

		Course title: Radiocommunications		
Course code	Course status	Semester	Number of ECTS credits	Lecture hours
PA3103	Mandatory	I	6	3L+1EP

Study program: Graduate academic studies, ELECTRICAL ENGINEERING, study program: Electronics, Telecommunications and Computer engineering (studies last for 4 semesters, 120 ECTS credits).	
Prerequisites: The course of Radiotechnique	
Course aims: Students will be introduced with characteristics of physical channel of actual HF, VHF/UHF i SHF radio-systems.	
Teacher(s) first and last names: Prof. dr Ivo Kostić	
Studying method: Lectures, exercises, seminar works, consultations.	
Course synopsis:	
Preliminary week	Preparation and semester enrolment.
I week	Introduction
II week	Basic characteristics of some radio-channels
III week	Basic characteristics of some radio-channels
IV week	Analysis of time varying channel
V week	Criteria and choice of digital modulation
VI week	Analysis of probability of error
VII week	Free week
VIII week	<i>I colloquium</i>
IX week	Methods for improving the transmission quality
X week	Analogue modulations- realization aspects
XI week	Analogue radio- and TV- diffusion apparatus
XII week	Digital radiodiffusion and digital TV diffusion – basic concepts
XIII week	Concept of Spread spectrum transmission
XIV week	GSM and complementary technologies
XV week	<i>II colloquium</i>
XVI week	<i>Final exam (Seminar work presentation)</i>
Final week	Administrative procedures.
XVIII-XXI week	Additional lessons, correction of the final exam and administrative procedures.
STUDENT WORKLOAD	
<u>per week</u>	<u>per semester</u>
Working hours: 6 credits x 40/30 = 8 hours.	Teaching and the final exam: (8hours) x 16 = 128hours.
Working hours structure: 3 hours for teaching 1 hour for exercises 4 hours for individual work, including consultations.	Necessary preparation (before semester): 2 x (8hours) = 16hours. Total work hours for the course: 176hours Additional hours for preparing correction of the final exam, including the exam taking: up to 36hours. Work hours structure: 128hours (lectures) + 16hours (preparation) + 36hours (additional work)
Lessons attendance is mandatory for students, as well as doing seminar works, etc	
Literature: I. M. Kostić, Radiocommunications, lecture notes. I. M. Kostić, Digital telecommunication systems I, Naučna knjiga, Beograd, 1994.	
The forms of knowledge testing and grading:	
<ul style="list-style-type: none"> - Permanent evaluation of activities related to the seminar work - 10 points - Each colloquium carries 20 points (40 points in total) - Seminar work presentation (50 points) Student gets the passing grade by collecting 51 points at least.	
Special remarks for the course:	
Teacher(s) who provided the information: Prof. dr Ivo Kostić	
Note:	