**DESCRIPTION OF A STUDY COURSE – SYLLABUS**

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| **Title of a course** | **System Design in Telematics** | | | | |
| **Study programme** | **Professional undergraduate study Telematics** | | | | |
| **Status of a course** | Obligatory | | | | |
| **Year of study** | 2 | **Semester** | s | **ECTS credits** | 5 |
| **Goals of a course** | | | | | |
| Introduce students with practical aspects of designing and documenting simple telematic systems. | | | | | |
| **Conditions for enrolling course** | | | | | |
| No conditions | | | | | |
| **Learning outcomes on a level of a study programme which includes course** | | | | | |
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| **Expected learning outcomes on a level of a course** | | | | | |
| 1. Properly interpret the Croatian legislation related to the design work and the project phases and levels 2. Describe the types and architecture of telematics system assemblies, as well as their associated cables and their selection 3. Independently use design tools (AutoCAD, etc.) 4. Independently create project documentation for a smaller telematics system 5. Use computer and telecommunications infrastructure as the basis for project development | | | | | |
| **Content of a course** | | | | | |
| Basic definitions of a system. Interactions between systems, processes and environment. Basics of information systems. Basics of connecting systems: computer networks and basics of telecommunication systems. Examples of telematics systems within company and transportation. Basics of system’s and projects’ design. Definition and purpose of a project. Specificities of HW projects in comparison to SW project. Phases of development project. Project management. Processes and tools of development. Sorts of circuits. Architecture of circuits. Project documentation. Quality insurance. | | | | | |