Name of the subject: Materials Science I.	NEPTUN-code: BAXATE2MNE	Credits: 2 ECTS: 3
Subject leader:Dr. Mihály Réger	Title: full professor	

Course description:

Structural structure and behavior of materials used in engineering practice are different stresses. Strength, hardness, breakthrough mechanical tests. Crystal structure, grid faults.

Crystallization and transformation. Deformation and recrystallization of metals. Dual alloy alloy systems. iron Carbon alloy system; steels, cast iron. Non-equilibrium transformations. Theoretical basics of heat treatment processes. Non-metallic materials: typical types of polymers, ceramics, composites