

	Subject	type	hour/ week	hour/ sem.	ETCS
	Structural Mechanics I	Ps	2	30	4
<p>Description: Subject description: Statically and kinematically determinate structures as minimum-rigidity structures, adaptable to the environment. Triangular trusses. Cables. Bar-cable systems. Simple beams. Multi-span beams. Curved beams. Frames. Models of supports, joints and loadings. Basic types of materials: wood, masonry, concrete, metals. Schematic models of real structures. Basic analysis for preliminary optimal synthesis of continuous, trussed and composite structures. Shape and cross-section optimization. Lightweight structures. Skills: Acquiring working knowledge of the basic analysis and prototype topology and form-finding of statically determinate structures irrespective of scale, material, and function. Developing of structural intuition</p>					