

Study program:	Civil Engineering		
Level of study:	Master academic studies		
Course title:	RAILWAY STATIONS AND JUNCTIONS		
Teacher:	Igor Jokanović		
Course Status:	Core		
Credits (ECTS):	6		
Prerequisite:	N/A		
Course objective(s):	Acquiring basic knowledge in design and construction of railway stations.		
Course outcome(s):	The realization of the planned objectives.		
Course Content:			
1 st week	Basic principles of organization of railway transport (main characteristics of railways as a transport system).		
2 nd week	The role of railway stations in the system, the main indicators of operation.		
3 rd week	The classification of stations and other official places.		
4 th week	The methodology and technology of design (basic steps and tasks in the design process of stations and junctions).		
5 th week	Content and arrangement of design documentation.		
6 th week	Specifics of the reconstruction of stations.		
7 th week	The structural elements of stations (substructure and superstructure at stations, cross section, layout plan and longitudinal profile of stations).		
8 th week	Classification of basic station systems, the connection between tracks.		
9 th week	Switches, switch connections and materials, position of switches in the plan and profile.		
10 th week	Junctions, pass buys, intermediate stops, sorting stations, marshalling yards, passenger stations, technical passenger stations, docking and port stations (assignment, classification, number and position within the junction in the railway network, the basics of technological processes).		
11 th week	Work automatization, the main capacities.		
12 th week	Basic principles for the design, methods of determining the capacity, typical schemes.		
13 th week	Guidelines for the design, the basic elements for reconstruction.		
14 th week	The basic elements of railway junctions (the term railway junction, tasks of the junction within the railway network and the local work at junction).		
15 th week	Connection of connecting lines at the junction, the basic capacity of the junction. Submission of graphic works and preparing for the final exam.		
Literature:	1. Janjić, S., Železničke stanice I-III, Građevinski fakultet, Beograd, 1978/83.		
Number of hours:			Other classes: 0
Lectures: 2	Exercises: 2	Other forms of teaching: 0	Individual research work: 0
Teaching methods: lectures, exercises, design, colloquiums, consultations			
Evaluation of knowledge (maximum 100 points)			
Pre-exam activities	points	Final exam	points
Activity during the lectures	5	Written exam	-
Activity during the exercises		Oral exam	25
Design	20	-	-
Colloquia	50 (2 x 25)	-	-