



# Technical Faculty in Bor

# Chemical Engineering

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

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

## Study program content

The program includes five compulsory and five optional subjects which are connected to defining a dissertation topic and doing a doctor's thesis. A student can choose, according to his affinities and coaching of his mentor, any combination of optional subjects which are related directly or indirectly to the topic of a doctor's thesis.

The study program of Chemical Engineering represents a direct continuation of the academic master's program in Chemical Engineering. The program clearly defines total number of ECTS subjects and research work, which directly relate to the realization of the doctor's dissertation, as well as the number of credits for the doctor's dissertation itself. The doctor's dissertation is a final part of doctoral studies together with a research work which relates to defining a dissertation topic.

## Study program goals

The study program aims at educating and enabling students for scientific research in the field of Chemical Engineering. After completing doctoral studies, Doctors of Science gain in-depth competence in this field, which enables them to carry out research work successfully in this field.

By having an insight into current scientific literature, students are supposed to discover how broad the scientific knowledge in the field of the doctoral thesis is, how up-to-date the topic for the research is. They should also anticipate further courses of the development and research. At the same time students should know how to formulate a scientific hypothesis, to plan and set out experiments, choose up-to-date methods, elaborate results of research, interpret them fully, analyze them in a scientific and critical way, make some logical deductions and present results in the form of a final scientific paperwork.

## Study program outcomes

After completion of technological studies doctors of science can apply their expertise to the

resolution of complex operational issues in the field of chemical engineering. They should be motivators of the incentives for development and scientific researches.

Doctors of science should be enabled to participate in international scientific projects, to understand and use the latest findings in the field of Chemical Engineering, to develop their creativity and follow ethical code during scientific research. They should also acquire a satisfactory level of written and oral communication skills and present their research results independently, as well as present their work at international science conferences and publish the results in leading science journals. All this makes it possible for doctors of Chemical Engineering to be leaders of science and economic progress in society and, of course, the knowledge that they have acquired can be accessible to the scientists worldwide, since their results will be published in international journals.

## Admission requirements

A person who has completed Bachelor's degree and Masters academic degree with the mean mark 8 (eight) at least.

## Contact

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

## Study program content

Doctoral academic studies last three years with the total of 180 ECTS credits. Methods of realizing the program are lectures and research work which are done in interactive way, with coaching, mentor work and independent students' work. Thus, a continual contact of students with their teachers and mentor is achieved.

It is also possible to opt for subjects, i.e. to transfer ECTS credits, from other accredited study programs of doctoral studies at domestic and foreign universities, with which The Faculty in Bor has an agreement of cooperation and student exchange.

## Study program goals

The study program is aiming at:

- Enabling students as individuals to participate as an effective part of a team and to appreciate teamwork, realization of scientific research and active participation in international and domestic research and development projects;
- Enabling students for innovative thinking and implementation of the latest scientific findings into actual production systems;
- Continual encouragement of ecological thinking and ethical engineering thinking
- defining of research issues, its elaboration, research and writing;
- Presenting the obtained results to a wide scientific audience, through publishing their research in the journals on the Sci list.

## Study program outcomes

General competences which students acquire at this study program comprise knowledge, skills, developed competences for independent scientific research work; presentation of their own results at scientific gatherings; publication of their research in scientific journals; participation in domestic and international projects; dealing with actual issues from metallurgical production, due to the acquired general and specific

competences expressed through knowledge and understanding; development of new and innovative technologies; following the code of scientific practice with the aim of contributing to the development of science in general; understanding of important concepts in a wider range of engineering sciences (concepts of modeling, experimental, simulation and analytic analysis of complex issues, principles of projecting and organization); correlation of basic knowledge in various fields and their application.

## Admission requirements

A person who has completed Bachelor's degree and Masters academic degree with the mean mark 8 (eight) at least.

## Contact

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# Engineering Management

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

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

## Study program content

Doctoral academic studies of Engineering Management last three years and bring at least 180 ECTS credits. Research work in Theoretical basics of doctoral dissertation represents individual work of students in defining a dissertation topic and is verified by taking an exam approved by The Teachers' Council at the suggestion of the mentor and which is taken before a committee consisting of three teachers of subjects from the study program.

Students define their research interests by choosing from the suggested list of optional subjects which they are going to study and take exams in. These subjects contribute to deepening of their knowledge and understanding of the field and topic of their doctoral dissertation. The teaching program of the subjects (compulsory and optional) is realized in a group or individually (coaching).

## Study program goals

The aim of the study program of doctoral studies of Engineering Management is designed to enable progressive education to students of above average abilities who want to continue their career in researching academic, scientific and production institutions.

Combination of the right courses offers students a rare opportunity for interdisciplinary approach to research, as well as to methods and skills of empirical and analytic management disciplines. In this way creative competences are developed, as well as mastering of necessary skills needed for successful development of vocational career. Special aim of the study program is achieving a competence for independent defining of research issue, its elaboration, research and writing - presenting the obtained results to a wide scientific audience, through publishing their research in the magazines from the SCI list.

In this way the obtained results are adjusted with the development of this discipline worldwide.

## Study program outcomes

The competences which students acquire at this study program comprise knowledge, skills, developed competences for independent scientific research work; dealing with actual issues in practice; participation in domestic and international projects; taking part in the development of new technologies; presentation of their own results at scientific gatherings and publication of their research in scientific journals; following the code of scientific practice with the aim of contributing to the development of science in general; contributing to the development of science in general.

## Admission requirements

A person who has completed Bachelor's degree and Masters academic degree with the mean mark 8 (eight) at least.

## Contact

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