



FINAL PROJECT ASSIGNMENT

Publicly Available

Identification	Name: Kulcsár Márton		ID: 77789628666	
	Code of the Curriculum: 2N-MW0		Specialisation:	Document ref. number:
	Curriculum: Gépészeti modellezés mesterképzési szak		2N-MW0	GEÁT:2022-2:2N-MW0:JCNBT4
	Final Project issued by: Department of Fluid Mechanics		Final exam organised by: Department of Fluid Mechanics	
Supervisor: Dr. Suda Jenő Miklós (71958230447), assistant professor				

Project Description	Title	Experimental and numerical investigation on the aerodynamics of the „DrivAir” generic vehicle model A „DrivAer” járműmodell kísérleti és numerikus áramlástanai aerodinamikai vizsgálata
	Details	1. Summary of the reference literature on the previous “DrivAir” studies and the aerodynamic balance system 2. Review of aerodynamic balance design 3. Production preparation and supervision of the aerodynamic balance system elements 4. Assembly, calibration and testing of the new aerodynamic balance system 5. Review of the “DrivAer” model vehicle design 6. Design of the new wheel holding structures for the model vehicle wheelhouse 7. Production preparation and supervision of the 3D printed elements 8. Assembly of the new 3D printed wheelhouse elements 9. Perform wind tunnel testing of the notchback version of the “DrivAer” model vehicle 10. Perform CFD simulation of the notchback version of the model vehicle 11. Evaluate and compare the wind tunnel measurement and CFD simulation results 12. Summarise the work in the required document format of the MSc Thesis
	Advisor	Advisor’s Affiliation: -- Advisor: --

Final Exam	1 st subject (group)	2 nd subject (group)	3 rd subject (group)	4 th subject (group)
	ZVEGEÁTNW02 Computational Fluid Dynamics	ZVEGEÁTNW03 Fluid Mechanics Measurements	ZVEGEÁTNW19 Vehicle Aerodynamics	ZVEGEVGMW07 Flow stability

Authentication	Handed out: 14 February 2022		Deadline: 20 May 2022			
	Compiled by: Dr. Suda Jenő Miklós (71958230447) Supervisor		Verified by: Dr. János Vad (signed) Head of Department		Approved by: Dr. Gábor Györke (signed) Vice-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. Kulcsár Márton					