



# FINAL PROJECT ASSIGNMENT

**Publicly Available**

Identification	Name: <b>Huang Kang Jian</b>		ID: 73013567187	
	Code of the Curriculum: 2NAAG0		Specialisation:	Document ref. number:
	Curriculum: Bachelor of Science Degree Program in Mechanical Engineering		2NAAG0-PE	GEÁT:2022-1:2NAAG0:A4CBM5
	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	<b>Optimisation of a small scale thermal energy harvesting device</b> Kisméretű hőenergia-gyűjtő berendezés optimalizálása
	Details	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 optimisation of a thermal energy harvesting device. The following tasks are required for the project. 1. Surveying and analysing relevant resources of technical literature 2. Identifying the relevant parameters which can be optimised on a thermal energy harvesting device to improve its performance 3. Selecting an appropriate model of the thermal energy harvesting device 4. Selecting an appropriate optimisation method/algorithm 5. Optimisation of the relevant thermal energy harvester device parameters 6. Assessment of the optimised thermal energy harvester device performance 7. Summarize the work in the required document format of the BSc Thesis
	Advisor	Advisor's Affiliation: Advisor: —

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

Authentication	Handed out: 6 September 2021		Deadline: 10 December 2021			
	Compiled by: Dr. Joshua Patrick Davidson (71569852589) 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.  ..... Huang Kang Jian					