serbian or some other European universities.

Study program outcomes

Students will be able to conduct, within teamwork (but independently as well), all the phases of the research part of a research (scientific) project. They will gain experience in working with modern instruments which are used in research laboratories. Students will be able to independently apply complex chemical protocols and they will be familiar with the application of computers in all phases of research work. They will be able to present the results of their work at scientific conferences both orally and in writing. By completing these studies, students will broaden their knowledge of various areas of chemistry and develop their ability to solve scientific and professional problems by applying analytical and computational methods. They will be able to work independently in chemical laboratories of different kinds and purposes (research and development, quality control, standardization, monitoring processes, etc.). They will acquire knowledge and skills needed when working with real, complex samples and they will develop the ability to study literature and to present the collected data in a critical way. They will gain experience in independent work with modern instruments, as well as the appropriate laboratory practice. Students will be able to analyze the research problem within teamwork, present it within their master thesis, as well as to orally present and discuss their thesis.

Admission requirements

The appropriate higher education with the total workload of 240 ECTS is required for the admission to the study program of master academic studies in Chemistry.

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Contact

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Biochemistry

at Faculty of Chemistry, 12-16 Studentski Trg, 11000 Belgrade, www.chem.bg.ac.rs

ECTS: 60/ LANGUAGE OF INSTRUCTION: SERBIAN/ DEGREE: MASTER

Study program content

Study program of master academic studies in Biochemistry has a workload of 60 ECTS credits and includes required (12 ECTS credits) and elective (8 ECTS credits) courses, studious research work (20 ECTS credits) and a master's thesis (20 ECTS credits).

Required courses are Bioinformatics and Contemporary Biochemical Methods, and within the elective courses students can choose courses which they have not attended during their basic studies (Biochemistry and Physiology of Plants) and/or advanced courses of basic courses in biochemistry, chemistry or biology.

Students will be guided towards research work, especially through individual work with a supervisor within studious research work and through writing a master's thesis. Instruction is conducted through individual (supervised) work with students or through work with small groups of students. Teaching methods are adequately adapted (consultations, term papers, elaborating papers from original scientific literature). The accent is on experimental work with the elements of research work which is mainly done in teams in research (instructional) laboratories. Extensive use of computers is planned in all aspects of teaching.

Study program goals

The primary goal of this study program is to enable students to acquire a master's degree which (along with bachelor's degree) will be recognized/accepted by all European institutions and which will enable students to find appropriate employment or to continue their doctoral studies in biochemistry or related disciplines at Serbian or other European universities.

Study program outcomes

Students will be able to conduct within teamwork (but independently as well) all stages of the research part of a research (scientific) project. They will gain experience in working with up-todate instruments which are used in biochemical research laboratories.

Students will be able to independently apply complex biochemical protocols and they will be familiar with bioinformatics and with the application of computers in all stages of research work. They will be able to present the results of their work at scientific conferences both orally and in writing.

Students will broaden and deepen their knowledge of biochemical, chemical and biological disciplines, develop their ability to solve scientific and professional problems in the area of biochemistry by applying analytical and computational methods, they will deepen the knowledge and improve the skills needed for working with biological material and experimental animals, they will develop their ability to study literature and present literature data in a critical way, they will acquire specific experimental skills, gain experience in independent work with modern instruments, broaden and deepen their laboratory practice (safety at work, working with pathological material), they will improve on keeping laboratory records, as well as improve their numerical skills (biochemical calculations), they will be able to analyze a research problem within teamwork, present it within a master's thesis and present and discuss the thesis orally.

Admission requirements

The appropriate higher education with the total workload of 240 ECTS is required for the admission to the study program of master academic studies in Biochemistry.

Contact

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