



FINAL PROJECT ASSIGNMENT

CLASSIFIED

Identification	Name: Széles Marcell		ID: 73747556806	
	Code of the Curriculum: 2N-MW0		Specialisation:	Document ref. number:
	Curriculum: Gépészeti modellezés mesterképzési szak (angol nyelven)		2N-MW0-FM	GEÁT:2022-1:2N-MW0:P2WL2C
	Final Project issued by: Department of Fluid Mechanics		Final exam organised by: Department of Fluid Mechanics	
	Supervisor: Dr. Balázs Istók (72856166168), senior lecturer			

Project Description	Title	Investigation of a compact reversed osmosis system Kompakt fordított ozmózis rendszer vizsgálata
	Details	1. Analyse and calculate the working conditions (forces acting, pressure, osmotic pressure, etc...) based on the previously gathered measurement results. 2. Build the dynamic model of the reversed osmosis system in Amesim environment. 3. Investigate the operation of the reversed osmosis filter. 4. Validate the previously gathered data with the help of the dynamic model. 5. Make the model scalable to any industrial sizes. 6. Document and evaluate the work in an MSc thesis format.
	Advisor	Advisor's Affiliation: FLOWSERVE GTEC 1097 Budapest, Gubacsi út 6. Advisor: Dr. Gergely KRISTÓF , principal engineer

Final Exam	1 st subject (group)	2 nd subject (group)	3 rd subject (group)	4 th subject (group)
	ZVEGEÁTNW03 Fluid Mechanics Measurements	ZVEGEÁTNW02 Computational Fluid Dynamics	ZVEGEÁTNW19 Vehicle Aerodynamics	ZVEGEÁTNW08 Building and Environmental Aerodynamics

Authentication	Handed out: 6 September 2021		Deadline: 10 December 2021	
	Compiled by: Dr. Balázs ISTÓK (72856166168) Supervisor		Verified by: <i>Dr. János Vad (signed)</i> Head of Department	Approved by: <i>Dr. Gábor Györke (signed)</i> 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>Széles Marcell</i>			