„DZEMAL BIJEDIC“ UNIVERSITY OF MOSTAR FACULTY OF CIVIL ENGINEERING		
Unit:	**PRESTRESSED STRUCTURES**	**Subject code: 0000**
Level:	Postgraduate	
Professor:	Assistant Professor Dr Đani Rahimić	
Contact details:	E-mail: djani.rahimic@unmo.ba	Tel: +387 36 514-867
Contact hours:	Lectures per week: 2	Practicals/tutorials per week: 2
ECTS:	6 ECTS	
Unit status:	Core	
Prerequisites:	Concrete structures I and II	
Synopsis:	□ Detailed analysis of mounting posterior prestressed concrete brackets (selection of the cross section, calculation of the force of preloading, calculation of the loss of force pre-stressing; voltage state of the cross section for usable loads; limit load capacity; selection of pre-stressing systems; selection of cables and anchors; guiding cables; cable holders; preloading protocol; budget and construction classical and prestressed fittings; the field of introducing the pre-stressing force; calculator of shearers; elements for extracting the mould carrier and transmission; injection of the support; carrier performance). □ Details of the solution for pre-assembled pre-adhesion brackets. Continuous preloaded brackets. Pre-loaded coffeepads. Cables outside the cross-section of the concrete (external overpressure). Partially pre-stressing. □ Adjusting and cable anchoring. Preloaded boards. Preloaded membranes and hangers. □ Pre-stressed complex spatial structures. Examples of pre-stressed construction. Details of some pre-stressing and anchoring systems. □ Basics of the durability of prestressed structures. Provisions of the regulations. □ Tour of some built pre-stressed concrete structures and some under construction.	
Aims:	Acquiring knowledge about the theory of pre-stressed concrete and modern approach to design construction of pre-stressed concrete	
Outcomes	Student needs to master the complex design, analysis and analysis problems during designing pre-stressed concrete structures.	
Teaching methods:	Lectures, practicals/tutorials/self-directed learning exercises	
Assessment:	Assessment is based on a number of practical exercises, tests and an end of semester examination.	
Prescribed literature:		