**DESCRIPTION OF A STUDY COURSE – SYLLABUS**

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| **Title of a course** | **Web Programming** | | | | |
| **Study programme** | **Professional undergraduate study Telematics** | | | | |
| **Status of a course** | Obligatory | | | | |
| **Year of study** | 3 | **Semester** | W | **ECTS credits** | 5 |
| **Goals of a course** | | | | | |
| Acquiring knowledge of basic web technologies and communication protocols, and acquiring competencies for the development and implementation of web applications and services | | | | | |
| **Conditions for enrolling course** | | | | | |
| No conditions | | | | | |
| **Learning outcomes on a level of a study programme which includes course** | | | | | |
| Outcome 4: Use computer principles and methods related to the architecture and organization of computers and computer networks.  Outcome 5: Use computer principles and methods related to programming languages, databases, and operating systems.  Outcome 6: Design and implement desktop, web and mobile computer applications and computer programs for microcomputers and microcontrollers, with or without a database.  Outcome 10: Analyse and implement an information system in the field of telematics.  Outcome 15: Participate in teamwork and independently present professional content in written and spoken form in Croatian and English. | | | | | |
| **Expected learning outcomes on a level of a course** | | | | | |
| 1. Apply client and server technology in website construction 2. Create dynamic web content 3. Apply and document the basic principles of the development and building a web site 4. Apply standards and protocols for data sharing on the web 5. Apply tools to create simple web services | | | | | |
| **Content of a course** | | | | | |
| Extensible Markup Language (XML); Separation of structure, form and content in files; Data Type Definition (DTD); XML Shema Definition (XSD); XML Stylesheets (XLS/XLST); Wireless Application Protocol (WAP); Development of wireless Web application with WML and WMLScript; PHP programming on servers – standard libraries, forwarding parameters, Web forms processing; Java Servlet – basic concepts, Servlet engine Tomcat, development and instalment of Java Servlet; Java Beans and Java Server Pages (JSP) – syntax and semantics of JSP, integration with Java Beans and installation in Servlet engine; Web services – standards for Web Services Broker (UDDI, ebXML); Web services stack – XML / WSDL / SOAP / UDDI; Programming and integration of Web service Apache SOAP and Java; Apache Axis; Access to Web services with PHP and SOAP. | | | | | |