

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: Mehraliyev Taleh | | | | ID: 73493480399 | |
|----------------|-------------------------------|--|---------------------------|------------------------------------|-----------------|---------------------------|
| | Code of the Curriculum: | | 2NAAG0 | Specialisation: | | Document ref. number: |
| | Curriculum: | um: Bachelor of Science Degree Program in Mechanical Engineering | | 2NAAG0-PE | | GEÁT:2023-2:2NAAG0:JMVVZ4 |
| | Final Project issued by: | | | Final exam organised by: | | |
| | Department of Fluid Mechanics | | | Department of Hydrodynamic Systems | | |
| | Supervisor: | Dr. Szente Vi | ktor Gyula (71958279813), | , assistant professor | | |

| | Title | Szélterelővel ellátott szélenergia-generátor optimalizálása Optimisation of a wind power generator with wind deflectors |
|---------------------|---------|---|
| Project Description | Details | Literature survey, surveying and analysing relevant resources of technical literature. Select a wind turbine and establish baseline characteristics. Prepare one or more wind deflectors/spoilers to increase turbine utilisation for low wind velocities. Establish the characteristics of the deflectors/spoilers using CFD. Compare the results with the baseline characteristics. Summarise the work in the required document format of the BSc Final Project. |
| | Advisor | Advisor's Affiliation: Advisor: |

| _ | 1 st subject (group) | 2 nd subject (group) | 3 rd subject (group) | |
|------------|------------------------------------|--|--|--|
| Final Exam | ZVEGEVGBX01 Fluid Machinery | ZVEGEÉEBG61 Process Engineering | ZVEGEVGBG13 Fluid Flow Technology | |

| | Handed out: 27 February 2023 | | Deadline: 2 June 2023 | | |
|----------------|--|------------------------|-----------------------|---------------------------|--|
| | Compiled by: | Verified by: | | Approved by: | |
| | Dr. Szente Viktor Gyula (71958279813) | Dr. János Vad (signed) | | Dr. Gábor Györke (signed) | |
| Authentication | Supervisor | Head of Department | | Vice-Dean | |
| | The undersigned declares that all prerequisites of the have been fully accomplished. Otherwise, the present the Final Project is to be considered invalid. Mehraliyev Taleh | | | | |