English

Dear Visitor!

Welcome to the website of the Department of Automotive and Railway Engineering!

The Department of Automotive and Railway Engineering teaches subjects and conducts research on the fields of vehicle engineering, electronics, mechatronics, and on vehicle technical, trade areas.

Our department is working in education closely together with the Department of Automobiles and Vehicle Manufacturing at Budapest University of Technology and Economics, and with the Department of Vehicle Technology at Kecskemét College.

Our research background is given by the Research Center of Vehicle Industry operating at our university.

I am confident that both students and professional partners can cooperate in joint projects successful with us.

István LAKATOS, Ph. D.
Associate Professor
Head of Department

Main scientific research and development fields of our Department:

- Road and rail track-vehicle dynamic system identification
- Vehicles, parts, components testing, diagnostic and assessment methods, simulations, operation and maintenance systems

Research and development methods:
The Research and Development activities of our department is based both on theoretical load and practice, experience.

- computer simulations
• laboratory tests
• tests during the operation of vehicles
• measurement and experimental studies
• identifications

R&D results:

• First Hungarian alternatively driven family car (concept)
• Vehicle car body static and dynamic strength rating
• Development of maintenance and repair technology: Stadler DMU
• Systematic development of road and railway vehicle depot process technology
• Gear test bench development
• Classification and development of vehicles and components; restoration technologies to development
• The development and construction of urban electric vehicle, HUPERCAR
• Development of Traffic Safety Multimedia tutorials focusing on circular geometric crossroads
• Development of motorcycle ABS
• Development of public transport vehicle and route certification system based on vehicle dynamics

measurement datas