# Faculty of Civil and Environmental Engineering

| Title (Concrete Structures)                                 | Code<br>1010102121010100239 |
|---|-----------------------------|
| Field Civil Engineering II stopień                          | Year / Semester 1 / 2       |
| Specialty   | Course                      |
| •   | core                        |
| Hours   | Number of credits           |
| Lectures: 2 Classes: - Laboratory: - Projects / seminars: 2 | 3                           |
|   | Language                    |
|   | polish                      |

# Lecturer:

dr inż. Teresa Grabiec-Mizera

Wydział Budownictwa i Inżynierii Środowiska

ul. Piotrowo 5 60-965 Poznań tel. +48 061 665 2085

e-mail: teresa.grabiec.mizera@ikb.poznan.pl

## Faculty:

Faculty of Civil and Environmental Engineering

ul. Piotrowo 5 60-965 Poznań

tel. (061) 665-2413, fax. (061) 665-2444 e-mail: office\_dceeaf@put.poznan.pl

## Status of the course in the study program:

-The obligatory course for students of the 2nd degree Faculty of Civil and Environmental Engineering

#### Assumptions and objectives of the course:

-The aim of the subject is to teach students how to dimention two-way slabs, thin-walls structures and prestressed structures.

# Contents of the course (course description):

- -Lectures and project:
- thin-walled structures,
- prestressed structures (pre-tensioning, post-tensioning),
- floors with particular consideration for two-way slabs,
- modelling of structures by the ROBOT program,
- design of two-way slab supported on spatial frame.

#### Introductory courses and the required pre-knowledge:

-Basic knowledge of general mechanics, strength of materials and dimention RC elements working in different way (the 1st degree of Faculty of Civil and Environmental Engineering)

#### Courses form and teaching methods:

- -Lectures multimedia presentation
- -Project calculation of RC and prestressed beams (ULS and SLS), calculation of two-way slabs, modelling by the ROBOT program

## Form and terms of complete the course - requirements and assessment methods:

- -Examination written form
- Project estimation of design on the basis of calculations and structural drawings, and test.

#### **Basic Bibliography:**

#### **Additional Bibliography:**