

Study branch Building Structures

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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	S03
Title of the branch	Building Structures
Regular period of the study	4 years
Cost	50,000 CZK per semester
Coordinating department	Department of Structures
Coordinator	prof. Ing. Jiří Brožovský, Ph.D.
Key words	Bridges, Concrete Structures, Masonry structures, Timber Structures, Steel Structures

About study programme

The graduate of the Building Structures specialization will be an expert in the field of structural analysis, implementation and design of industrial and civil engineering structures and bridges, and will be primarily employed in construction companies designing engineering structures or ensuring their operation, repair and reconstruction. Graduates will also have a broad knowledge of computational and numerical methods so that they can apply both in projection and in the design of algorithms for static calculations, their testing and verification of their accuracy. He will also be able to work as a developer and consultant for software design and engineering firms or research organizations in professional positions, where he will be able to create specialized computational algorithms for numerical modeling of special problems. The graduate will have the knowledge needed for the follow-up master's study programs in statics, dynamics and engineering.

Graduate's employment

Graduate of the bachelor study program Civil Engineering, specialization Building Structures, will find employment especially in companies and design offices designing ground, engineering and technological structures and bridges, or ensuring their operation, maintenance and reconstruction.

Study aims

The aim of the study in the Building Structures specialization is to prepare the graduate for all areas of construction activity for which the student will acquire relevant theoretical and professional knowledge and skills. After the first two years of joint study, focusing on theoretical background and basic vocational subjects, students continue to study in the field of specialization Building Structures, where they will acquire knowledge of designing, assessing and implementing steel, concrete, timber and composite structures.

Graduate's knowledge

The graduate of the Building Structures specialization will be an expert in the field of structural analysis, implementation and design of industrial and civil engineering structures and bridges, and will be primarily employed in construction companies designing engineering structures or ensuring their operation, repair and reconstruction. Graduates will also have a broad knowledge of computational and numerical methods so that they can apply both in projection and in the design of algorithms for static calculations, their testing and verification of their accuracy. He will also be able to work as a developer and consultant for software design and engineering firms or research organizations in professional positions, where he will be able to create specialized computational

algorithms for numerical modeling of special problems.

Graduate's skills

Graduates of the Building Structures specialization have the necessary skills in terms of using professional terminology and processing technical documentation. They know the principles of professional methods of the field and are able to use them in a practical context. They can adopt and develop new theories and methods of the field, including their inclusion in application practice.

Graduate's general competence

The graduate will be theoretically equipped for the follow-up master's study at the Faculty of Civil Engineering VSB – TU Ostrava or at other building faculties in the Czech Republic and abroad, especially in study programs focused on statics, dynamics and engineering structures.