

ASSIGNMENT

MSc MAJOR PROJECT (BMEGEÁTMWD1)

Title: **Wind turbines augmented by simple-shaped deflectors**

Author's name (code): **Tamás MÁTÉ (CLNW0Q)**
Curriculum: **MSc in Mechanical Engineering Modelling / Fluid Mechanics**
Curriculum's code: **2N-MW0-FM**

Supervisor's name, title: **Dr. Viktor SZENTE, assistant professor**
Affiliation, address: **Department of Fluid Mechanics / BME Building AE
H-1111 Budapest, Bertalan Lajos street 4-6.**

Advisor's name, title: -
Affiliation, address: -

Description / tasks of the project:

1. Study the currently available vertical axis wind turbine types. Evaluate the different fluid mechanical spoilers, guides, vanes, etc. that are used to enhance their efficiency and/or power output, then select the most promising constructions.
2. Select a wind turbine geometry, then establish its characteristics using CFD.
3. Investigate how the different constructions selected in Task 1 influence the analysed turbine's characteristics using CFD.
4. Propose one or more ways to further enhance the optimal construction. This can be one or more modifications on existing geometries, or new constructions. Verify the proposed configurations using CFD.

Handed out / Deadline: **10th of February 2014. / 16th of May 2014.**
Budapest, 10th of February 2014.

(L.S.)

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supervisor

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Dr. János VAD, associate professor
Head of Department

Received by:
Budapest, 10th of February 2014.

The undersigned declares that all prerequisite subjects of the Major Project have been fully accomplished. Otherwise, the present assignment for the Major Project and the subject's registration of BMEGEÁTMWD1 are considered to be invalid.

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student



Supervisor's declaration of acceptance:	The submitted Project Report fulfils all requirements of the Department of Fluid Mechanics, Budapest University of Technology and Economics.
Supervisor's proposal for final grade of the thesis:	<div style="border: 1px solid black; padding: 10px; margin: 10px auto; width: 80%;"><p>The proposed final grade* of the Project Report:</p><p>.....</p></div> <p>* Please, select one: excellent (5), good (4), medium (3), acceptable (2), fail (1)</p>
Date:	Budapest, 16th of May 2014.
Name / Signature:	<p>.....</p> <p style="text-align: center;">supervisor</p>

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