



University of Debrecen

Faculty of Engineering

**Conference of Scientific Students' Association Faculty of
Engineering: 21 november 2025, 09:30**

Programme – for presentations in english

09:30		preparation for students in the session rooms
09:30		Discussion for Department secretaries (as needed 323)
10:00-		Presentation in the rooms (according to the announcements)
from 11:00 - continous		Discussion for Jury and Scientific Committee members
approx. 13:00		Announcement of the results, Ground floor „U” aula

Civil Engineering – Urban Systems Engineering – Engineering Management and Enterprise

Organized by the Department of Civil Engineering and the Department of Engineering Management and Enterprise,

Department secretaries: Dr. habil Lovra Éva, Prof. Dr. Máté Domicián
Place: Room 216

Chair: Prof. Dr. Csomós György
Members: Dr. Matkó Andrea, Dr. Jenei Tünde, Pataki Beáta

Student member: Jávorszki Vivien and Rocska Gergő (students) UD FE

	name	Thesis title
10:00	opening	
10:10-10:25	Tompos Vivien Brigitta	Tavakon lebegő szigetek tervezése
10:25-10:40	Leskó Balázs Tamás	PEM elektrolízis és zöld hidrogén injektálásának környezeti és gazdaságossági vizsgálata
10:40-10:55	Juhász Flóra Anna	Fenntartható menedzsment – A női vállalatvezetés és a nemzeti kultúra összefüggéseinek vizsgálata
10:55-11:10	Gál Dávid	Mérési pontosság vizsgálata ingyenesen elérhető ortofotón
11:10-11:25	Jayawardana Ralalage Miyunadi Devindi Jayawardana	The Influence of Urban Morphology on Contemporary Mobility Patterns in Asian Colonial Cities: a Study of Kandy, Sri Lanka

Mechanical Engineering I

organized by the Department of Mechanical Engineering

department secretary: Dr. Sándor Bodzás, associate professor

place: Robert Bosch laboratory

chair: Dr. Sándor Bodzás, associate professor

member: Dr. Sándor Pálincás, collage associate professor

István Domokos, assistant lecturer

Cintia Sajben, B.Sc. student

	Name	Thesis title
10:00-10:15	Kezia Lima Gascoigne	Finite element investigations of axisymmetric rubber bumper
10:15-10:30	Sangov Shukrullo	Rubber bumper shape optimization using particle swarm optimization algorithm
10:30-10:45	Tabassum Tasnim Promy	Predicting rubber bumper behavior using inverse material model calibration.
10:45-11:00	Omar Al Aqrabawi	Shape optimization of a rubber bumper with a genetic algorithm
11:00-11:15	Csajbók Imola Lenke	Járműparaméterek mérése járműdinamikai modell validálásához

Mechanical Engineering II

organized by the Department of Mechanical Engineering

department secretary: Dr. Sándor Bodzás, associate professor

place: Emerson laboratory

chair: Dr. Sándor Manó, associate professor

member: Dr. Andrea Keczánné Üveges, senior research associate

Gábor Balogh, master teacher

Lilla Török, B.Sc. student

	Name	Thesis title
10:00-10:15	Mokaya Ian Momanyi	Complex geometric and manufacturing analysis of a mechanical wire bending machine
10:15-10:30	KM Euphe Hassan	Surrogate model based parameter tuning of Tabu Search Algorithm for the shape optimization of automotive rubber bumpers
10:30-10:45	Maliha Binte Hasan	Machine learning-based investigation of the compressive behavior of ti6al4v lattice structures
10:45-11:00	Tazrian Kabir Arwa	A multistage approach to the design and analysis of a flat form tool and its clamping device
11:00-11:15	Ahnaf Habib	MATLAB-based finite element solver for 2D prismatic beams: an educational approach

Vehicle Engineering

organized by Department of Vehicles Engineering

department secretary: Jozsef Kertesz

location: University of Debrecen Faculty of Engineering classroom No413. (4028 Debrecen Otemeto str.2-4.)

chair: Dr. Peter Szemes

members: Zoltan Telepoczki, Jozsef Kertesz

student member: Miklos Kovacs

Appointment	Name	Thesis title
10:00-10:15	Shruti Sharma; Ayaan Faeiz; Qasem Zakaraya Albadwi	Additive Manufacturing Morphing Wing Prototype for UAV and Aircraft Applications
10:15-10:30	Muhammad Aqib Hussain; Qasem Zakarya	A Low Cost, CPU Based Approach to Vision Driven Autonomous Navigation Using Behavioral Cloning and TinyML Optimizaton
10:30-10:45	Thidaphone Khounmanyketh	Vehicle Traction Battery Modelling
10:45-11:00	Osváth Zsombor	LiDAR szenzor mérési eredményeinek javítása különböző időjárási körülmények esetén

Environmental Engineering 1.

organized by the Department of Environmental Engineering,

department secretary: Dr. Alexandra Truzsi, assistant professor, UD FE, Department of Environmental Engineering
place: 319. room

chair: Dr. Ildikó Bodnár, college professor, UD FE, Department of Environmental Engineering

member:

Dr. Herta Mária Czédli, associate professor, UD FE, Department of Civil Engineering

Dr. Dóra Beáta Buzetzy, assistant professor, UD FE, Department of Environmental Engineering

student member: Liliana Soós, UD FE

	Name	Thesis title
10:00-10:15	Kiss Virág	Hidropóniás rendszerben termesztett vízitorma elemtartalma
10:15-10:30	Nusser Gyöngyvér Boglárka	Fürdővíz, mint szürkevíz újrahasznosításának lehetősége mikrozöld-termesztésben – a brokkoli és a búza példáján
10:30-10:45	Magaia Viviane Judite Carlos	Chemical pathways to sustainable energy: analysis of waste-to-energy, bioenergy, and sunfuel technologies
10:45-11:00	Muctaru Mohame Abubakarr Bellay	Integrated management of water and energy resources at community level to enhance sustainability of mount aureol