Course Title:	**Petroleum characterisation and motor fuel quality**
Lecturer:	Maja Fabulić-Ruszkowski, Ph.D., research associate Prof. Ante Jukić, Ph.D.
Course Type:	Elective
ECTS:	6
Total Hours:	30 hours
Content of the Course:	The course provides an overview of characterisation and selection of petroleum stocks and their processing routes (characteristics of petroleum, types of refineries and their complexity, primary and secondary refinery processes). The course also covers all important segments of characteristics of motor fuels (from production, blending, application properties and specifications) with an emphasis on the application and environmental standards.
Competences:	Integration of knowledge required to be able to work in the processing segment of the petroleum industry; consideration of issues concerning petroleum processing, production, transportation and selling of petroleum products.
Teaching Methodology:	Lectures, practical exercises, seminars
Course Units:	Types and division of petroleum stocks Selection of petroleum stocks Corrosion and anti-corrosion additives for petroleum Analytical methods of petroleum characterisation Petroleum characterisation Petroleum processing Practical part: laboratory distillation of petroleum Primary and secondary refinery processes Production of motor fuel components Motor gasoline, characteristics, additives, blending Diesel fuel, characteristics, additives, blending Analytical methods of characterisation of individual types of fuels Examples from practice Transportation and selling of petroleum products
Examination method:	Seminar, oral exam
References:	1. G.J. Speight, Handbook of Petroleum Analysis, A, John Wiley & Sons, Vol. 159, 2001. 2. Concawe 2013, Oil refining in EU 2020, with perspectives to 2030, report no. 1/13, Concawe, Brussels. 3. E. Cerić, Nafta, procesi i proizvodi, Biblioteka INA, Zagreb, 2006. 4. S. Parkash, Petroleum Fuels Manufacturing Handbook, McGraw Hill, New York, 2010. 5. Worldwide Fuel Charter, Fifth Edition, ACEA, Alliance, Emo, JAMA, September 2013.
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.