

Level : master		
Course title: Introduction to plasma technologies		
Status: elective		
ECTS: 8		
Requirements: Fundaments of electronics		
Learning objectives To teach students about the main aspects plasma technologies.		
Learning outcomes Capability to perform experimental work. Understanding of plasma sources and application in different technological and industrial processes.		
Syllabus		
Theory Treatment of surfaces by plasmas. Ions-solids interactions. Thin film deposition by plasmas. Plasma etching in microelectronics. Material processing by plasmas. Plasma chemistry. Plasma light sources.		
Practical Electrical characteristics of pulsed plasma sources. Spectral characteristics of pulsed plasma sources. Spectral characteristics of DC arc plasma. Spectral characteristics of glow discharge. Glass metalization by plasmas.		
Literature 1. J. R. Roth, Industrial Plasma engineering, Vol. 1, IoP, Bristol, 1995. 2. J. R. Roth, Industrial Plasma engineering, Vol. 2 IoP, Bristol, 2001.		
Weekly teaching load	Theory: 3	Practise: 2