By studying **Materials Science and Engineering** you gain the knowledge on the structure, properties and technology of materials. It is an interdisciplinary field with strong contribution from physics, chemistry, mechanics, informatics and many others. You will learn about the relationship between the structure of materials at atomic or molecular scales and their macroscopic properties.

**Materials Science and Engineering** is nowadays a driving force of modern industries, from space, aviation and automotive industry, through materials for medicine up to everyday life where advanced electronics and telecommunication are based on the recent achievements of materials science.

Degree programme in materials science and engineering has an interdisciplinary character and comprises basic courses (mathematics, physics, chemistry), major courses and specialisation courses. Programme of studies includes many hours spent in the laboratory where students have the opportunity to acquire and develop their practical skills in the field of material processing and characterization. Special emphasis is placed on plasma based surface treatment and thin film technologies as well as modern ceramic materials.

Graduates of materials science and engineering possess all the essential qualifications required to design technologies of materials processing and select materials for specific applications. In particular, their competences encompass vacuum based plasma technologies of thin film coatings and surface treatment of materials as well as design and processing of modern ceramic composites.

Research laboratories for materials science are fully equipped and very modern, they were officially opened to students in September 2011. Laboratories of metals, ceramics, plastics and plasma technologies give students the possibilities to carry out various experiments, such as: hardening of steel, sintering of ceramics or generating of thin carbon-like layers using plasma methods.

## Specialization of the course:

• Devices and technologies designing

**Materials Science and Engineering** program is offered as a full time course.

• 1 st degree - B.Sc. full time studies in English, duration: 7 semesters

## Employment prospects:

Graduates of materials science and engineering are well-trained to work as:

• constructor of technological apparatus and components

• process/product engineer

• technologist in constructional departments

• tests and quality control engineer

• materials technology specialist

• vacuum processes technologist

• research and development engineer

## Your future jobs:

Graduates can find employment in:

• various branches of industry: tool, automotive, building materials, electronic, medical equipment and home appliance industries

• companies which manufacture biomaterials and implants

• construction and design departments

• production departments which manufacture and process materials

• technology consulting department which deal with material and technology transfers

• large research units

Our Faculty provides modern and well-equipped laboratories and other research and learning facilities as well as the access to the internet thanks to the hot spots all over the campus. Our students can benefit from a good scholarship system and international student exchange; they can develop their interests and skills in the research circles and students' organizations.