**DESCRIPTION OF A STUDY COURSE – SYLLABUS**

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| **Title of a course** | **Process industry safety** | | | | |
| **Study programme** | **Professional undergraduate study Occupational Safety** | | | | |
| **Status of a course** | Obligatory | | | | |
| **Year of study** | 3. | **Semester** | W | **ECTS credits** | 5 |
| **Teaching plan**  **(L + E + S+ Pr)** | 2+2+0+0 | | | | |
| **Goals of a course** | | | | | |
| Introduce students to basic measures in the process industry. Identify the possibilities of applying preventative measures in the security in the process industry and familiarize students with the methods that can be used to solve problems in the process industry. | | | | | |
| **Conditions for enrolling course** | | | | | |
| No conditions | | | | | |
| **Expected learning outcomes on a level of a course** | | | | | |
| 1. Identify hazards and noxiousness’s in the work space 2. Propose occupational safety measures in the process industry 3. Distinguish occupational safety measures based on the hazards and noxiousness’s present in the work space 4. Analyse the production process from the aspect of safety at work 5. Identify the need for personal protective equipment | | | | | |
| **Content of a course** | | | | | |
| Safety principles in process industry. Safety organization. Standards in construction, work and process flow. Fixed fire-extinguishing and cooling system. Safety systems. Warehousing systems. In-house supervision. Hazardous substances used in processing. Potential causes of fire. Process halt. Continuous and discontinuous processes. Process devices (pipelines, tanks, containers, reactors etc. and fittings). Control and supervision system. System of fire alarm and gas detection. Omission and emission control system. Personal protective equipment. Qualitative and quantitative risk method. Risk and frequency assessment. Temporary and common work sites. | | | | | |
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