



FINAL PROJECT ASSIGNMENT

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Identification	Name: Asgarov Elvin		ID: 73360944875	
	Code of the Curriculum: 2NAAG0		Specialisation:	Document ref. number:
	Curriculum: Bachelor of Science Degree Program in Mechanical Engineering		2NAAG0-PE	GEÁT:2022-1:2NAAG0:ANVTR2
	Final Project issued by: Department of Fluid Mechanics		Final exam organised by: Department of Fluid Mechanics	
	Supervisor: Dr. Joshua Patrick Davidson (71569852589), research fellow			

Project Description	Title	Validation of a numerical model for a small scale thermal energy harvester Kisméretű hőenergia-gyűjtő numerikus modelljének validálása
	Details	<p>Thermal energy harvesters scavenge energy from natural temperature gradients, to provide a robust power supply for autonomous wireless sensor networks in the environment. This project will involve validating a numerical model of a thermal energy harvesting device which has been implemented in the AMESim software environment. The following tasks are required for the project.</p> <ol style="list-style-type: none"> 1. Surveying and analysing relevant resources of technical literature 2. Comparison of the model against values reported in the literature 3. Design a range of experiments to produce data for model validation 4. Construct a physical prototype 5. Perform experiments, measure and post-process relevant data 6. Validate the model against the experimental data 7. Summarize the work in the required document format of the BSc Thesis
	Advisor	<p>Advisor's Affiliation: Dept. Fluid Mechanics 1111 Budapest, Bertalan Lajos utca 4-6. Advisor: Dr. Viktor Szente, senior lecturer</p>

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

Authentication	Handed out: 6 September 2021		Deadline: 10 December 2021		
	Compiled by: Dr. Joshua Patrick Davidson (71569852589) Supervisor		Verified by: <i>Dr. János Vad (signed)</i> Head of Department		Approved by: <i>Dr. Gábor Györke (signed)</i> Vice-Dean
	<p>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.</p> <p>..... <i>Asgarov Elvin</i></p>				