

EDUCATE - Water Resources and Environmental Management

at Faculty of Civil Engineering, 73 Bulevar kralja Aleksandra, 11000 Belgrade, www.grf.bg.ac.rs

ECTS: 120/ LANGUAGE OF INSTRUCTION: ENGLISH/ DEGREE: SPECIALIST

Study program content

The specialist study program EDUCATE! is envisioned as a continuation of master academic studies during which the students gain scientific and professional knowledge in the area of project planning and execution of various civil works and structures.

The students who continue their education through the Educate! studies program gain advanced knowledge in the specific areas of hydraulic and environmental engineering. In addition, the Educate! studies program represents an intermediate step to the highest academic learning level of a doctorate degree.

By completing the Educate! studies program the students gain a solid knowledge base that eases the path to continuing their studies further towards a doctorate degree.

Study program goals

The overall objective of this postgraduate course is to assist the regional translational cooperation on Water Resources and Environmental Management. This will be achieved by shaping future policy makers from highly trained graduates from a number of countries who can rise to positions of leadership in their fields and perform their function professionally and with an understanding of the perspectives of the entire region.

The international character of the educational course enables the pulling together of resources and academic personnel, allows cross - fertilization from expertise niches from different universities and a cross-cultural exchange of views and ideas both between academics and students which directly support the broader objectives of promoting cooperation within the region. Since most of the environmental problems the Balkans are in fact cross-boundary, the project works on the assumption that their solutions can only be cross-boundary and that shared knowledge and understanding of the issues directly contribute to effectively addressing them.

Study program outcomes

Students learn how to critically assess research results and acquire an understanding of the impact of engineering solutions within a physical and societal context. IT literacy, reporting and presentation skills are further improved and an ability to function in multi-national teams is acquired.

Specific capacities are developed for analysis, modeling through a variety of hydro informatics tools and management of all of key aspects of catchment and integrated water management systems. IT, data analysis, reporting and presentation skills are further improved, as well as the necessary skills for independent learning.

Specific competencies for understanding water and environmental policy and legislation are developed, with an emphasis on EU legislation and the Water Framework Directive (WFD), policy making and social processes and the role of public participation in the decision making process. Furthermore it develops an understanding of environmental assessment, its components, the different techniques widely used and how they can contribute to sustainable development.

Modules

The course is a flexible distance learning program based on e-learning. All educational material, lectures and tutorials are developed in English. The Academic Program is organized as a pedagogic continuum and includes four Thematic Areas and a research thesis. Students can follow the entire postgraduate course or alternatively they can follow selected course elements according to their needs. The four Thematic Areas are: Scientific Background, Urban Water Management, Catchment Management and Environmental Management.

Admission requirements

Admission is based on the academic and intellectual excellence of applicants as well as their

motivation and prior experience. In order to create a multicultural learning environment, the consortium strives to achieve a balance between various geographic and disciplinary backgrounds of the program's students.

Successful candidates must have a good first degree from a recognized university of at least 4 years of full-time study (B.Eng + MSc, M.Eng or equivalent) in Engineering.

Contact

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Geodesy and Geoinformatics

at Faculty of Civil Engineering, 73 Bulevar kralja Aleksandra, 11000 Belgrade, www.grf.bg.ac.rs

ECTS: 180/ LANGUAGE OF INSTRUCTION: SERBIAN/ DEGREE: PHD

Study program content

The study program is modeled to follow the modern and actual developments in the area of geodesy and geoinformatics. It consists of eight elective courses and doctoral thesis.

A supervisor is appointed for each student after admission to the studies. The student and the supervisor compose the list of courses the student will take during the first three semesters, having in mind the topic of the future doctoral thesis.

The list of courses for each student is approved by the appropriate chair of the Faculty and verified by the Doctoral Studies Council. The offered courses are related to fundamental theoretical topics and subfields such as: satellite geodesy, physical geodesy, geodynamics, geodetic astronomy, 3D cadastre, cartography, photogrammetry, geostatistics.

The work on doctoral thesis lasts for another three semesters. It usually consists of laboratory (experimental) and theoretical research in the chosen topic.

Study program goals

Main goal of the studies is to provide further scientific training of graduate students through a specialized research program. The courses and doctoral thesis are designed to instruct students for self-sufficient organization and management of the research process. Students are also trained in verbal and written communication skills, independent presentation and critical evaluation of scientific results, developing the international scientific cooperation.

Study program outcomes

Thorough understanding and comprehension of geodesy and geoinformatics and especially the chosen area of expertise; capabilities for solving different problems in the field of geodesy and geoinformatics by scientific methods and procedures application; capabilities of using

the obtained skills and knowledge in planning, performing and managing the research process, presentation the results, monitoring the other research results, communication; capabilities of application and development of information technologies.

Admission requirements

Master degree in civil engineering.

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Civil Engineering

at Faculty of Civil Engineering, 73 Bulevar kralja Aleksandra, 11000 Belgrade, www.grf.bg.ac.rs

ECTS: 180/ LANGUAGE OF INSTRUCTION: SERBIAN/ DEGREE: PHD

Study program content

The study program is modeled to follow the modern and actual developments in the area of civil engineering. It consists of eight elective courses and doctoral thesis. A supervisor is appointed for each student after admission to the studies. The student and the supervisor compose the list of courses the student will take during the first three semesters, having in mind the topic of the future doctoral thesis.

The list of courses for each student is approved by the appropriate chair of the Faculty and verified by the Doctoral Studies Council. The offered courses are related to fundamental theoretical topics and subfields such as: Engineering Mechanics and Theory of Structures, Civil Engineering Materials and Structures, Hydraulic and Environmental Engineering, Roads, Railways and Airports, Management, Technology and Informatics in Civil Engineering.

The work on doctoral thesis lasts for another three semesters. It usually consists of laboratory (experimental) and theoretical research in the chosen topic.

Study program goals

Main goal of the studies is to provide further scientific training of graduate students through a specialized research program. The courses and doctoral thesis are designed to instruct students for self-sufficient organization and management of the research process. Students are also trained in verbal and written communication skills, independent presentation and critical evaluation of scientific results, developing the international scientific cooperation.

Study program outcomes

Thorough understanding and comprehension of civil engineering and especially the chosen area of expertise; capabilities for solving different problems in the field of civil engineering by scientific methods and procedures application;

capabilities of using the obtained skills and knowledge in planning, performing and managing the research process, presentation the results, monitoring the other research results, communication; capabilities of application and development of information technologies.

Admission requirements

Master degree in civil engineering.

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