University of Debrecen
Faculty of Engineering

Student Research Conference

Faculty of Engineering

6 november 2026, 09:00

Programme – for presentations in english

09:00	Opening (Room A.4.12.)
09:30	Discussion for Department secretaries (as needed, Room A.4.12.)
09:30	Preparation for students in the session rooms
10:00-	Presentation in the rooms (according to the announcements)
11:00 - continous	Collection of results of each sessions (Room A.3.18.)
13:00-14:00	Sandwich lunch for jury members and participating students (Room A.4.12.)
approx. 15:00	Announcement of results and presentation of certificates to students (Room A.4.12)

The 10-minute presentations are followed by a 5-minute discussion.

This is an excerpt from the Hungarian-language conference program, listing only those sessions that include presentations in English.

Civil Engineering session

Organized by the Department of Civil Engineering

Department secretary: Dr. habil Éva Lovra
Place: DE MK A.2.15.

Chair: Dr. Imre Kovács
Members: Dr. habil Zoltán Bereczki
Attila Vámosi

Student listener: Evelin Szabó

	Name	Thesis title
1	Camila Nicole Ceron Rivera / Zhang Jingjie	From City Center to Factory Gates: Assessing Pedetrian Network Integration in a Rapidly Industrialising City, Debrecen
2	Aytakin Jalilova	Historical Transformation of Urban Structures: A Morphological Analysis for Contemporary Development in the Case of Baku, Azerbaijan
3	Molnár Szabolcs	Optimális csavarkép kialakítása a homloklemezes gerendatoldás nyomatéki ellenállásának maximalizálásához
4	Lukács Péter	Forgalmi csomópontok gyalogosokat visszatartó hatásának vizsgálata, kiemelt tekintettel az időveszteségen és a metabolikus energiafogyasztáson alapuló kiértékelésre

Engineering Management session

Organized by the Department of Engineering Management

Department secretary: Prof. Dr. Domician Máté
Place: DE MK A.0.09.

Chair: Dr. habil Andrea Matkó
Members: Dr. László Pusztai
Zsolt Buri

Student listener: Flóra Forbauer

	Name	Thesis title
1	Allison Giseth García Garzón / Eunsu Kim	Sports Footwear Design for Injury Risk Reduction: Engineering Principles and Cross-Sport Applications
2	Bongo Bokoa Kosa	Validation Gate Design in Regime-Adaptive Trading Systems
3	Nagy Adrián Gergely	Emulziós hidrogél rendszer fejlesztése gyógyszerhordozási alkalmazáshoz
4	Zhang Kaiyuan	Sports in Which Women Use Chest Protectors and the Potential of 3D Printed, Custom Fit Breast Protectors

Environmental Engineering Session 1

Organized by the Department of Environmental Engineering

Department secretary: Dr. Bianka Sipos
Place: DE MK A.1.14.

Chair: Dr. Edina Baranyai, UD FST
Members: Dr. Balázs Kulcsár
Dr. Tamás Magyar, UD FAFSEM

Student listener: Panna Biró

	Name	Thesis title
1	Nguyen Le Khanh Huyen	Assessing Flood Mitigation of Green Infrastructure in the Vinh River Corridor using the SCS-CN Method
2	Osakwe Nmesoma Chukwukadibia	Investigation Of Electric Vehicle Influence On Road Traffic Noise
3	Nóra Kaczur	Különböző adszorbensek használata a szürkevíz kezelésében
4	Gyöngyvér Boglárka Nusser	Alternatív növénytermesztés a vízszűkösség korában Ivóvíz és szürkevíz alapú hidropóniás tornyok vízlábnyomának számítása
5	Anna Spisák	Szintetikus szürkevizek természetes eredetű koagulánsokkal történő kezelésnek vizsgálata

Mechatronics and Computer Engineering session 1

Organized by the Electrical Engineering and Mechatronics Department

Department secretary: Dr. Kornél Sarvajcz
Place: DE MK B.2.09.

Chair: Dr. Sándor Piros
Members: Taleb Mayar Abdullah Abdo
Dániel Vígh

Student listener: Botond Oláh

	Name	Thesis title
1	Asswiel Mosfer Fayez Salem	Designed of Industrial Delta-Parallel Mechanism for Advanced Pick & Place Procedure
2	David Pani	Path planning algorithms for companion robots
3	Manuel Afonso Fernandes Junior	Embedded Owner Following on an Ackermann Robot: Adapting FollowMe with Multi-View Re-Identification and LiDAR-Assisted Owner Keeping
4	Muhammad Nuruddin Bin Muktaruddin	Automated Verification and Instrument Based Characterization of FPGA Serial Communication Interfaces: A Simulation to Hardware Correlation Framework
5	Nour El Aziz Jeridi	Audio-Visual Sound Event Localization and Detection Using Vision-Coupled FA3-Net for Real-Time Applications
6	Urala Rasanjana Waidyanatha	Validation of Distibuted Control Barrier Function for Multi-Robot Coordination Under Communication Delays
7	Yooha Binth Ali Nasheed	Design, Kinematic Analysis and Trajectory Planning of a 4-DoF Linear Delta Parallel Robot using Onshape and matlab
8	Shatov Georgiy	Worskpace Mapping and Motion Analysis of FANUC ER-4iA Industrial Robot in MATLAB/Simscape Multibody environments

Mechanical Engineering Session 2

Organized by the Department of Mechanical Engineering

Departmental Secretary: Dr. Sándor Bodzás
Place: DE MK A.0.15.

Chair: Dr. Dávid Huri
Members: Khaleel Alkhateib
Dániel Nemes

Student listener: Csaba Viktor Szopkó

	Name	Title of the Student Research Paper
1	Akope Maxwel Van	Manufacturing and Connection Analysis of a pair of spur gear
2	Kezia Lima Gascoigne	Rubber Bumper Optimization based on Machine Learning
3	Geffery Muhammad Mahirul Alam	Geometric design and FEM analysis of a circular form tool
4	Vajda Péter	Hengeres testek mártó-bevonása
5	Gulyás Szabolcs	A kitozán jelenlétének hatása a citromsavval és L-argininnel módosított nanoszálas PVA-szálhálók deformációs és energiafelvételi viselkedésére

Vehicles Engineering session

Organized by the Vehicles Engineering Department

Department secretary: Zoltán Telepóczki
Place: DE MK A.3.16.

Chair: Dr. Péter Szemes
Members: Dr. Zsolt Tiba
Dr. József Kertész

Student listener: Sándor Király

	Name	Thesis title
1	Abdullah Sayeed	A 1D Aerothermodynamic Model for Predicting Total Pressure Gain and Injector Losses in Rotating Detonation Combustors
2	Farha Hossain	Comparative Structural Mechanics, Bending Stress, and Fatigue Life Analysis of Isolated Trapezoidal and Delta Wing Geometries for High-Speed Fighters
3	Muntasir Bin Fakhrul	Airspace Congestion And Solutions: Case Study, Data Analysis And Integration Of Ai And Machine Learning In Aviation'
4	Mehedi Hasan Hridoy	Assessment of Flight Safety Margin Degradation in Iced NACA 2412 Airfoil