Course Unit Descriptor

Study Programme: Power, Electronic and Telecommunication Engineering (Telecommunication Systems)	
Course Unit Title: Medical Image Processing	
Course Unit Code: EK520	
Name of Lecturer(s): Vladimir Petrović	
Type and Level of Studies: Master Academic Degree	
Course Status (compulsory/elective): compulsory	
Semester (winter/summer): winter	
Language of instruction:english	
Mode of course unit delivery (face-to-face/distance learning): face-to-face	
Number of ECTS Allocated:	
Prerequisites: none	
Course Aims:	
Students become familiar with basic concepts in the field of medical image processing and up-to-date methods of medical image processing	
Learning Outcomes:	
The overview of principles and up-to-date methods used in medicine for image processing. The ability to understand the basic principles of medical digital image processing and the ability to acquire and widen that knowledge by working on a problem.	
Syllabus:	
Basic terminology in medical image processing. X-ray systems. Computed tomography. Magnetic resonance. Ultrasound image. Medical image segmentation. Image registration. Geometrical image transformation.	
Required Reading: Relevant literature in English TBD	

Weekly Contact Hours:2	**Lectures:2**	**Practical work:0**

Teaching Methods:

Lectures, computer practice, projects

Knowledge Assessment (maximum of 100 points):100

Pre-exam obligations	points	**Final exam**	points
Lecture attendance	3	Theoretical part of the exam	70
Exercise attendance	2		
Project defense	25		

The methods of knowledge assessment may differ; the table presents only some of the options: written exam, oral exam, project presentation, seminars, etc.