

**FINAL PROJECT B ASSIGNMENT (MSc)**

Identification	Name: <b>Gergely Németh</b>		Student ID: <b>76583259209</b>
	Code of the Curriculum: <b>2N-MW0</b>	Code of the Specialisation:	Document ref. number:
	Curriculum: <b>Mechanical Engineering Modelling</b>	<b>2N-MW0-SM</b>	<b>FPB-MM-19t / BE903C</b>
	Final Project issued by <b>Department of Applied Mechanics</b>	Final exam organised by <b>Department of Applied Mechanics</b>	
	Supervisor: <b>Dr. Dénes TAKÁCS</b> , Neptun: MBJV9X, ID: 71725502814 Associate Professor, <a href="mailto:takacs@mm.bme.hu">takacs@mm.bme.hu</a> , +36-1/463-1227		

<b>PROJECT DESCRIPTION</b>	Title	<b>SIMULATION OF VEHICLE TRAFFIC FOR AUTONOMOUS DRIVING TESTS</b> <i>(Járműforgalom szimulációja önvezetés teszteléséhez)</i>
	Details	<ol style="list-style-type: none"> <li>1. Summarize the methods and models that are conventionally used to simulate vehicle traffic on high-ways.</li> <li>2. Implement a traffic simulation algorithm available in the literature into MATLAB environment.</li> <li>3. Consider the time intervals of the lane changes and the divided attention of the drivers in the simulation algorithm.</li> <li>4. Investigate the behaviour of a self-driving vehicle in the traffic.</li> <li>5. Analyse the effect of the parameters of drivers and the self-driving vehicle with respect to the traffic jams.</li> <li>6. Summarize the results in English and in Hungarian. Prepare a poster presentation of the work.</li> </ol>
	Advisor	Advisor's Affiliation: - Advisor: -

<b>FINAL EXAM</b>	1 <sup>st</sup> subject	2 <sup>nd</sup> subject	3 <sup>rd</sup> subject	4 <sup>th</sup> subject
	<b>Finite Element Analysis</b>  ZVEGEMMMW02	<b>Continuum Mechanics</b>  ZVEGEMMMW03	<b>Elasticity and Plasticity</b>  ZVEGEMMMW05	<b>Nonlinear Vibrations</b>  ZVEGEMMMW06

AUTHENTICATION	Handed out: 4 <sup>th</sup> February 2019		Deadline: 17 <sup>th</sup> May 2019	
	Compiled by	Controlled by		Approved by
		L.S.		L.S.
	.....	.....		.....
	Supervisor	Head of Department		Dean
	The undersigned declares that all prerequisites of the Final Project have been fully accomplished. Otherwise, the present assignment for the Final Project is to be considered invalid.			
	Budapest, 4 <sup>th</sup> February 2019		.....	
			Student	