**DESCRIPTION OF A STUDY COURSE – SYLLABUS**

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| **Title of a course** | **Safety systems** | | | | |
| **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+1+0+0 | | | | |
| **Goals of a course** | | | | | |
| Introduce students to the basics of technical protection systems (burglar alarms, video surveillance and access control), security systems (automatic fire alarms and related systems) and the legislative framework of these systems. | | | | | |
| **Conditions for enrolling course** | | | | | |
| No conditions | | | | | |
| **Expected learning outcomes on a level of a course** | | | | | |
| 1. Identificirati zakonodavno okruženje za projektiranje i izvođenje sustava tehničke zaštite. 2. Analizirati funkcije pojedinih elemenata sustava protuprovale, protuprepada i sustava kontrole pristupa 3. Analizirati funkcije i djelovanje sustava za automatsku dojavu požara, plinodojavu i odimljavanje 4. Usporediti klasični i mrežni videonadzor 5. Usporediti specifičnosti napajanja i prijenosa signala za sve obrađene sustave 6. Describe the regulatory environment for the design and implementation of technical protection systems. 7. Describe the functions of the individual elements of anti-burglary systems and access control systems 8. Describe the functions and operation of the automatic fire alarm, gas alarm and smoke extraction system 9. Compare classic and online video surveillance   Describe the specifics of power supply and signal transmission for all covered systems | | | | | |
| **Content of a course** | | | | | |
| Analysis of the necessity to introduce security systems. Sources, types and level of hazards. Types of security. Characteristics of passive and active detectors. Central devices and appliances for sound alarming. Transmit of alarm signal. Physical barriers. Security systems: pressure detectors, ultrasound, piezoelectric effect, electromagnetic field, photoelectric effect, and infrared radiation. An example of safety alarm systems for indoors and outdoors, models of security, security in transport, detecting and alarming other hazardous events. Video control and its usage in security systems. Examples of security systems in industry, banking business, commerce, computing centres, transport and tourism. Use of computers in security systems. | | | | | |
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