

Komplex Design 8th semester

Loadbearing structures

The aim of the semester: to make the loadbearing structural part of the building permission documentation

Precondition of the fulfilment: min. two consultations

The first task during the semester is the determination of the starting-points of the design problem

- Collecting of the basic data concerning the building site,; data of the neighbouring buildings, their structural description, measurements of the state of any existing buildings, collection of the geotechnical characteristics of the ground layers
- Structural sketches of the building to be designed, analysis of the possible structural systems
- Evaluation of the structural solutions by making static models
- On the basis above choice of the structural system to be applied, reasons of the choice, its static models

Parts of the project to be submitted

- Submission of the architectural drawings of the stable, structurally correct building to the department of design
- Statical technical description of the semester project on building permission project level – by introducing the structures indicated on the architectural drawings-, with sketches of details if necessary, with description of the structural materials, material qualities
- Justification of the adopted dimensions by approximate calculations
- Structural sketches of the designed buildings – structural plans of different floors, arrangement drawings of the foundation -, indication of loadbearing directions and applied structural dimensions, by indicating dilatation joints, structural members assuring spatial rigidity (with special sketches if necessary).
- Sketches should be presented at scale of the architectural project on tracing paper by pencil, calculations and structural description by free hand in legible and well-ordered form.