National University of Science and Technology Politehnica Bucharest

Council for University Doctoral Studies

Doctoral School of Industrial Engineering and Robotics

Department: *D*; Doctoral field*DF*: Industrial Engineering*IE*, Mechanical Engineering*ME*, Engineering and Management*EMg*

Doctoral Scientific Areas

No.	PhD Advisor	D	DF	Scientific Areas
1	Prof.univ.dr.eng. BENDIC Vasile	RSP	IE	• Management and systems engineering • Manufacturing processes and systems • Product development
2	Prof.univ.dr.eng. CONSTANTIN George	RSP	IE	• Advanced manufacturing systems • Manufacturing processes • Advanced modeling, simulation and optimization techniques
3	Prof.univ.dr.eng. COTEȚ Costel Emil	RSP	IE	• Smart manufacturing • Digital twining in industrial engineering • Product Lifecycle Management
4	Prof.univ.dr.eng. DORIN Alexandru	RSP	IE	• Industrial Robot Modular Design • Optimizing Devices for Driving Robots Systems
5	Prof.univ.dr.eng. GHIONEA Adrian	RSP	IE	• Machine Tool Performance and Precision • Maintenance Management • Industrial Logistics • Manufacturing Systems
6	Prof.univ.dr.eng. MOHORA Cristina	RSP	IE	• Material Flow Modelling and Simulation; • Vibration and Noise; • Assistive Devices.
7	Assoc.Prof.univ.dr.eng. PASCU Elisabeta - Nicoleta	RSP	IE	• Industry 4.0; • Industrial Design • Computer Aided Design
8	Prof.univ.dr.eng. PREDINCEA Nicolae	RSP	IE	• Thermal Field for Applications Using Industrial Robots • Product Lifecycle Management • Kinematics of Machine Tool
9	Prof.univ.dr.eng. PUPĂZĂ Cristina	RSP	IE	• Advanced Computer Aided Engineering; • Industry 4.0; • Machine learning.
10	Prof.univ.dr.eng. VELICU Ștefan	RSP	IE	• Manufacturing Systems • Materials Processing • Industrial Logistics
11	Prof.univ.dr.eng. ZAPCIU Miron	RSP	IE	• Machine dynamics and vibrations • Process control in industry • Robotics and Manufacturing Systems
12	Prof.univ.dr.eng.ec. DOICIN Cristian	TCM	IE	• Product Development • Manufacturing Processes and Systems • Systems Engineering and Management • Engineering Economics
13	Prof.univ.dr.eng. DRĂGĂNESCU Florian	TCM	IE	• Product Development • Manufacturing Processes and Systems • Machining and Machinability
14	Prof.univ.dr.eng. GHEORGHE Marian	TCM	IE	• Integrative Processes, Systems, Technology • Product Development • Machinability, Machining, Control, Assembly

				• Manufacturing, Production and Recycling
15	Prof.univ.dr.ing. GHICULESCU Liviu Daniel	TCM	IE	• Nonconventional Technologies and Specific Technological Systems • Micro and Nanotechnologies • Strategic and Quality Management, Innovation and Technological Transfer
16	Prof.univ.dr.eng. IONESCU Nicolae	TCM	IE	• Nonconventional Machining Processes and Systems • Manufacturing Processes and Systems • Product Development • Creativity and Intellectual Property
17	Prof.univ.dr.eng.ec. MILITARU Constantin	TCM	IE	• Quality Engineering and Management • Product and Processes Quality • Quality Management Systems
18	Prof.univ.dr.eng. NEAGU Corneliu	TCM	IE	• Production Programming and Control • Product Development • Systems Engineering and Management • Manufacturing Processes and Systems
19	Prof.univ.dr.eng. OPRAN Constantin Gheorghe	TCM	IE	• Engineering of Composites Products • Engineering of Polymeric Products • Intelligent manufacturing of advanced materials products
20	Prof.univ.dr.eng. STURZU Aurel	TCM	IE	• Geometric Control Process and Devices • Geometric Control Systems • Manufacturing Processes and Systems
21	Prof.univ.dr.eng. SEVERIN Irina	ICTI	IE	• Advanced Composite Systems • Integrated Management Systems • Quality Engineering & Management
22	Prof.univ.dr.eng. VOICULESCU Ionelia	ICTI	IE	• Materials Science and Processing • Welding Processes • Heat Treatments
23	Prof.univ.dr.eng. CHIVU Oana Roxana	ICTI	IE	• Occupational health and safety management • Manufacturing processes and Systems • Quality management
24	Prof.univ.dr.eng. AMZA Cătălin Gheorghe	ICTI	IE	• Additive manufacturing • Industrial image processing • Quality inspection of industrial products • Virtual and augmented reality for industrial applications
25	Prof. univ. dr. eng. NIȚOI Dan	ICTI	IE	• Ultrasonics. Applications in engineering and medicine • Modelling and simulation • Materials Technology. Smart materials • Sustainable development and eco-technologies
26	Prof.univ.dr.eng. RONTESCU Corneliu	ICTI	IE	• Welding Processes and Control • Materials and Products Reconditioning
27	Prof.univ.dr.eng. ANTONESCU Păun	TMR	IE	• Topological structure of mechanisms and manipulators • Kinematics and dynamics of mechanisms and machines • Serial and parallel industrial robots
28	Prof.univ.dr.eng. SIMIONESCU Ion	TMR	IE	• Optimum Design of Industrial Robots • Mechanisms and Machineries Design • Optimal Synthesis of Mechanisms
29	Prof.univ.dr.eng. TEMPEA Iosif	TMR	IE	• Analysis and Synthesis of Mechanisms Applied in Industry • Modeling and Simulation of Robotic Mechanisms
30	Prof.univ.dr.eng. SIMION Ionel	GIDI	IE	• Industrial Design • Computer Aided Design • Computer Graphics

31	Prof.univ.dr.eng. CĂNĂNĂU Sorin	OMT	IE	• Mechanical transmissions with gears • Tribology • FEM analysis of mechanical structures
32	Prof. univ. dr. eng. RECE Laurențiu	UTCB-TM	IE	• Development of numerical control systems. • Development of innovative products. • Modern industrialization of innovative products.
33	Prof.univ.dr.eng. CONSTANTINESCU Dan Mihai	RM	ME	• Fracture mechanics and fatigue • Interface damage and failure • Mechanical behavior of composites/ nanocomposites, foams, and ceramics
34	Prof.univ.dr.eng. JIGA Gheorghe Gabriel	RM	ME	• Layered composite structures; • Experimental stress analysis; • Sandwich structures; • Impact on composite structures.
35	Prof.univ.dr.eng. HADĂR Anton	RM	ME	• Stress and strain optimization for mechanical structures statically or dynamically loaded; • Mechanical structures based on composite materials.
36	Prof.univ.dr.eng. RADEȘ Mircea	RM	ME	• Machine dynamics • Mechanical vibration • FEM in dynamic analysis of mechanical structures
37	Prof.univ.dr.eng. OLARU Adrian	RSP	ME	• Assisted research of the Robot's dynamics • Modelling and simulation with LabVIEW • Software platform for the assisted research of the Forward kinematics and Inverse dynamics of robots • Controlling and automation manufacturing systems • Neural Networks solving the Inverse kinematics in Robotics • Humanoid robots
38	Prof.univ.dr.eng. POPESCU Diana	RSP	ME	• Assembly/disassembly process modeling • Additive Manufacturing • Industrial robots
39	Prof.univ.dr.eng.mat.ec. SEMENESCU Augustin	IE-SIM	EMg	• Industrial Processes, Equipment and Management; • Modeling, Simulation and Innovation for Industrial Processes and Product Development; • Innovative Medical Devices and Materials; • Metallic Materials Producing and Processing;
40	Prof.univ.dr.eng.ec. ȚÎȚU Aurel Mihail	IIM-ULBS	EMg	• Engineering and quality management; • Intellectual property management, innovation and technology transfer; • KAIZEN systems and LEAN systems; • Experimental research and data processing; • Engineering and management of nonconventional technologies.
41	Prof.univ.dr.eng. IOANA Adrian	IE-SIM	EMg	• Quality management in the metal materials industry • Strategic management specific to industrial engineering • Optimal management of aggregates in the materials industry • Automation and robotization in the materials industry • Specific management of educational systems
42	Prof.univ.dr.eng. CĂRUȚAȘU Nicoleta Luminița	RSP	EMg	• Occupational Health and Safety Management; • Logistics;
43	Prof. univ. dr. eng. MARIN Alexandru	HMHIM - Energetics	EMg	• Renewable energy and environmental protection • Fluid power and electro-hydraulic servo-systems

				• Intellectual property rights protection & management and capitalization of intangible assets • Innovation and knowledge / technology transfer
44	Prof. univ. dr. eng. CĂRUȚAȘU George	U. Rom. American. Fac. Inform. for Bus. Management	EMg	• Enterprise Resource Planning • Business Software Applications • Virtualization and Cloud Computing Management