

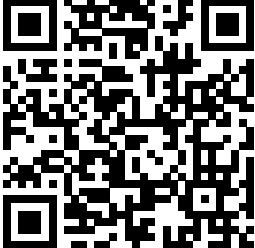
FINAL PROJECT ASSIGNMENT

Publicly Available

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| Identification | Name: Abdelkhalik Mohamed Badr Gomaa | | ID: 73493488109 | |
| | Code of the Curriculum: 2NAAG0 | | Specialisation: | Document ref. number: |
| | Curriculum: Bachelor of Science Degree Program in Mechanical Engineering | | 2NAAG0-PE | GEÁT:2023-1:2NAAG0:ZEE7C8 |
| | Final Project issued by: Department of Fluid Mechanics | | Final exam organised by: Department of Hydrodynamic Systems | |
| Supervisor: Dr. Horváth Csaba (71949162105), associate professor | | | | |

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| Project Description | Title | Testing and further development of the Segmented ROSI beamforming method for a centrifugal fan investigations A Segmented ROSI nyalábformálási módszer tesztelése és továbbfejlesztése centrifugális ventilátor méréseken |
| | Details | <ol style="list-style-type: none"> Review of the literature regarding centrifugal fan noise sources. Review of the literature regarding beamforming technology. Review of the literature regarding the ROSI and Segmented ROSI beamforming methods. Become familiar with the Matlab environment and the Segmented ROSI code. Carry our preliminary tests on a centrifugal fan: carry out measurements using beamforming technology, process the data using the currently available codes, and draw conclusions. Help in the further development of the Segmented ROSI beamforming method. Process centrifugal fan data using the best available methods and draw conclusions. Summarize your work in the required document format of the BSc Thesis. |
| | Advisor | Advisor's Affiliation: Dept. Fluid Mechanics, Fac. Mech Eng, Budapest University of Technology and Economics 1111 Budapest, Bertalan Lajos u. 4-6. Advisor: Tokaji Kristóf, research engineer |

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| Final Exam | 1 st subject (group) | 2 nd subject (group) | 3 rd subject (group) |
| | ZVEGEVGAGFM Fluid Machinery | ZVEGEÉEBG51 Transfer Processes | ZVEGEVGBG13 Fluid Flow Technology |

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| Authentication | Handed out: 5 September 2022 | | Deadline: 9 December 2022 | |
| | Compiled by: Dr. Horváth Csaba (71949162105) 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. <i>Abdelkhalik Mohamed Badr Gomaa</i> | | | | |