



UNIVERSITATEA
AUREL VLAICU
din ARAD



Facultatea de
Inginerie

Sesiunea internațională de comunicări științifice studențești a Facultății de Inginerie UAV

PROGRAM

7-9 MAI 2026

The International Students Scientific Communications Session of the Engineering Faculty of Aurel Vlaicu University from Arad is in its 28th edition.

As always, the main purpose is to offer students the opportunity to demonstrate their knowledge and skills in different branches of engineering: automatic control, automobiles, mechanics, or IT, through original scientific papers resulting from innovative and creative research.

This session of scientific communication helps undergraduate, master's, and doctoral students from different universities in Romania and abroad to exchange opinions and knowledge, to establish future collaborations, to make friends, and to get tips from the best in the field.

The participation diplomas and the prizes for the best works that will be awarded to the participants will be an added bonus to their resumes. Participation in the competition is challenging and beneficial for the professional evolution of the students.

Sesiunea internațională de comunicări științifice studențești a Facultății de Inginerie din cadrul Universității "Aurel Vlaicu" din Arad se află la a XXVIII-a ediție.

Ca întotdeauna, principalul ei scop este de a oferi studenților oportunitatea de a-și demonstra cunoștințele din domeniile ingineriei, mecanicii, informaticii și energeticii, cu aplicabilitatea lor prin realizarea unor lucrări științifice care să le pună în evidență eforturile creative și intelectuale.

Această sesiune de comunicări științifice este un prilej pentru studenții din diversele centre universitare, atât din țară, cât și din afara țării, de a schimba păreri, opinii, cunoștințe, de a lega colaborări viitoare, prietenii și de a primi sfaturi de la cei mai buni în domeniu, doctoranzi, masteranzi și profesori din mediul academic național și internațional.

Diplomele care vor fi oferite participanților, diplome de participare sau de premieră pentru cele mai bune lucrări, vor putea constitui un plus în CV-ul personal al studentului. Competiția între studenții participanți la sesiunile de comunicări este benefică și poate constitui un mod de afirmare în evoluția profesională a studentului.

Comitete

Comitet Consultativ:

- Rector: Ramona Lile
- Prorector: Alexandru Popa
- Prorector: Codruta Stoica
- Decan - Facultatea de Inginerie: Corina Mnerie
- Prodecan: Tiberiu Mănescu
- Prodecan: Adina Bucevschi
- Director de departament: Andrei Komjaty

Comitet stiintific:

- Acad. Florin Gheorghe Filip (Romania)
- Valeriu Beiu (Romania)
- Lakhmi C. Jain (Australia)
- Anca Ralescu (USA)
- Dan Ralescu (USA)
- Guojun Wang (China)
- Bernadette Bouchon-Meunier (Franta)
- Tsung-Chih Lin (China)
- Octavian Proștean (Romania)
- Oana Geman (Suedia)
- Ankur Gupta (India)
- Valeriu Ungureanu (Republica Moldova)
- Muhammad Waseem Ashraf (Pakistan)
- Simona Dzițac (Romania)
- Egri Angela (Romania)
- Riurean Simona (Romania)
- Cornelia Victoria Anghel Drugarin (Romania)
- Kristijan Cincar (Serbia)
- Gabor Kiss
- Gelu Ovidiu Tirian (Romania)
- Mariana Nagy (Romania)
- Rajeeb Dey (India)
- Seshadhri Srinivasan (India)
- Muhammad Waseem Ashraf (Pakistan)
- Amira Ashour (Egipt)
- Fuqian Shi (China)
- Barnali Dey (India)
- Krit Salahddine (Maroc)
- Ranbir Batth (Australia)
- Muhammad Imran Tariq (Pakistan)
- Aurelia Natalia Darau (Romania)
- Clara Rohatinovici (Romania)
- Noemi Rohatinovici (Romania)

- Marius Buzera (Romania)
- Maria Petcuț (Romania)
- Maria Mureșan (Romania)
- Florina Pasculescu (Romania)
- Carmen Rus (Romania)

Comitet de organizare:

1. Automatizări, Inginerie Electrică si Informatică Aplicată:

- Marius M. Bălaș
- Valentina E. Bălaș
- Valentin Muller
- Cornel Barna
- Corina Mnerie
- Petcuț Flavius-Maxim
- Daniel Dragu
- Cătălin Crișan
- Mihaela Popa
- Daniel Alexuță
- Tania Bogdana Gavrilă
- Anca Petcut-Lasc
- Dan Radulescu

2. Inginerie Industrială și Autovehicule Rutiere:

- Liviu Sevastian Bocîi
- Dan Ovidiu Glăvan
- Adriana Moțica
- Tiberiu Mănescu
- Florin Bulzan
- Lucian Gal
- Aurelia Tănăsoiu
- Laurențiu Jitaru
- Lavinia Culda
- Adriana Micșa
- Stela Wisznovszky
- Andrei Komjaty
- Geza Erdodi
- Attila Gerocs
- Sorin Igreț
- Radu Negrilă
- Theoharis Babanatsas
- Roxana Babanatsas
- Andrei Komjaty
- Mircea Raul Bogdan

3. Inginerie Economică Industrială:

- Ionel Barbu
- Alexandru Popa
- Adina Bucevschi
- Magdalena Fogorași
- Cecilia Sîrghie
- Monica Szabo
- Monica Pustianu

Program

Joi, 07.05.2026

Ora 12:00 – 20:00 – Primirea invitatilor de la alte centre universitare si vizita laboratoare.

Vineri, 08.05.2026

Ora 9:00-9:30 Deschiderea festivă a conferinței, Corp M, etaj III, sala 330

Ora 9:30-10:00 Cuvinte de bun venit, prezentari plenare

Ora 10:00 – 12:30 - Sesiuni paralele: profil electric, profil mecanic, textil, elevi

Ora 10:00 – 12:30 – Sesiune online: profil electric, profil mecanic, textil

Ora 12:30 – 13:00 – Vizita la laboratoare

Ora 13:00 14:00 – Pauza de masa

Ora 14:00 – 18:00 – Sesiune studenți masteranzi si doctoranzi

Ora 14:00 - 18:00 - Sesiuni paralele: profil electric, profil mecanic, textil, elevi

Sambata, 09.05.2026

Ora 9:00 – 15:00 Vizita la obiective turistice pentru invitați

Plecarea participantilor

SESIUNI PARALELE

Sectiunea: Automatică, Calculatoare și Inginerie Electrică

Vineri, 08.05.2026, 10:00-12:30 și 14:00-18:00

Sala M321

Comisia de evaluare:

Președinte: Prof.habil.dr.ing. Valentina E. Bălaș

Membri: Prof.habil.dr.ing. Marius M. Bălaș
Conf.dr.ing. Valentin Muller
Conf.dr.ing. Cornel Barna
S.I.dr.ing. Corina Mnerie
Ș.I.dr.ing. Flavius-Maxim Petcuț
S.I. dr. ing. Daniel Dragu
Ș.I.dr.ing. Catalin Crișan
Asist. drd. ing. Mihaela Popa

Secretar: Asist. drd. Tania Gavrilă
Asist. drd. ing. Daniel Alexuță

Vineri, 08.05.2026		
Nr. crt.	Titlul lucrării	Autor, programul de studii, anul Coordonator Afiliere
1.	NeuroPolygraph – The Architecture of an Intelligent System Based on Neural Networks and an AI Agent for the Automatic Scoring of Polygraph Tests	Author: Daniel Balas Timar, “Aurel Vlaicu” University of Arad, AIA II Coordinator: Rad Dana, Valentina E. Bălaș
2.	Engineering Cheat Sheet Tool (ECS Tool)	Author: Ungureanu Erika-Maria, “Aurel Vlaicu” University of Arad, AIA III Coordinator: Dragu Daniel
3.	Your Virtual Assistant on Discord, Gion	Author: Mărienuțiu Marian Ilie, “Aurel Vlaicu” University of Arad, AIA III Coordinator: Dragu Daniel
4.	Design of a Three-Phase Inverter for Brushless Motors with Hall Sensors	Author: Butnaru Petrică, “Aurel Vlaicu” University of Arad, AIA IV Coordinator: Bălaș Marius
5.	Traffic light controlled with Arduino UNO	Author: Funica Maxim, “Aurel Vlaicu” University of Arad, AIA III Coordinator: Dragu Daniel
6.	Sentrix Shield - tool for detecting threats against Windows endpoints	Author: Căbău Natan, “Aurel Vlaicu” University of Arad, AIA III

		Coordinator: Bălaș E. Valentina
7.	Smart Watering System for Plants	Author: Anicăi Dorina, “Aurel Vlaicu” University of Arad, AIA III Coordinator: Dragu Daniel
8.	Design of a mechatronic system for a water circuit in a thermal power plant	Author: Botezatu Iulian Dimitrie, “Aurel Vlaicu” University of Arad, AIA III Coordinator: Mișsa Adriana
9.	TANKULETZ	Author: Marienutiu Marian, “Aurel Vlaicu” University of Arad, AIA III Coordinator: Mișsa Adriana
10.	Automatic irrigation system	Author: Sold (Soica) Valentina Ioana, “Aurel Vlaicu” University of Arad, AIA III Coordinator: Mișsa Adriana
11.	Automatic root vegetable cutting system	Author: Ungureanu Erika, “Aurel Vlaicu” University of Arad, AIA III Coordinator: Mișsa Adriana
12.	Dual Axis Sun Tracker	Author: Uncu Darian, Gruia Denisa, “Aurel Vlaicu” University of Arad, AIA IV Coordinator: Petcut Flavius-Maxim
13.	Muzic Genre Recognition based on Fuzzy Logic	Author: Toderaș Stefan-Marius, Ianc Adrian, “Aurel Vlaicu” University of Arad, AIA IV Coordinator: Gavrilă Bogdana-Tania
14.	Overcoming FPV Limits with GPS Navigation	Author: Ianc Adrian, Toderaș Stefan-Marius, “Aurel Vlaicu” University of Arad, AIA IV Coordinator: Bălaș Marius
15.	Digital PID Controller Design Discrete-Time Design and Implementation	Author: Eduardo Garcia, “Aurel Vlaicu” University of Arad Coordinator: Petcut Flavius-Maxim
16.	Intelligent Mobile Robot	Author: Roman Sebastian-Ioan, “Aurel Vlaicu” University Of Arad Coordinator: Petcut Flavius-Maxim
17.	Real-Time Embedded Game with AI Performance Analysis	Author: Uncu Darian, Gruia Denisa, “Aurel Vlaicu” University Of Arad, AIA IV Coordinator: Gavrilă Bogdana-Tania
18.	Battery Autonomy of an Electric Scooter	Author: Butnaru Petrică, “Aurel Vlaicu” University of Arad, AIA IV Coordinator: Bălaș Marius
19.	Smart Parking System	Author: Elhilali Khalid, “Aurel Vlaicu” University of Arad, Erasmus Coordinator: Bălaș Marius
20.	Design of a Financial Trade System using UML	Author: Garcia Pina Eduardo, “Aurel Vlaicu” University of Arad, Erasmus Coordinator: Bălaș Marius
21.	Intelligent Microclimate Control System for Vine Forcing Using Fuzzy Logic and Cascade Control	Author: Ille Valeriu, “Aurel Vlaicu” University of Arad, AIA IV Coordinator: Bălaș Marius

22.	Case Study of Valid Options in UML Diagramming	Author: Mărienuțiu Mariani și Ungureanu Erika, “Aurel Vlaicu” University of Arad, AIA III Coordinator: Bălaș Marius
23.	Design and Implementation of a Dual-Axis Solar Tracking and Charging System	Author: Negrean Cornelia, “Aurel Vlaicu” University of Arad, AIA IV Coordinator: Bălaș Marius
24.	Library Management System	Author: Nguewou Tchamdjeu Naomi, “Aurel Vlaicu” University of Arad, Erasmus Coordinator: Bălaș Marius
25.	Task Manager for Efficient Task Organization	Author: Yalçın Miray, “Aurel Vlaicu” University of Arad, Erasmus Coordinator: Bălaș Marius
26.	Acquisition Setup for 360 Degrees Ultra Sound Sensing	Author: Valentin Ciuvica, Spiru Haret University of Bucharest Coordinator: Nicolaie Popescu-Bodorin
27.	Modeling And Control of Processes in an Automated Hi-Day-Type Warehouse for Cheese Ripening	Author: Ușvat Ana-Maria, “Aurel Vlaicu” University of Arad, AIA IV Coordinator: Bălaș Marius
28.	Artificial Intelligence and Neural Network-Based Control for an Educational Humanoid Robot	Author: Turnescu Loredan, Cîrpaci Ioan, “Aurel Vlaicu” University of Arad Coordinator: Bălaș Marius
29.	Controlul automat al temperaturii într-un circuit de încălzire cu apă folosind platforma Arduino și tehnologia inducției.	Author: Ilie Alexuță, “Aurel Vlaicu” University of Arad Coordinator: Valentina Emilia Bălaș și Daniel Dragu

Sectiunea: Inginerie industrială și Autovehicule Rutiere

Vineri, 08.05.2026, 10:00-12:30 si 14:00-18:00

Sala M326

Comisia de evaluare:

Președinte: Prof.habil.dr.ing. Liviu Sevastian Bocîi

Membri: Prof.dr.ing. Adriana Moțica
Conf.dr.ing. Dan Glavan
Conf.habil.dr.ing. Tiberiu Manescu
Ș.l.dr.ing. Stela Wisznovszky
Ș.l.dr.ing. Lavinia Culda
Ș.l.dr.ing. Adriana Micșa
Ș.l.dr.ing. Aurelia Tanasoiu
S.l.dr.ing. Komjaty Andrei
Ș.l.dr.ing. Theoharis Babanatsas
Ș.l.dr.ing. Roxana Babanatsas
Ș.l.dr.ing. Bogdan Tanasoiu
S.l.dr.ing. Gerócs Attila

Secretar: As.dr.ing. Mircea Raul-Bogdan

Nr. crt.	Titlul lucrării	Autor, programul de studii, anul Coordonator Afilieră
1.	Diagnosing wear in automobile engines by measuring the pressure or flow of gases escaping from the crankcase	Author: Novanc Nicu / Borlan Radu, AR II Coordinator: Wisznovszky Elena Stela, Erdodi Geza Mihai
2.	Static and dynamic diagnostics of the gas distribution mechanism in automobile engines	Author: Stejereanu Mircea / Lontea Angelo, TCM-II Coordinator: Wisznovszky Elena Stela, Gerocs Attila
3.	Study of the LWB Steinl VCRS-T 300/36 hydraulic press	Author: Komjaty Daniel UPTimisoara, Popa Ovidiu Dumitru UAV- TCM II Coordinator: Wisznovszky Elena Stela, Gerocs Attila
4.	Crane with two hydraulic cylinders	Autor: Kolman David Norbert, II TCM Coordinator: Wisznovszky Elena Stela
5.	Thermodynamic and Functional Analysis of Hennecke TopLine HK Polyurethane Foaming Machine	Author: Ioanovici Claudiu, TCM II Coordinator: Wisznovszky Elena Stela, Komjaty Andrei

6.	Solar panel structure designed in SolidWorks – Weldment	Author: Pop Paul Călin, IS II, Coordinator: Wisznovszky Elena Stela
7.	Designing a manufacturing line for the “Headlight Control Module”	Autor: Basalmalic Catalin Dumitru, III TCM Coordinator: Culda Lavinia Ioana
8.	Production Management within Yazaki Arad	Autor: Balan Ioan Radu, III TCM Coordinator: Culda Lavinia Ioana
9.	Seat belt testing equipment and operating principle	Autor: Buciuman Anita Rebeca, III TCM Coordinator: Culda Lavinia Ioana
10.	Q-Gate Workstation	Autor: Burta Alexandra Lavinia, III TCM Coordinator: Culda Lavinia Ioana
11.	Galvanized Profiles	Autor: Drig Denisa Debora, III TCM Coordinator: Culda Lavinia Ioana
12.	Testing a Reflow Oven	Autor: Drîgla Dumitru Constantin, III TCM Coordinator: Culda Lavinia Ioana
13.	MiR Robots	Autor: Lovin Liviu, III TCM Coordinator: Culda Lavinia Ioana
14.	Auxiliary components of the extrusion flow	Autor: Marcu Dumitru, III TCM Coordinator: Culda Lavinia Ioana
15.	Metal X 3D Printer	Autor: Morar Nicola-Adrian, III TCM Coordinator: Culda Lavinia Ioana
16.	Implementing Jet Printing and 3D Inspection Technologies in Rapid Validation of Solder Alloys for Automotive Electronic Modules	Autor: Onea Elisabeta Mariana, Homicianu Alexandrina, III TCM Coordinator: Culda Lavinia Ioana
17.	Automotive Fuse Box Design	Autor: Opincă Benjamin, III TCM Coordinator: Culda Lavinia Ioana
18.	The Use of 3d Printing in Industry	Autor: Suciu Robert-Doru, III TCM Coordinator: Culda Lavinia Ioana
19.	District Heating Systems (DHS)	Autor: Vujdeu Ioan-Flavius, III TCM Coordinator: Culda Lavinia Ioana
20.	Automotive body manufacturing technology	Autor: Ancuța Mădălina-Elena, Dominic Dârlea , Erdei Mircea-Ștefan , Ficu Andrei-Ionuț, IV AR Coordinator: Tănăsoiu Aurelia
21.	Engine Assembly Animation	Autor: Batrin Sergiu Mihnea, Iancu Alexandru, Saplacan Denis, II AR Coordinator: Micșa Adriana
22.	Robot	Autor: Rus Robert Andrei, II AR Coordinator: Micșa Adriana
23.	Industrial Robot	Autor: Susca Bogdan, II AR Coordinator: Micșa Adriana
24.	Robot operating at height	Autor: Susca Matia Mihai, II AR Coordinator: Micșa Adriana

25.	Integration of Artificial Intelligence in Driver Assistance and Vehicle Dynamics	Autor: Dârlea Dominic, Ancuța Mădălina Elena, Erdei Ștefan Mircea, IV AR Coordinator: Tănăsoiu Aurelia
26.	Study on the Camshaft in Internal Combustion Engines	Autor: Erdei Ștefan Mircea, Dârlea Dominic, Ancuța Mădălina Elena, IV AR Coordinator: Tănăsoiu Aurelia
27.	Four-Piston Engine	Autor: Barlau Raul, II TCM Coordinator: Micșa Adriana
28.	Simulation of Fluid Motion in a Semi-Closed Circuit	Autor: Barlau Raul, II TCM Coordinator: Micșa Adriana
29.	Cardan Mechanism	Autor: Buzea Marian, II TCM Coordinator: Micșa Adriana
30.	Simulation of Fluid Motion and Analysis of the Corresponding Characteristic Parameters Inside a T-Shaped Pipe	Autor: Buzea Marian, II TCM Coordinator: Micșa Adriana
31.	Crank-connecting Rod Mechanism	Autor: Herbei Alexandra, II TCM Coordinator: Micșa Adriana
32.	Aircraft Engine	Autor: Ioanovici Florin Claudiu, II TCM Coordinator: Micșa Adriana
33.	Simulation of flow in a windmill	Autor: Ioanovici Florin Claudiu, II TCM Coordinator: Micșa Adriana
34.	Simulation of the motion of a crank-connecting rod mechanism	Autor: Iovuta Denis, II TCM Coordinator: Micșa Adriana
35.	Motion of an engine piston	Autor: Micula Casian, II TCM Coordinator: Micșa Adriana
36.	Three-pulley mechanism	Autor: Scheplein Alin, II TCM Coordinator: Micșa Adriana
37.	Isometric scanner OpticView	Autor: Pop Paul Calin, II TCM Coordinator: Micșa Adriana
38.	Real-Time Detection of Cutting Tool Wear	Autor: Komjaty Daniel, Radu Teodor Casian, TCM Coordinator: Babanatis Theoharis
39.	The Technical Importance in the Tire Changing Process	Autor: Ficu Andrei-Ionuț, Dominic Dârlea, Ancuța Mădălina-Elena, Erdei Mircea-Ștefan, IV AR Coordinator: Tănăsoiu Aurelia
40.	Design and Development of a Profile Notching Device for Automotive Elastomer Components	Author: Claudiu BAIAS, Dennis FRENȚIU, Titus FRENȚIU, Alexandru MINA, Marian DURBACĂ, Luca MERĂUȚĂ, Alexandru POSA, Marius TOLAN, Alexandru TRIFA, Coordinator: Codruța STOICA, Gabriel VASILESCU
41.	Mechanical Punching System with Pneumatic Actuation Used in the Automotive Component Industry	Author: Claudiu BAIAS, Dennis FRENȚIU, Titus FRENȚIU, Alexandru MINA, Marian DURBACĂ, Luca MERĂUȚĂ, Alexandru POSA, Marius TOLAN, Alexandru TRIFA,

		Coordinator: Codruța STOICA, Gabriel VASILESCU
42.	Bridges of Sustainability: Engineering Excellence Built on Responsibility in Occupational Safety and Health	Author: Claudiu BAIAS, Dennis FRENȚIU, Titus FRENȚIU, Alexandru MINA, Marian DURBACĂ, Luca MERĂUȚĂ, Alexandru POSA, Marius TOLAN, Alexandru TRIFA, Coordinator: Codruța STOICA, Gabriel VASILESCU
43.	Optimization of Industrial Processes Through the Implementation of Automatic Pneumatic Clamping on a Vise – A Robotic Approach	Author: Claudiu BAIAS, Dennis FRENȚIU, Titus FRENȚIU, Alexandru MINA, Marian DURBACĂ, Luca MERĂUȚĂ, Alexandru POSA, Marius TOLAN, Alexandru TRIFA, Coordinator: Codruța STOICA, Gabriel VASILESCU

Energii Regenerabile, Automatică, Calculatoare și Inginerie Electrică

Vineri, 08.05.2026, 10:00-12:30

Sala M304

Comisia de evaluare:

Președinte: Prof.habil.dr.ing. Valentina E. Bălaș

Membri: Prof.habil.dr.ing. Marius M. Bălaș
Conf.dr.ing. Valentin Muller
Conf.dr.ing. Cornel Barna
Conf.dr.ing. Simona Dzițac
Conf.dr.ing. Angela Egri
Conf.dr.ing. Rîurean Simona
S.I.dr.ing. Cornelia Victoria Anghel-Drugărin
S.I.dr.ing. Corina Anca Mnerie
Ș.I.dr.ing. Flavius-Maxim Petcuț
Ș.I.dr.ing. Catalin Crișan
S.I.dr.ing. Daniel Dragu
Ș.I.dr.ing. Andreea-Amalia Minda
Asist drd.ing. Mihaela Popa
Prof.dr.ing. Marius Buzera
Prof.drd.ing. Kristijan Cincar (Serbia)
Prof.ing. Milan Njegomir (Serbia)

Secretar: Asist drd. Tania Bogdana Gavrilă
Asist drd. ing. Daniel Alexuță

Nr. crt.	Titlul lucrării	Autor, programul de studii, anul Coordonator Afiliere
1.	Smart Energy Management System	Author Mehmet Melih Çağlayık, “Aurel Vlaicu” University Of Arad, Erasmus Coordinator: Bălaș M. Marius
2.	Transformer-Based Temporal Encoder for Epileptic Seizure Prediction Using EEG Signal	1. MSc. Thi-Cuc Bui. PHENIKAA School of Engineering, PHENIKAA University, Vietnam 2. Thi Thu Ha Nguyen. PHENIKAA School of Engineering, PHENIKAA University, Vietnam 3. Pranathi Deshmukh. Stanley College of Engineering & Technology for Women, India Coordinator: Prof. Vijender Kumar Solanki. Stanley College of Engineering & Technology for Women, India
3.	Data Augmentation Strategies for Medical	1. Dr. Van-Toi NGUYEN. PHENIKAA School of Engineering, PHENIKAA University, Vietnam

	Image Segmentation: A Review	2. Van-An Tran. PHENIKAA School of Engineering, PHENIKAA University, Vietnam 3. K Keerthana. Stanley College of Engineering & Technology for Women, India Coordinator: Prof. Vijender Kumar Solanki. Stanley College of Engineering & Technology for Women, India
4.	Acquisition Setup for 360 Degrees Ultra Sound Sensing	Author: Valentin Ciuvica, 2nd year Student, Department of Engineering and Computer Science, Spiru Haret University of Bucharest, Coordinator: Nicolaie Popescu-Bodorin, Department of Engineering and Computer Science, Spiru Haret University of Bucharest
5.	Pre trained trajectory tracking of Geomagic Omni Robotic Manipulator	Author: Srinjoy Chowdhury Coordinator: Rajeeb Dey National Institute of Technology Silchar, India
6.	Development of a Python-Based Application System for Library Management Using SQLite	Author: Cuciureanu Sebastian, Facultatea de Inginerie, Universitatea Babeş-Bolyai Cluj-Napoca, Informatică Industrială IV Coordinator: Cornelia Anghel-Drugărin
7.	Internet of Things (IoT) Applications in Monitoring and Optimizing CNC Machining Processes	Author: Gîrban Sebastian-Cristian, Facultatea de Inginerie, Universitatea Babeş-Bolyai Cluj-Napoca, Informatică Industrială IV Coordinator: Cornelia Anghel-Drugărin
8.	Artificial Intelligence and Neural Network-Based Control for an Educational Humanoid Robot	Author: Claudiu BAIAS, Dennis FRENȚIU, Titus FRENȚIU, Alexandru MINA, Marian DURBACĂ, Luca MERĂUȚĂ, Alexandru POSA, Marius TOLAN, Alexandru TRIFA, Coordinator: Anca PETCUȚ LASC, Marius BĂLAȘ, Gabriel VASILESCU, Codruța STOICA
9.	Intelligent Analysis of Household Appliance Energy Consumption Using Modern Data Processing Techniques	Author: Țuțu Filip, Trifu Oscar, Veres Dávid, University Of Oradea Coordinator: Dzițac Simona
10.	The Dynamics of Global Energy Security in The Context of Geopolitical Conflicts – Implications, Vulnerabilities, and Current Case Studies	Author: Veres Dávid, Trifu Oscar, Ardelean Daria, University Of Oradea Coordinator: Dzițac Simona
11.	Energy Storage Methods and Their Role in The Integration of Renewable Sources: Case Study	Author: Trifu Oscar, Ardelean Daria, Veres Dávid, University Of Oradea Coordinator: Dzițac Simona

12.	A Comparison of High-Power Electrical Machines For Use in A Pumped-Storage Hydropower Plant	Author: Țuțu Filip, University Of Oradea Codinator: Dzițac Simona
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Sectiunea: Studenți masteranzi și doctoranzi**Vineri, 08.05.2026, 14:00-18:00****Sala M321**

Comisia de evaluare:

Președinte: Prof.habil.dr.ing. Valentina E. Bălaș

Membri: Prof.habil.dr.ing. Marius M. Bălaș
Conf.dr.ing. Valentin Muller
Conf.dr.ing. Cornel Barna
Conf.dr.ing. Simona Dzițac
S.I. dr. ing. Corina Mnerie
Ș.I.dr.ing. Flavius-Maxim Petcuț
Ș.I.dr.ing. Catalin Crișan

Secretar: S.I. dr. ing. Daniel Dragu

Nr. crt.	Titlul lucrării	Autor, programul de studii, anul Coordonator Afiliere
1.	Implementation of a Real-Time Smart Parking Management System	Author: Popa Sergiu, Technical University of Cluj-Napoca, Faculty of Automation and Computer Science, Applied Informatics II Coordinator: Dragu Daniel
2.	Sistem de monitorizare și stocare locală a datelor provenite de la o stație meteo personală	Author: Daniel Alexuță, “Aurel Vlaicu” University of Arad Coordinator: Valentina E. Balas
3.	Detectia automata a campurilor irigate din banatul sarbesc prin algoritmi machine learning pe date satellite SENTINEL-2	Author: Marius Susa, Universitatea Petrol-Gaze din Ploiesti Coordinator: Valentina E. Balas
4.	Smart Greenhouses on Rooftops: Emerging Technologies and Global Directions in Sustainable Urban Agriculture	Author: Popa Mihaela, “Aurel Vlaicu” University of Arad Coordinator: Valentina E. Balas
5.	Mining Automotive Databases Intelligent Identification of Safety-Critical Incidents	Author: Priscilla Ioana Nicorici, Universitatea Petrol-Gaze din Ploiesti Coordinator: Valentina E. Balas
6.	Reglarea concentratiei de glucoza din sange folosindun controler fuzzy	Author: Bogdana-Tania Gavrila, Universitatea Petrol-Gaze din Ploiesti si Universitatea Aurel Vlaicu din Arad Coordinator: Valentina E. Balas
7.	Analiza metodelor MPPT utilizate în sistemele fotovoltaice moderne	Author: Anca-Adriana Lasc Petcut, Universitatea Petrol-Gaze din Ploiesti si Universitatea Aurel Vlaicu din Arad Coordinator: Valentina E. Balas

Sectiunea: Elevi

Vineri, 08.05.2026, 10:00-12:30 si 14:00-18:00

Sala: 330

Comisia de evaluare:

Președinte: Prof.habil.dr.ing. Valentina E. Bălaș

Membri: S.I. dr. ing. Corina Mnerie
Ș.I.dr.ing. Flavius-Maxim Petcuț
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Prof. Cornel-Daniel Krausz
Prof. Mihaela Nan

Secretar: Prof. Petcut Maria
Prof. drd. ing. Noemi-Clara Rohatinovici

Nr. crt.	Titlul lucrării	Autor, programul de studii, anul Coordonator Afiliere
1.	Intelligent Operating Systems for Vehicle Onboard Systems”	Author: Anghel Drugărin Anastasia, Marișescu Ionuț Dario, Colegiul National Diaconovici Tietz din Reșița, 12th grade Coordinator: Tomoș Daniel
2.	Raywatch AI: Solar Panel Monitoring System	Author: Aleksandar Dragojević 12th grade Luka Stojisavljević 11th grade Coordinator: Kristijan Cincar, Nenad Cvetkovic
3.	Intelligent Irrigation System	Author: Anuțoiu Andrei, “General Gheorghe Magheru” Technical College, 11 th grade Coordinator: Buzera Marius
4.	Intelligent Weather Station	Author: Ciucur Alexandru, “General Gheorghe Magheru” Technical College, 11 th grade Coordinator: Buzera Marius
5.	Intelligent Warehouse Activity Management System	Author: Cola Emilian, “General Gheorghe Magheru” Technical College, 11 th grade

		Coordinator: Buzera Marius
6.	Applications of Logic Gates	Author: Gal Sebastian, "Regina Maria" Technological High School, 10 th grade Coordinator: Rohatinovici Noemi, Andras Marinela
7.	Sistem inteligent de acces	Author: Sarkozi Arthur-Rahul, Boleacu Albert "Regina Maria" Technological High School, 11 th grade Coordinator: Darau Aurelia, Demeter Anca
8.	Optimal Electrical Energy Transmission	Author: Sofică Denis-Gabriel, "Regina Maria" Technological High School, 11 th grade Coordinator: Krausz Cornel-Daniel
9.	Detector for Electrical Circuits	Author: Lazea Raul-Eduard, Fodor Cosmin Alexandru, "Regina Maria" Technological High School, 10 th grade Coordinator: Petcuț Maria