1.	**Course title**	Implementation of Free and Open Source Systems
2.	**Course code**	F18L3W103
3.	**Semester**	7
4.	**Unit offering the course**	Faculty of Computer Science and Engineering
5.	**ECTS**	6
6.	**Goals of the study programme**	
	After completion of the course it is expected for the students to be capable of productive participation in bigger software teams working using free and open source technologies. To be capable of working with programming languages with open source, to develop web applications on those platforms. To be capable of managing software projects based on technologies with free and open source.	
7.	**Contents of the study programme**	
	History of the concept of systems with Free and Open Source - FOS. Software with free and open source (Free/Open Source Software - FOSS). Philosophy for development with FOS. FOS hardware. Economic analysis of systems with FOS. Business analysis. Business models. Patenting. Licencing with FOS and licence types (GNU General Public License (GPL)). Comparison of systems with closed code. Comparison with free software.Applicative software with FOS code. Operating systems with FOS code. Programming languages for development with FOS. Server software with FOS. Widelly used products with FOS. Education systems with FOS. Development tools for FOSS. Systems for management of dependancies. Models for development wiht FOS. Patterns for FOS development. SOLID principles. Managing software projects with FOS. Monitoring of the development of projects, management of changes. Patterns implemented with Open Source platforms. Libraries based on platforms with FOS. Practical techniques in development of	

	FOS web applications. Standards for coding and documentation. Safety and reliability of Open Source Software. Support for systems with FOS (communities for development of OSS). Blogs, groups, forums, social networks for FOSS. Future of FOSS.