Name of subject: **Physics II.**	***NEPTUN-code:*** RKXFI2ABNE	***Number of hours:*** ***lec+gs+lab*** 1+1+0	***Credit*****:** 3 ***Requirements:*** examination
Course coordinator: Sándor Pekker PhD	***Title:*** research professor	***Prerequisite:*** **Physics I.**	
Curriculum			
Dividing of physics II. Laws of thermodynamics. Special processes. Molecular heat theory. Thermal propagation. Heat engines (Carnot, Otto, Diesel). Basics of electrodynamics. Charges at rest. Moving charges. Alternating and direct current. Maxwell's equations. Introduction to atom physics: basic concepts of quantum mechanics. Photoelectric effect. Uncertainty relation. Nuclear physics: Bohr's atomic mode. The structure of the atomic nucleus. Relationship between mass defect and binding energy. The mechanism of atomic fission. The operating principle of nuclear power plants. Radioactive decays and their lawfulness.			
Competences to be mastered: a) knowledge - Knowledge of general and specific mathematical and natural scientific principles, rules, relations, and procedures as required to pursue activities in the special field of product design.			
Bibliography:			
1. Serway Jewett: Physics for Scientist and Engineers			
2. Lóránt Szabó: Physics for Undergraduate Students			
3. www.physicsslassroom.com			