

Study branch Transport Constructions

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Faculty	Faculty of Civil Engineering
Study programme	Civil Engineering
Type of study	Bachelor
Language of instruction	English
Code of the branch	S01
Title of the branch	Transport Constructions
Regular period of the study	4 years
Cost	50,000 CZK per semester
Coordinating department	Department of Structures
Coordinator	prof. Ing. Antonín Lokaj, Ph.D.
Key words	Traffic Engineering, Roads, Railways, Intersections, Urban Roads

About study programme

Within the bachelor study program Civil Engineering, specialization Transport Constructions, the students are trained to apply in the field of transport structures in a wide range of activities in the design, construction, maintenance and administration of transport structures and constructions (roads, motorways, bridges, urban roads, intersections, stations and industrial trucks, public transport constructions etc.). In the field of traffic engineering, students focus on building safety elements, elements of traffic control and traffic management, traffic modelling and simulation etc. Graduates of this specialization may continue in the follow-up master's degree program Civil Engineering - Transport Constructions.

Graduate's employment

Graduate of the bachelor study program Civil Engineering, specialization Transport Constructions, finds employment in design offices as well as on construction sites or building offices, especially in the positions of designer, site manager, technologist, preparation of production and investment, realization of investments and engineering, control quality and management. Due to its wide theoretical and practical basis, it will be used in road construction, in the construction and modernization of regional and high-speed railways and in the construction of integrated transport systems. The graduate will also find employment in the preparation, design, implementation and maintenance of transport constructions and equipment, as well as in administrative activities within the field, both at regional level and throughout the Czech Republic or abroad.

Study aims

The aim of the study in the specialization Transport construction is to prepare the graduate for all areas of construction activity, for which he will acquire relevant theoretical and professional knowledge and skills. After the first two years of joint study, focusing on theoretical foundation and basic specialist subjects, students continue their studies in the specialist Transport Constructions, where they acquire knowledge focused on specific areas of this construction industry and in this area they also work on their final (bachelor) work. The study of this specialization, thanks to the previous joint study, enables the student to have a good orientation in other areas of building activity. In the sixth and seventh semesters students also prepare projects related to their final work.

Graduate's knowledge

The profile of the graduate of the bachelor study program Civil Engineering, specialization Transport Constructions, will be generally more professionally focused on the whole area of building activities with an emphasis on deeper and more detailed knowledge within

the specific area of the transport constructions. As part of a joint study, the graduate completes theoretical subjects (mathematics, physics, descriptive geometry) and also specialist subjects in the fields of building construction, engineering, transport and geotechnical constructions, building materials, building geodesy and urban engineering. In the course of compulsory optional subjects, the student will deepen the knowledge in the chosen specialization "Traffic constructions".

Graduate's skills

Graduates of the specialization Transport Constructions have the necessary skills in terms of using professional terminology and processing technical documentation. They know the principles of professional methods of this field and are able to use them in a practical context. They can adopt and develop new theories and methods of this field, including their inclusion in application practice. Basic competencies include the ability to design transport constructions and related technologies efficiently, taking into account the minimization of their negative environmental impacts. The graduates are able to analyze and synthesize problems in the framework of building organization and construction production, to use technical procedures for solving problems of building practice and to design buildings, also in terms of safe use and maintenance of constructions.

Graduate's general competence

The graduate will be able to perform individual activities within the selected professional field and participate in implementation teams for complex solutions of large-scale orders. They will be able to independently solve partial tasks and plan, implement, organize and decide partial building activities and works, whether directly in building production or in design and construction practice, especially in the field of rail and non-rail transport constructions. The graduate will be theoretically equipped for the follow-up master's study of the technical orientation of related study programs at the Faculty of Civil Engineering of VSB-TU Ostrava or at other faculties of civil engineering in the Czech Republic or abroad. After fulfilling the requirements for professional practice, the graduate will comply with the conditions for authorization in the field of Transport Structures.

Study curriculum

- form Full-time (en)