University POLITEHNICA of 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.ing. AURITE Traian	RSP	IE	• Nonconventional Machining Processes and Systems • Virtual Manufacturing Systems
2	Prof.univ.dr.ing. BENDIC Vasile	RSP	IE	• Management and systems engineering • Manufacturing processes and systems • Product development
3	Prof.univ.dr.ing. CONSTANTIN George	RSP	IE	• Advanced manufacturing systems • Manufacturing processes • Advanced modeling, simulation and optimization techniques
4	Prof.univ.dr.ing. COTEȚ Costel Emil	RSP	IE	• Smart manufacturing • Digital twining in industrial engineering • Product Lifecycle Management
5	Prof.univ.dr.ing. DORIN Alexandru	RSP	IE	• Industrial Robot Modular Design • Optimizing Devices for Driving Robots Systems
6	Prof.univ.dr.ing. GHIONEA Adrian	RSP	IE	• Machine Tool Performance and Precision • Maintenance Management • Industrial Logistics • Manufacturing Systems
7	Prof.univ.dr.ing. MOHORA Cristina	RSP	IE	• Material Flow Modelling and Simulation; • Vibration and Noise; • Assistive Devices.
8	Prof.univ.dr.ing. PREDINCEA Nicolae	RSP	IE	• Thermal Field for Applications Using Industrial Robots • Product Lifecycle Management • Kinematics of Machine Tool
9	Prof.univ.dr.ing. PUPĂZĂ Cristina	RSP	IE	• Advanced Computer Aided Engineering; • Industry 4.0; • Machine learning.
10	Prof.univ.dr.ing. VELICU Ștefan	RSP	IE	• Manufacturing Systems • Materials Processing • Industrial Logistics
11	Prof.univ.dr.ing. ZAPCIU Miron	RSP	IE	• Machine dynamics and vibrations • Process control in industry • Robotics and Manufacturing Systems
12	Prof.univ.dr.ing. DOICIN Cristian	TCM	IE	• Product Development • Manufacturing Processes and Systems • Systems Engineering and Management • Engineering Economics
13	Prof.univ.dr.ing. DRĂGĂNESCU Florian	TCM	IE	• Product Development • Manufacturing Processes and Systems • Machining and Machinability
14	Prof.univ.dr.ing. 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.ing. IONESCU Nicolae	TCM	IE	• Nonconventional Machining Processes and Systems • Manufacturing Processes and Systems • Product Development • Creativity and Intellectual Property
17	Prof.univ.dr.ing. MILITARU Constantin	TCM	IE	• Quality Engineering and Management • Product and Processes Quality • Quality Management Systems
18	Prof.univ.dr.ing. NEAGU Corneliu	TCM	IE	• Production Programming and Control • Product Development • Systems Engineering and Management • Manufacturing Processes and Systems
19	Prof.univ.dr.ing. OPRAN Constantin Gheorghe	TCM	IE	• Engineering of Composites Products • Engineering of Polymeric Products • Intelligent manufacturing of advanced materials products
20	Prof.univ.dr.ing. STURZU Aurel	TCM	IE	• Geometric Control Process and Devices • Geometric Control Systems • Manufacturing Processes and Systems
21	Prof.univ.dr.ing. TACHE Voicu	TCM	IE	• Manufacturing Processes and Systems • Machining, Control and Assembly Devices
22	Prof.univ.dr.ing. VIŞAN Aurelian	TCM	IE	• Nonconventional Machining Processes and Systems • Manufacturing Processes and Systems • Product Development
23	Prof.univ.dr.ing. VLASE Aurelian	TCM	IE	• Manufacturing Processes and Systems • Machining and Machinability • Machining Tools and Devices
24	Prof.univ.dr.ing. SOLOMON Gheorghe	ICTI	IE	• Welding Processes and Control • Quality Management • Occupational Health and Safety Management
25	Prof.univ.dr.ing. SEVERIN Irina	ICTI	IE	• Advanced Composite Systems • Integrated Management Systems • Quality Engineering & Management
26	Prof.univ.dr.ing. VOICULESCU Ionelia	ICTI	IE	• Materials Science and Processing • Welding Processes • Heat Treatments
27	Prof.univ.dr.ing. CHIVU Oana Roxana	ICTI	IE	• Occupational health and safety management • Manufacturing processes and Systems • Quality management
28	Prof.univ.dr.ing. AMZA Cătălin Gheorghe	ICTI	IE	• Additive manufacturing • Industrial image processing • Quality inspection of industrial products • Virtual and augmented reality for industrial applications
29	Prof.univ.dr.ing. RONTESCU Corneliu	ICTI	IE	• Welding Processes and Control • Materials and Products Reconditioning
30	Prof.univ.dr.ing. ANTONESCU Păun	TMR	IE	• Topological structure of mechanisms and manipulators • Kinematics and dynamics of mechanisms and machines • Serial and parallel industrial robots
31	Prof.univ.dr.ing. SIMIONESCU Ion	TMR	IE	• Optimum Design of Industrial Robots • Mechanisms and Machineries Design

				• Optimal Synthesis of Mechanisms
32	Prof.univ.dr.ing. TEMPEA Iosif	TMR	IE	• Analysis and Synthesis of Mechanisms Applied in Industry • Modeling and Simulation of Robotic Mechanisms
33	Prof.univ.dr.ing. SIMION Ionel	GIDI	IE	• Industrial Design • Computer Aided Design • Computer Graphics
34	Prof.univ.dr.ing. CĂNĂNĂU Sorin	OMT	IE	• Mechanical transmissions with gears • Tribology • FEM analysis of mechanical structures
35	Prof.univ.dr.ing. 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
36	Prof.univ.dr.ing. POPESCU Diana	RSP	ME	• Assembly/disassembly process modeling • Additive Manufacturing • Industrial robots
37	Prof.univ.dr.ing. BLUMENFELD Maty	RM	ME	• Materials Strength • Finite Elements Method
38	Prof.univ.dr.ing. CONSTANTINESCU Dan Mihai	RM	ME	• Fracture mechanics and fatigue • Interface damage and failure • Mechanical behavior of composites/ nanocomposites, foams, and ceramics
39	Prof.univ.dr.ing. GHEORGHIU Horia Miron	RM	ME	• Biomechanics of bone • Analysis of stress and strain for mechanical structures statically or dynamically loaded
40	Prof.univ.dr.ing. JIGA Gheorghe Gabriel	RM	ME	• Layered composite structures; • Experimental stress analysis; • Sandwich structures; • Impact on composite structures.
41	Prof.univ.dr.ing. HADĂR Anton	RM	ME	• Stress and strain optimization for mechanical structures statically or dynamically loaded; • Mechanical structures based on composite materials.
42	Prof.univ.dr.ing. RADEŞ Mircea	RM	ME	• Machine dynamics • Mechanical vibration • FEM in dynamic analysis of mechanical structures
43	Prof.univ.dr.ing. 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;
44	Prof.univ.dr.ing. 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.
45	Prof.univ.dr.ing. IOANA Adrian	IE-SIM	EMg	• Managementul calitatii in industria materialelor metalice

				• Managementul strategic specific ingineriei industriale • Conducerea optimala a agregatelor din industria materialelor • Automatizari si robotizari in industria materialelor • Management specific sistemelor educationale
46	Conf.univ.dr.ing. CĂRUȚAȘU Nicoleta Luminița	RSP	EMg	• Occupational Health and Safety Management; • Logistics;
47	Prof.univ.dr.ing. MOMETE Daniela Cristina	IE-FAIMA	EMg	• Natural resource management • Human resource management • Sustainable production • Environmental Economics • Sustainable engineering education • Circular economy • Innovation • Energy Economics
48	Conf.univ.dr. DESELNICU Dana Corina	DAM - FAIMA	EMg	• Risk Management • Human Resources Management • Organizational Behaviour • Sustainability • Life Cycle Assessment