| Title<br>(Podstawy budownictwa przemysłowego)               | Code<br>1010101161010110467 |
|---|-----------------------------|
| Field<br>Civil Engineering First-cycle Studies              | Year / Semester 3 / 6       |
| Specialty Structural Engineering                            | Course                      |
| Hours   | Number of credits           |
| Lectures: 2 Classes: - Laboratory: - Projects / seminars: 2 | 3                           |
|   | Language                    |
|   | polish                      |

# Lecturer:

dr inż. Mariusz Dembiński Instytut Konstrukcji Budowlanych ul. Piotrowo 5 60-965 Poznań 061 665 2454 mariusz.dembinski@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:

Fundamentals of industrial construction

### Assumptions and objectives of the course:

The aim of the course is to provide theoretical and practical problems associated with industrial facilities, the development, calculation, design, technology implementation and operation of specific features.

# Contents of the course (course description):

Charges and influence technology in the construction industry. Types of industrial cranes and their impact. The design and calculation crane substructure beams. Shaping the industrial halls. Construction of industrial chimneys (brick, reinforced concrete, steel). Calculation of brick and reinforced concrete chimneys. Underground and above-ground intake chimney?s channels. Reinforced concrete and steel belt conveyor galleries. Shaping the structure and calculation of the conveyor belt substructure. Methods of conducting pipelines - unducted, industrial channels in terrestrial, above-ground (for poles, pipe trestles, bridges, self bearing). Supporting construction of pipelines. Basics of forming the basis for machine based directly on the ground. Vibration isolation in the foundations of the machine.

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

The basic message of the strength of materials, mechanics, reinforced concrete structures, steel, and brick structures, foundation of building.

# Courses form and teaching methods:

The lecture illustrated with slides, exercises design.

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

Final exam

Project od industrial object

# **Basic Bibliography:**

# Additional Bibliography:

# http://www.put.poznan.pl/