

Title CONCRETE BRIDGES	Code 1010101161010120490
Field Civil Engineering First-cycle Studies	Year / Semester 3 / 6
Specialty Bridges and Underground Engineering	Course core
Hours Lectures: 2 Classes: 1 Laboratory: - Projects / seminars: 2	Number of credits 6
Language polish	

Lecturer:

dr hab.inż. Arkadiusz Madaj
Instytut Inżynierii Lądowej
ul. Piotowo 5
61-138 Poznań
ul. Piotrowo 5
te. (061) 665 2433
e-mail: arkadiusz.madaj@put.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_dceef@put.poznan.pl

Status of the course in the study program:

Specialization course

Assumptions and objectives of the course:

Getting knowledge on design computations of reinforced and prestressed concrete bridges

Contents of the course (course description):

Ultimate limit states of concrete and reinforced-concrete bridges (beams, slabs, columns). Principles of reinforcing of beams, slabs, columns (simple structural systems). Basics of design of bridge pre-stressed-concrete structures ? statically determinate systems. Serviceability limit states ? SLS of deflection and cracking.

Introductory courses and the required pre-knowledge:

Basics of concrete structure design, basics of structural mechanics and strength of materials, structural forms of concrete bridges

Courses form and teaching methods:

Lecture, design exercises, auditorium exercises

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

Lecture: written exam
Auditorium: exercises: colloquium
Design exercises: submission of correctly completed exercise and oral check of knowledge in concern.

Basic Bibliography:

Additional Bibliography: