

Title of Course	Prestressed and Prefabricated Constructions		
Semester	Autumn/Spring		
Teaching Hours per Course:	Total	- Lectures:	- Tutorials:
	30	30	-
ECTS Credits	2		
The content of education			
Aims of Course	The aim of education is the acquisition by students design skills dealing typical prestressed concrete elements and learn the rules of precast reinforced concrete structures. Understanding the physical characteristics of concrete and steel and the principles of their cooperation in prestressed elements.		
Program	Basics verification limit states prestressed structures. Bases for calculating the prestressed elements: general information, determining the prestressing force, loss of compression stages of calculation, calculation rules, principles of selecting sections, design routes tendons and anchorage areas, -Example project od prestressed girder. The calculation example of external compression of cylindrical water tank. Prefabricated industrial building constructions. Durability of concrete structures. Diagnosis expertise of prestressed structures.		
Conditions of completion	Grading Standard: The basis for passing lectures is the presence on classes, a positive evaluation of the test. The test covers all the issues discussed in the lectures and practical exercises. Grade: 2-5		
Teacher	Dr Eng. Krzysztof Kamiński		