
ASSIGNMENT

MSc FINAL PROJECT (BMEGEÁTMWD2)

Title:	Evaluation of flow quality in a large open test-section wind tunnel
Author's name (code):	Árpád VARGA (PDSGNN)
Curriculum :	MSc in Mechanical Engineering Modelling / Fluid Mechanics
Supervisor's name, title:	Márton BALCZÓ, assistant research fellow
Affiliation, address:	Department of Fluid Mechanics / BME H-1111 Budapest, Bertalan L. 4-6.
Advisor's name, title:	-
Affiliation, address:	-
Handed out / Deadline:	3rd of September 2012. / 7th of December 2012.
Curriculum subjects (code):	1. Flow Measurements (BMEGEÁTMW03) 2. Computational Fluid Dynamics (BMEGEÁTMW02) 3. Building Aerodynamics (BMEGEÁTMW08) 4. Aerodynamics and its Application for Vehicles (BMEGEÁTMW09)
Title of the Major Project (BMEGEÁTMWD1):	Evaluation of flow quality in a large open test-section wind tunnel
Description / refinement of the Major Project (BMEGEÁTMWD1):	1) Literature research on flow quality requirements in case of open test section wind tunnels. 2) Preparation of LWTTs for the test section scan with an appropriate probe (Pitot-tube, HWA) by installing the probe holding arm and complementary components (streamlined covering, energy chain, cables, data acquisition card). 3) Writing a software application in LabView environment for programmed automatic test-section scan.
Description of the Final Project (BMEGEÁTMWD2):	1) Performing velocity, turbulence and static pressure measurements in grid points along different horizontal and vertical planes. 2) Evaluation and visualization of measurement results. 3) Recommendations of wind tunnel geometry changes to improve flow quality in the test section.



Budapest, 3rd of September 2012.

(L.S.)

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supervisor

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Dr. János VAD, associate professor
Head of Department

Approved by:
Budapest, 3rd of September 2012.

(L.S.)

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Prof. Tibor CZIGÁNY
Dean of Faculty

Received by:
Budapest, 3rd of September 2012.

The undersigned declares that all prerequisite subjects of the Final Project have been fully accomplished. Otherwise, the present assignment for the Final Project is to be considered invalid.

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student

Supervisor's declaration of acceptance:	The submitted Thesis fulfils all requirements of the Department of Fluid Mechanics, Budapest University of Technology and Economics. The Thesis is accepted for review process and public defence.
Supervisor's proposal for final grade of the thesis:	<div style="border: 1px solid black; padding: 5px; text-align: center;"> The proposed final grade* of the MSc Thesis: </div> * Please, select one: excellent (5), good (4), medium (3), acceptable (2), fail (1)
Date:	Budapest, 7 th of December, 2012.
Name / Signature: supervisor

Reviewer's proposal for final grade of the thesis:	<div style="border: 1px solid black; padding: 5px; text-align: center;"> The proposed final grade* of the MSc Thesis: </div> * Please, select one: excellent (5), good (4), medium (3), acceptable (2), fail (1)
Date:	
Name / Signature: reviewer

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