**Engineering Physics 1 (ECTS credits 6)**

Language: the course is offered in Serbian and Hungarian.

Contact person: Dr. Lívia Szedmina (slivia@vts.su.ac.rs)

**Course description:**

Students will learn about the basic electromagnetic phenomena and corresponding physical laws.

Electrostatic field in vacuum, conductor in electrostatic field. Electric field in dielectrics. Energy of electrical field. Direct current, magnetic field in vacuum, magnetic field in substance. Electromagnetic induction, energy of magnetic field. Practical problems related to engineering applications will be solved during the course.

**Aims:**

The student will learn basic physical laws underlying electric and magnetic phenomena, their interrelation and build a sound basis for understanding courses Electrotechnics 1 and 2.

Student will learn the possibilities and limitations dictated by physical laws.