Course Title:	**Stress and elasticity analysis of the piping systems**
Lecturer:	Prof. Veljko Filipan, Ph.D.
Course Type:	Elective
ECTS:	6
Total Hours:	30 hours
Content of the Course:	The course provides an insight into the analysis of stress and elasticity of the piping systems and an overview of the calculation methods.
Competences:	Upon completion of the semester, students will be able to perform the static analysis of stress and elasticity of the piping systems.
Teaching Methodology:	Lectures, practical exercises, practical computer work with computer application for analyses and budget calculation.
Course Units:	The basics of the stress theory of piping systems (2D and 3D) The piping system calculation methods The principles of static analysis of the stress and elasticity of piping The finite elements method in the analysis of piping system Engineering approach to solving piping system problems Dynamic problems Computer applications for the analysis of piping systems
Examination method:	Analysis of stress and elasticity of the given piping system (both manually and by computer application)
References:	1. L.C. Peng and Alvin Peng: Pipe Stress Engineering – ASME Press, New York 2009. 2. B. Silowash: Piping Systems Manual, McGraw-Hill, New York, 2010. 3. P. Ellenberger: Piping Systems & Pipeline ASME B31 Code Simplified, McGraw-Hill, New York, 2005.
Course in English:	Yes
Quality Monitoring Method:	Course quality and performance monitoring in accordance with the quality management system of the University of Zagreb. Self-evaluation of lecturers and student poll.