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: **Mahammadov Seymur**	ID: **73352437814**

Code of the Curriculum: 2NAAG0	Specialisation:	Document ref. number:
Curriculum: Bachelor of Science Degree Program in Mechanical Engineering	2NAAG0-PE	GEÁT:2022-1:2NAAG0:YLC5RC

Final Project issued by:	Final exam organised by:
Department of Fluid Mechanics	Department of Fluid Mechanics

Supervisor: Lelkes János (72866960617), PhD student

Project Description

Title

Numerical investigation and optimization of morphing wing geometries

Alakváltó szárnygeometriák numerikus vizsgálata és optimalizációja

Details

1. Literature survey morphing wing technology
2. Creating a MATLAB code to generate the morphing wing geometries
3. CFD analysis of the different geometries
4. Calculation of the drag and lift coefficient
5. Comparison of the different geometries
6. Choosing an optimal morphing geometry
7. Summary of the results

Advisor

Advisor's Affiliation:

Advisor: —

Final Exam

1st subject (group)	2nd subject (group)	3rd subject (group)	4th subject (group)
ZVEGEVGAG4X Volumetric Pumps and Compressor	**ZVEGEVGAGFF** Fluid Flow Systems	**ZVEGEENAG71** Energy Processes and Equipments	

Authentication

Handed out: 6 September 2021	Deadline: 10 December 2021

Compiled by:	Verified by:	Approved by:
Lelkes János (72866960617) Supervisor	*Dr. János Vad* (signed) Head of Department	*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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Mahammadov Seymur