UNIVERSITY OF PANNONIA

COURSE DATASHEET

Semester:	2015/16/2
Course:	Vehicle Electronical Design
Code:	VEMKGEM456J
Responsible department:	Institute of Mechanical Engineering
Department code:	MKGEI
Responsible instructor:	Dr. Dénes Fodor

Course objectives:

Overview of the active and passive elektronic devices used int he automotive industry. The studens can familiarize the test requirements and the aspects of hardware and software develpments.

Course content:

Designing the hardware elements and developing the software modules of electrical circuits and driver tools used in the automotive industry. Accumulator charger circuits, stabilizer electronic circuits of ultracapacitors, design and software development of ABS, ESP, EHB controller ECU's. Body electrical driver circuits, basic communication protocols and diagnostic tools in automotive industry.
Precondition: Simulation of mechatronics systems

Requirements, evaluation and grading:

Condition of entering the exam: achieve minimum 30% score on the in-term test, attendance minimum 50% of the lectures. The mark will be assigned on a compulsory written exam based on the result. After the compulsory written test there is a possibility of an oral test.
Score (Mark)
90- 100 (5)
76-89 (4)
61-75 (3)
51-60 (2)
0-50 (1)

Required and recommended readings:

Bosch Automotive Electronics: Systems and Components. Networking, Hybrid Drives Robert Bosch GmbH. (November 2007.)

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