

ASSIGNMENT

TEAMWORK PROJECT (BMEGEÁTMWTP)

Title: **Investigation of an automotive fuel system utilizing AMESim**

Author's name (code): **Eszterla Éva BALLA (IRAUHN)**

Curriculum: MSc in Mechanical Engineering Modelling / spec. Fluid Mechanics

Curriculum's code: 2N-MW0-FM

Supervisor's name, title: Csaba HORVÁTH, research assistant

Affiliation, address: Department of Fluid Mechanics / BME

Advisor's name, title: Dr. Viktor SZENTE, assistant professor

Affiliation, address: Department of Fluid Mechanics / BME

Description / tasks of the project:

1. Overview of the technical literature, with special regard to Computer-Aided Engineering (CAE) methods available and applied in automotive engine fuel system research, focusing on those which can be applied in the commercially available software package AMESim.
2. Overview of the technical literature, with special regard to automotive engine fuel systems and current research trends.
3. Overview of the measurement technique literature, with special regard to those methods which are applied in the automotive industry.
4. Overview of the literature with regard to standard operational states which are investigated during engine testing.
5. Determination of measurement errors for certain quantities measured in automotive fuel systems.
6. Development and application of a basic model for the investigation of a diesel engine fuel system or a particular subsystem of a fuel system.
7. Documentation of the project according to the requirements of the subject.

Handed out / Deadline: **8th of September 2014. / 12th of December 2014.**

Budapest, 8th of September 2014.

(L.S.)

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supervisor

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Dr. János VAD, full professor
Head of Department

Received by:
Budapest, 8th of September 2014.

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

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student



Supervisor's declaration of acceptance:	The submitted Teamwork 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 report:	<div style="border: 1px solid black; padding: 10px; text-align: center;"> The proposed final grade* of the Teamwork Project Report: </div> <p>* Please, select one: excellent (5), good (4), medium (3), acceptable (2), fail (1)</p>
Date:	Budapest, 12 th of December 2014.
Name / Signature:	<p style="text-align: center;">.....</p> <p style="text-align: center;">supervisor</p>

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