Name of the subject: Engineering Materials	NEPTUN-code: BAXMNE2BNE	Credits: 4 ECTS: 6
Subject leader:Dr. Péter Pinke	Title: associate professor	

## Course description:

Fundamentals of materials testing, mechanical, physical metallurgical and non-destructive testing methods. Atomic and higher structures of metals, polymers, ceramics and composites. Solidification and crystalline structure of metals. Interpretation of the equilibrium diagram and its information content. Iron-carbon alloys. The process of cold forming and recrystallisation and the consequences in practice. Structure, types and processing of polymers. Structure and properties of ceramics and composite materials.