

Course Name: **General building engineering I**

Credits: 3

Class Hours: 48 h

### 1.Course Description:

The purpose of this module is to present students with: main elements and systems of buildings construction; construction of selected elements of buildings; principles of preparation of engineering drawings of buildings built from bricks.

Course contents

Lecture: Traditional building engineering. Classification of buildings. Elements of buildings and building structures. Spatial rigidity of buildings. Expansion joints. Technical specifications for buildings and their location according to Polish building law. Excavations. Foundations. Building walls in traditional technology. Chimney walls. Ceilings. Staircases. Steep and flat roofs. Roofings. Windows and doors. Insulations. Finishing elements.

Project: Specification and technical drawings of multifamily residential building built from bricks.

### 2.Teaching Objectives:

- familiarising students with a basic knowledge regarding designing and construction of selected objects
- familiarising students with standard rules, regulations and building codes
- recognition and classification of different construction objects
- imparting the skill of designing apartments in multifamily residential building according to technical regulations and preparing specification and drawings

### 3.Teaching Content & Schedule

The course includes 32 teaching hours of lectures (theory) 16 teaching hours of project.

One teaching hours equals to 45 minutes.