

Thesis Topics BSc / MSc

Supervisor: Mr Krisztián Deák

Email: deak.krisztian@eng.unideb.hu

These topics are suggestions and flexible for modification following your ideas.

1. **Diagnostics of Engines and Machines**, Bearings, Vibration Measurements, Thermography, Ultrasonic Testing, Electronic Measurements.
2. **Repair Technology and Maintenance** of Machines and Vehicles.
3. **Automobile Topics**.
4. **Vehicle Diagnostics and Analysis**, Engine, Transmission, Performance Optimizations, Gain Extra Horsepower, ECU Tuning, Dynamical Analysis and Vibration Problems.
5. **Environmental Engineering Topics** (Biofuels, Bioenergy, Windpower, Solar Energy etc.).
6. **Acoustic Measurements and Analysis** by Sensitive Microphones.
7. **MATLAB** Applications in Engineering.
8. **LABVIEW** Applications in Engineering.
9. Applications of **Artificial Intelligence (AI)** in Engineering, **Robotics**.
10. **Neural Networks** and Other Machine-Learning Techniques (SVM, SOM etc.).
11. **Optimization of Engineering Problems** (by MATLAB or other pieces of software).
12. **Design and Manufacturing (CAD/CAM)**, Traditional and Modern Technologies (Laser Technology, Electrical Discharge Machining, Water Jet Machining etc.)