

<b>Level:</b> bachelor				
<b>Course title:</b> Laboratory techniques				
<b>Status:</b> elective				
<b>ECTS:</b> 6				
<b>Requirements:</b> none				
<b>Learning objectives</b> To introduce the students to the basic elements of technique and principles of the production process.				
<b>Learning outcomes</b> Obtaining knowledge about new and unconventional sources of energy. Getting the basic knowledge about classical and modern materials, their practical implementation, as well as basic processes of their manual and mechanical processing.				
<b>Syllabus</b> <i>Theoretical instruction:</i> Some conventional and unconventional energy sources. The materials in the physical laboratory. Metals, their physical and chemical properties. Processing and protection. Galvano-technique. Wood and its properties. Types and processing of wood. Wood pulp and cellulose. Glass and its production, types of glass. Cold and hot processing of glass. Ceramics and raw materials for its production. Plastics, obtaining and processing. <i>Practical instruction:</i> Technical drawing. Manual processing of metals. Mechanical processing of metals. Welding. Soldering and riveting. Copper and nickel plating on metal. Manual processing of wood. Cold and hot processing of glass and metal plating on glass. Industrial plant activities.				
<b>Weekly teaching load</b>				Other:
Lectures: 3	Exercises: 1	Other forms of teaching: 1	Student research:	