Budapest University of Technology and Economics
Faculty of Mechanical Engineering
Department of Fluid Mechanics
http://www.ara.bme.hu/

FINAL PROJECT ASSIGNMENT

Publicly Available

Identification

Name: **Tajti Benedek Levente**			ID: **74772757152**
Code of the Curriculum: 2N-MW0		Specialisation: 2N-MW0	Document ref. number: GEÁT:2022-2:2N-MW0:DTIOJX
Curriculum: Gépészeti modellezés mesterképzési szak			
Final Project issued by: Department of Fluid Mechanics		Final exam organised by: Department of Fluid Mechanics	
Supervisor: Lukács Eszter (72013534433), assistant research fellow			

Project Description

Title	**The effect of suspension and flap setup on the aerodynamic characteristics of the BME Motorsport FRC-09 race-car** A felfüggesztés- és szárnybeállítás hatása a BME Motorsport FRC-09 versenyautójának aerodinamikai tulajdonságaira
Details	1. Literature survey, surveying and analysing relevant resources of technical literature. 2. Preparation of the different geometry variants, mesh generation, mesh independence study. 3. CFD calculations for different front and rear suspension heights at various flow velocities. 4. CFD calculations at a given suspension height for different flap angles at various flow velocities. 5. Creation of aero maps based on the results of the CFD simulations. 6. Summarize the work in the required document format of the MSc Thesis!
Advisor	Advisor's Affiliation: Dept. Fluid Mechanics, Fac. Mech Eng., Budapest University of Technology and Economics 1111 Budapest, Bertalan Lajos 4-6. Advisor: Bálint Papp, PhD student

Final Exam

1st subject (group)	2nd subject (group)	3rd subject (group)	4th subject (group)
ZVEGEÁTNW02 Computational Fluid Dynamics	**ZVEGEÁTNW03** Fluid Mechanics Measurements	**ZVEGEÁTNW19** Vehicle Aerodynamics	**ZVEGEÁTNW11** Open Source Computational Fluid Dynamics

Authentication

Handed out: 14 February 2022		Deadline: 20 May 2022
Compiled by: Lukács Eszter (72013534433) 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.

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Tajti Benedek Levente