Faculty of Physics

Physics

at Faculty of Physics, 12 Studentski trg, 11000 Belgrade, www.ff.bg.ac.rs

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

Study program content

The study program of doctoral studies in physics lasts three years. The program has total value of 180 ECTS and the academic title of doctor of natural sciences. The load is evenly distributed across the semesters. The program includes four optional courses and one seminar.

The main part of the studies is student research work, whose result is the doctoral thesis defense. The student is also required to public two papers in leading journals. Courses include the material that is built on the contents of undergraduate and master studies. As modern physics is a very broad scientific area, and research problems and their related technologies are often interdisciplinary, method of selection of subjects on the study program provides direction to the basic disciplines of modern physics and their combination.

Because the courses are divided according to research fields, student has to select 3 subjects of his area of interest. In terms of content items include advanced courses in scientific subfields, methodological courses (technical research in the field), and courses introducing the most important features of the system for the area. Teaching is individual, with mentoring and consulting work. Lectures are conducted in small groups (5 to 10) students.

Study program goals

The primary goal is to create top quality professionals capable of independent research on a world scale, which will continue the development of fundamental and applied aspects of physics in Serbia, and continue the educational process as teachers and mentors.

In this sense, the specific objectives of the program are to provide high quality and modern knowledge in line with international standards. Especially important is to comply with standards of the European educational space, so the students can continue their education abroad and be competitive in finding jobs and training.

A specific goal of the program is linked to the fact that physics is the basic natural science, and at the same time a base for other natural sciences which have a series of overlapping. Therefore the program must necessarily allow specialization in scientific areas, giving the student a modern state in the chosen field and to train the student through mastering the basic techniques and systems relevant to the area. On the other hand, since the method often combines different fields, and sometimes the same systems become more relevant in other areas, it is necessary to enable interdisciplinary among the smaller areas.

Study program outcomes

Students obtain competence in accordance with the purposes and objectives of the program.

- The most important is the ability for independent research, which is verified with publications and defending of the doctoral dissertation. This includes mastering the superior knowledge of certain areas and methods of research, i.e. ability of analytical and synthetic thinking and review of the relevant experimental or theoretical techniques;
- Further implementation of the acquired knowledge and skills in practice, whether in science or research labs. This refers to the ability to participate in research and development teams, i.e. coordination with complementary knowledge experts;
- The ability of selection problems that is important for the development of science and international and domestic technology;
- Ability to display the results both in seminars and papers. This is directly related to the possibility of including Ph.D. students in education and in cooperation of students with other research groups;
- Ability to include research into global trends through intensive monitoring and selecting of relevant literature, communication with the world's leading research groups, positioning all the research on them to promote the participation in joint projects.

Admission requirements

Requirement for this degree program is previously completed primary and master academic studies with an average mark above 8.00.

Contact

Head of the study program:
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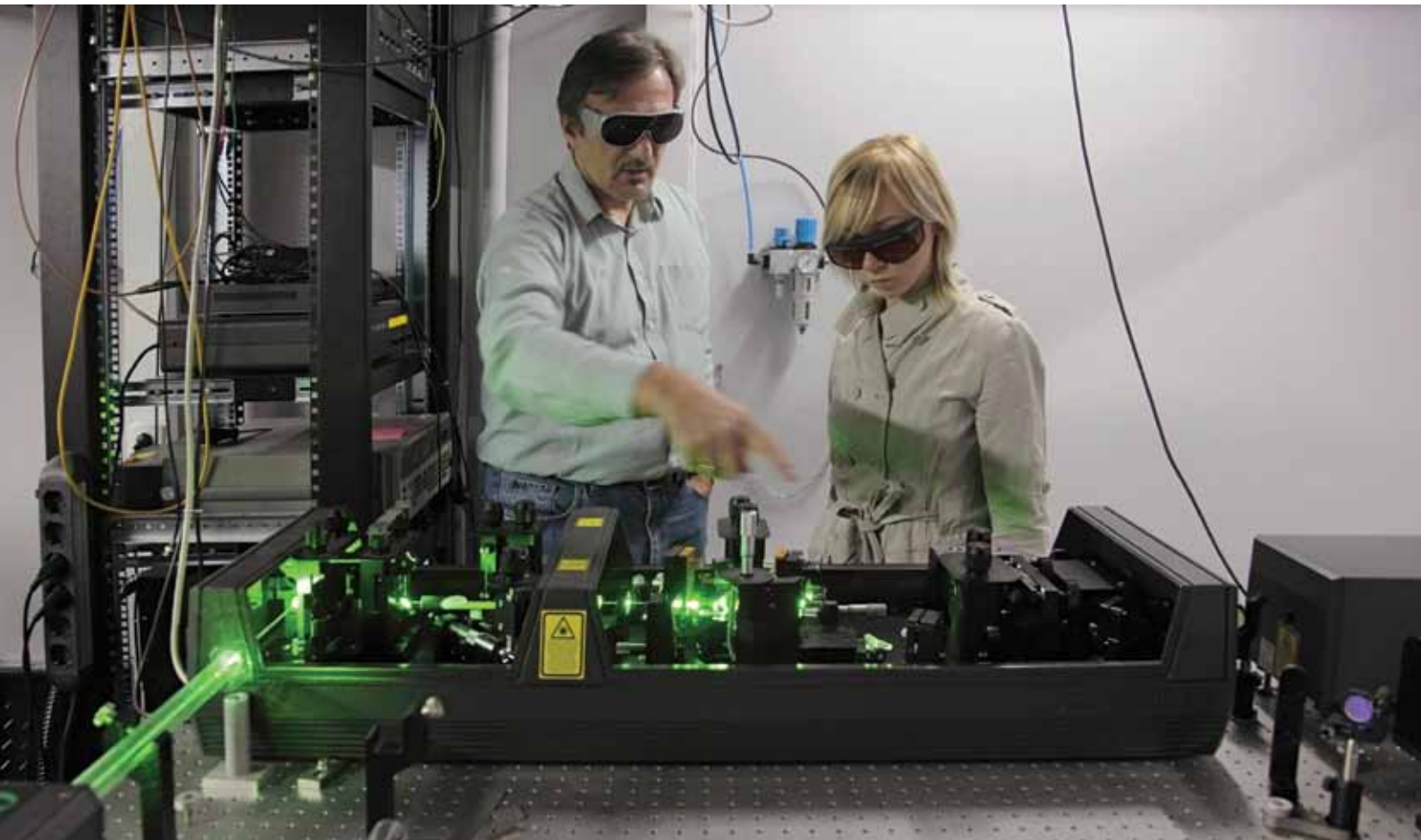

Meteorology

at Faculty of Physics, 12 Studentski trg, 11000 Belgrade, www.ff.bg.ac.rs

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

Study program content

The study program of meteorology doctoral studies lasts three years and its completion is obtained a total of 180 ECTS and the academic title of doctor of meteorological science. The load is evenly distributed across the semester. The program includes four optional subjects, two compulsory subjects and one seminar. The significant part of the program consists of students research which ends with the thesis defense. The student is also required to publish two papers in leading journals before the dissertation defense. The curriculum of compulsory subjects includes contemporary topics in central areas of meteorology - dynamic meteorology.

Meteorology is a very broad scientific field but optional courses allow students to study the basic disciplines of modern meteorology and to combine them. Teaching is mainly individual with mentoring and consulting work. Lectures are conducted in small groups (5 to 10) students.

Study program goals

The primary goal is to create top quality professionals capable of independent research on a world scale which will continue the development of basic and applied aspects of meteorology in Serbia and continue the educational process as teachers and mentors. In this sense the specific objectives of the program are to provide high quality and modern knowledge in line with international standards. Especially important is to comply with standards of the European educational space, so the students can continue their education abroad and be competitive in finding jobs and training.

Study program outcomes

Students obtain competence in accordance with the purposes and objectives of the program.

- The most important is the ability for independent research, which is verified with publications and defending of the doctoral dissertation. This includes mastering the superior knowledge of certain areas and methods of research, i.e. ability of analytical and synthetic thinking and review of the relevant experimental or theoretical techniques;
- Further implementation of the acquired knowledge and skills in practice, whether in science or research labs. This refers to the ability to participate in research and development teams, i.e. coordination with complementary knowledge experts;
- The ability of selecting problems that is important for the development of science and international and domestic technology;
- Ability to display the results both in seminars and papers. This is directly related to the possibility of including Ph.D. students in education and in cooperation of students with other research groups;
- Ability to include research into global trends through intensive monitoring and selecting of relevant literature, communication with the world's leading research groups, positioning all the research on them to promote the participation in joint projects.

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