

<b>Study program:</b> Road Traffic Engineering			
<b>Course title:</b> Motor Vehicles			
<b>Professor/assistant:</b> Đorđević Đ. Miloslav, Aleksandrović B. Branislav			
<b>Type of course:</b> Elective			
<b>ECTS credits:</b> 6			
<b>Prerequisites:</b> none			
<b>Aims of the course:</b> Acquiring knowledge about road motor vehicles (types, dynamic and motion characteristics; construction, exploitation and safety characteristics; operation of the basic system) for the purpose of analyzing vehicle's characteristics, solving tasks regarding vehicle safety, performing laboratory and road tests and organizing transport.			
<b>Learning outcomes:</b> The student understands the operation of a modern vehicle and solves engineering problems regarding motion, exploitation and safety of road motor vehicles.			
<b>Syllabus:</b> <i>Theoretical part:</i> Historical development of road motor vehicles; Definitions and types of vehicles; Wheel rolling; Distribution of weight and the position of the center of mass; Forces of resistance during vehicle's movement; Dynamic ground resistance; Traction dynamics of a vehicle – characteristics; Braking system; Stability of the vehicle; Steering; Vehicle safety. <i>Practical part:</i> Auditory exercises - solving practical problems in the field of the motion and resistance, dynamic reactions, weight and center of mass distribution; writing term papers and presenting the results.			
<b>Literature:</b> Đorđević M., Drumska motorna vozila, Visoka tehnička škola strukovnih studija, Kragujevac, 2011, nastavna publikacija-skripta; Simić D. Motorna vozila, Naučna knjiga, Beograd, 1988 Janičijević N., Janković D., Todorović J.: Konstrukcija motornih vozila, Mašinski fakultet, Beograd, 2000.			
<b>Total number of active classes:</b> 60		<b>Lectures:</b> 30	<b>Practical classes:</b> 30
<b>Teaching methods:</b> Lectures - interactive approach; Practice - task solving, preparation of term papers, presentations, discussions, solving specific problems, consultations.			
<b>Grading system</b> (maximum 100 points) grading scale from 5 to 10: below 51 points – student fails the exam, grade 6 from 51- 60 points, grade 7 from 61-70 points, grade 8 from 71-80 points, grade 9 from 81-90 points, grade 10 from 91- 100 points.			
<b>Pre-exam obligations:</b>	<b>Points:</b>	<b>Final exam:</b>	<b>Points:</b>
Activity during theoretical lectures	max 5	Oral exam	50
Practical training	max 5		
Written test	max 20		
Term paper	max 20		
Minimum for the final exam	30		