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| **University** | Valahia University of Târgoviște |
| **Faculty** | Materials Engineering and Mechanics |
| **Department** | Materials, Equipment, Installations, and Robotics |
| **Position in the Academic Staffing Chart** | 8 |
| **Academic Rank** | Associate Professor |
| **Curriculum Courses** | Applied Informatics<br>Automation<br>Integrated Dimensional Control<br>Mechanical Design with Specialized Software I<br>Advanced Mechatronics and Micromechatronics |
| **Scientific Field** | Mechatronics |
| **Academic Job Description** | Teaching Responsibilities:<br>• Applied Informatics – 3 hours/week (lecture/lab), Semester I<br>• Automation – 4 hours/week (lecture/lab), Semester II<br>• Integrated Dimensional Control – 4 hours/week (lecture/lab), Semester I<br>• Mechanical Design with Specialized Software I – 2 hours/week (lecture), Semester II<br>• Advanced Mechatronics and Micromechatronics – 2 hours/week (lecture/lab), Semester II |
| **Related Activities within the teaching and research framework** | • Teaching and laboratory activities, according to the position specified in the staffing plan<br>• Research activities<br>• Supervision of Bachelor's Projects and Master's Theses<br>• Participation in Bachelor's and Master's examination boards<br>• Participation in university admission committees<br>• Tutoring and academic counseling<br>• Guidance of student scientific circles and extracurricular research groups<br>• Participation in faculty councils and academic committees<br>• Involvement in other didactic, practical, and scientific research activities included in the curriculum<br>• Participation in other duties as assigned by hierarchical superiors |
| **Minimum Base Salary** | 7050 lei |
| **Timeline of the Selection Process** | **April 10 – August 18, 2025**<br>Submission of applications by candidates, including the resolution of the committee regarding fulfillment of minimum standards and approval from the Legal Office.<br>**April 10 – May 30, 2025**<br>Establishment of the selection committees and appeals committees; validation by the Administrative Board and the University Senate.<br>**No later than 48 hours after the issuance of the Legal Office's opinion, but at least 5 working days before the first evaluation**<br>Notification to candidates by the Legal Office regarding fulfillment of legal requirements for participating in the competition.<br>**August 25, 2025**<br>Posting the list of candidates with accepted application files.<br>**August 25, 2025**<br>Publishing on the university website the announcement regarding the date, |

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| | time, and location of the competition exams, along with the CV, the standard compliance verification form, and the list of publications for each candidate.<br>**August 25, 2025**<br>Transmission of the candidates' files, with Legal Office approval, to the members of the selection committees.<br>**September 2–8, 2025**<br>Conducting the competition examinations.<br>Submission of the committee chair's report.<br>**September 9, 2025**<br>Publication of competition results on the university website.<br>**September 10–12, 2025**<br>Submission of appeals.<br>**September 15, 2025**<br>Resolution of appeals.<br>**September 16, 2025**<br>Approval of the competition report by the Faculty Council.<br>**September 17–19, 2025**<br>Validation of competition results by the Administrative Board.<br>**October 1, 2025**<br>Official appointment by Rector's decision. |
| **Date of the Announcement's Publication in the Official Gazette** | Published in the Official Gazette of Romania, No. 339 of May 17, 2024, Part III |
| **Exam Topics for the Academic Competition** | **Lecture Topic**<br>Scientific Field: Mechatronics and Robotics<br>**Lecture Title**<br>Modern Mechatronic Systems: Assisted Design, Intelligent Automation, and Integrated Dimensional Control in Manufacturing Processes<br>**Thematic Structure**<br>**1. Introduction**<br>Defining mechatronics as an integrative domain. The essential role of design and control in the evolution of current systems – 2025 perspective.<br>**2. Mechanical Design with Specialized Software – Basic Foundation of Mechatronics**<br>Use of 3D CAD software for solid body modeling. Kinematic and dynamic analysis of mechanical subassemblies. Technical documentation for CAM processes. The importance of digital validation through virtual simulations prior to prototyping.<br>**3. Advanced Mechatronics – Integration of Components into Intelligent Systems**<br>The relationship between mechanical structure and intelligent automation. Integration of sensors (optical, force, position), actuators, and microcontrollers. Examples include: robotic platforms, micromanipulators, autonomous systems.<br>**4. Automation – The Logical Core of Mechatronic Systems**<br>Control loops and signals in analog/digital regimes. Feedback systems – PID, fuzzy logic, adaptive control. Instrumentation: sensors, converters, filters, PLCs. Correlation with development platforms: PLC, STM32, ESP32, and others.<br>**5. Applied Informatics in Mechatronic Devices**<br>Programming control and monitoring functions. HMI interfaces, command algorithms, telemetry. Embedded code structures and serial or wireless communication. Case studies: automated handling, metrology, IoT devices. |

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| | **6. Integrated Dimensional Control – Robotization of Quality Verification in Manufacturing**<br>Industrial metrology and real-time control. Contactless (video, laser) and tactile measurement systems. Integration of measuring stations into automated production lines. Automatic data transfer to MES/QC systems.<br>**7. Case Studies and Personal Contributions**<br>Developed or simulated systems: microactuators, platforms with submicrometric control, assisted processing and dimensional verification. Reference to personal publications and didactic implementations.<br>**8. Conclusions and Future Directions**<br>The strategic role of mechatronics in Industry 4.0. Preparing the engineer of the future: multidisciplinary, digital, and adaptive. |
| **Public Lecture – Date, Time, and Venue** | • **Date**: September 2, 2025<br>• **Time**: 12:00 PM<br>• **Venue**: Auditorium A002 (Valahia University of Târgoviște Campus) |
| **Description of the Competition Procedure** | *Delivery by the nominated candidates of a public lecture presenting their most significant previous professional achievements and their academic career development plan.* |
| **List of Documents** | **1.** Application form **signed by the candidate, including:**<br>▪ **Statement on own responsibility regarding the truthfulness of the information**<br>▪ **Declaration of incompatibilities according to Law no. 199/2023**<br>▪ ***(In the updated version: also the committee's resolution regarding the compliance verification sheet)***<br>**2.** Academic Career Development Plan **(maximum 10 pages)**<br>**3.** Curriculum Vitae **(printed and electronic format, Europass standard)**<br>**4.** Complete List of Publications **(printed and electronic format), structured as follows:**<br>▪ **Up to 10 relevant works**<br>▪ **PhD thesis/theses**<br>▪ **Patents**<br>▪ **Books / Book chapters**<br>▪ **ISI / BDI indexed articles**<br>▪ **International conference papers**<br>▪ **Other scientific contributions**<br>**5.** University Standards Compliance Sheet<br>**6.** Certified copy of the PhD diploma<br>▪ ***Recognition certificate if issued outside Romania***<br>**7.** PhD Thesis Summary **(in Romanian and English)**<br>**8.** Declaration of Incompatibilities ***(as a separate document)***<br>**9.** Certified copies of other academic diplomas<br>**10.** Copy of identity card or passport<br>**11.** Name change documents **(if applicable)**<br>**12.** Up to 10 most relevant publications / patents / works **(in electronic format)**<br>**13.** Three letters of recommendation ***(for associate professor – from external experts)***<br>**14.** Criminal record certificate<br>**15.** Behavioral integrity certificate ***(only in the updated version)***<br>**16.** Medical certificate **in the format approved by the Ministry of Education and Ministry of Health**<br>**17.** Medical certificate **for teaching activities approved by the Ministry of Education and Ministry of Health**<br>**18.** Foreign language proficiency certificate |

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| | **19.** Proof of payment of the registration fee<br>**20.** CD or electronic support **containing: CV, list of publications, compliance sheet, and relevant works** |
| **Submission Address for the Application Dossier (File)** | Registry Office of Valahia University of Târgoviște, Aleea Sinaia, nr. 13, Târgoviște, România, 130004. |

DECAN,