



Universitatea Națională de Știință și Tehnologie  
POLITEHNICA București



HR EXCELLENCE IN RESEARCH

## Formular 1

# Formular de publicare în platforma Euraxess a posturilor didactice

v. 13 septembrie 2024

Vă mulțumim anticipat pentru completarea corectă și integrală a acestui formular, care este aproape identic celui online.

Vă rugăm să parcurgeți instrucțiunile de mai sus și indicațiile de completare marcate cu gri în paginile următoare. Respectarea în totalitate a indicațiilor din preambul și din fiecare secțiune/rubrică ne ajută ca anunțurile să fie publicate la timp, fără să mai fie nevoie de reveniri, corecturi, clarificări sau modificări.

Înainte de a ne transmite formularul/formularele dvs., vă rugăm să vă asigurați că:

1. Ați înlocuit tot textul ce în prezent are culoarea gri cu informațiile specifice poziției scoase la concurs.
2. Textul pe care îl completați dvs. va fi doar de culoare neagră, Arial regular, de 11 puncte.
3. Conținutul formularului dvs. este text fără (a) liste automate cu litere sau cifre și fără (b) ghilimele, evidențierile sunt realizate doar prin *cursive/italic* sau **aldine/bold**.
4. Toate rubricile din stânga marcate cu albastru cu fundal gri (obligatorii) conțin informațiile solicitate.
5. Ați selectat opțiunea corectă acolo unde este meniu *drop-down* (*clic pentru....*).
6. Este de fiecare dată menționată corect denumirea actuală în limba engleză a instituției noastre: National University of Science and Technology POLITEHNICA Bucharest.
7. Toate informațiile din document, cu excepția titlului postului, sunt în limba engleză.

Conținutul furnizat de către dvs. îl încărcăm manual, rubrică după rubrică, uneori enunț cu enunț. Din acest motiv este foarte importantă respectarea tuturor indicațiilor de mai sus și păstrarea formatărilor documentului.

Pentru orice întrebări sau neclarități, vă încurajăm să ne contactați la [euraxess@upb.ro](mailto:euraxess@upb.ro).

## I. Basic information

Title	<b>Şef de lucrări (Recognized Researcher, R2)</b>  <b>Deţinător/deţinătoare de doctorat</b>  Position <b>25</b>
Offer description	<p>The Faculty of Engineering in Foreign Languages was created in 2002 by transforming the Department of Engineering Sciences (started in 1990) into a faculty of the University POLITEHNICA of Bucharest. The individuality of this faculty is given by the fact that engineering education is given in one of the foreign languages: English, French and German. For more information, the website of the faculty is at <a href="http://fils.upb.ro/">http://fils.upb.ro/</a> .</p> <p>The Department of Engineering in Foreign Languages represents the technical department of the faculty. It is made by around 25 academic personnel with competences in engineering and in at least one of the languages English, French and German. There are included two lecturers sent by the French and German states. For more information, the website of the department is at <a href="http://dils.upb.ro/">http://dils.upb.ro/</a> .</p> <p>The organizational chart of the department is the list of the subject components covered by the members of the department and by external professionals, where the department is responsible for the delivery of the topics and for quality of the learning.</p> <p>The position 25 is Assistant Professor/ Lecturer in the domain of Computer science and covers subjects given in English and French:</p> <ul style="list-style-type: none"><li>• Computer Architecture (Laboratory)</li><li>• Méthodes Numériques (Course, Laboratory)</li></ul> <p>APPLICATION</p> <p>Before applying, all candidates are invited to read carefully the NUSTPB's Methodology for occupying didactic and research positions: <a href="https://posturivacante.upb.ro/wp-content/uploads/2024/04/Methodology-for-occupyng-vacant-didactic-and-research-positions-2024.pdf">https://posturivacante.upb.ro/wp-content/uploads/2024/04/Methodology-for-occupyng-vacant-didactic-and-research-positions-2024.pdf</a></p>
Research field	Engineering  ENGINEERING, Computer engineering, Electrical Engineering, Electronic engineering, Simulation Engineering  COMPUTER SCIENCE, Computer architecture, Programming

### Where to apply

nora.modrangu@upb.ro

## II. Hiring information and work location

Department	Engineering in Foreign Languages
Contact person e-mail	dilsupb@gmail.com
Contact person phone number	+40 21 402 96 06
Department/Centre website	<a href="http://dils.upb.ro/">http://dils.upb.ro/</a>
Faculty	<b>Inginerie în Limbi Straine</b>
Geolocalizare	Va fi completată de către <i>Punctul de contact Euraxess</i> , în funcție de adresa facultății/departamentului.

## III. Requirements

Required education level	Engineering  <b>Ph.D. or equivalent</b>
Skills/Qualifications	<p>The Lecturer position in the field of Computers, Science, and Information Technology requires a set of well-defined skills and qualifications necessary for effectively carrying out teaching and research activities in Computer Architecture and Numerical Methods. The required competencies include:</p> <p>1. Knowledge and Understanding. Strong grasp of fundamental concepts, theories, and methods in Computer Science and Information Technology, with an emphasis on their correct application in professional communication. Proficiency in computer architecture, including the structure and operation of computing systems. Understanding of assembly language programming and low-level system interactions.</p> <p>2. Application of Knowledge in Problem-Solving. Ability to explain and interpret computer system design, architectures, and computational models. Expertise in assembly language programming for microprocessors, with an emphasis on real-world applications. Capability to diagnose and troubleshoot hardware and software issues in computer systems.</p> <p>3. Evaluation and Analysis. Proficiency in using electronic tools and specific analytical methods to evaluate and optimize the performance</p>

	<p>of computing systems. Competence in applying standard evaluation criteria for assessing the efficiency, reliability, and limitations of different computing architectures, numerical methods, and software solutions.</p> <p>4. Project Development and Implementation. Experience in designing and implementing professional projects that integrate both hardware (processors, embedded systems) and software (low-level programming, performance optimization techniques). Ability to develop numerical computing algorithms and apply mathematical methods to solve engineering problems.</p> <p>This position requires validated skills and technical expertise, rather than general teaching abilities or personality traits. Candidates are expected to demonstrate concrete competencies in computer system architecture and numerical methods, ensuring a high level of academic and professional excellence.</p>
Specific requirements	<p>There is needed strong interdisciplinary knowledge in engineering, allowing for the practical application of taught subjects across multiple engineering fields.</p> <p>A bilingual teacher is required, fluent in English and French, since the subjects are taught in these languages</p>
Required languages	<p>ENGLISH, FRENCH</p> <p>1. ENGLISH <b>Excellent</b></p> <p>2. FRENCH <b>Excellent</b></p>
Required research experience	<p>Engineering</p> <p><b>4-10.</b></p>

#### IV. Additional information

Website for additional job details	
Benefits	<p>All academic staff at NUSTPB enjoy several benefits, such as training and professional development opportunities, holiday leave, accommodation in NUSTPB residences, banking facilities, access to research infrastructure, and software for remote working.</p>
Eligibility criteria	

Selection process	
Additional comments	<p>The candidates for this position must comply with the minimum required and mandatory standards to award teaching positions in higher education, as stated in the Order of the Minister of National Education and Scientific Research no. 6129/2016.</p> <p>Also, the minimum conditions from the methodology regarding the employment of vacancy teaching and research position in UPB must be met (<a href="https://posturivacante.upb.ro/legislatie/">https://posturivacante.upb.ro/legislatie/</a>).</p>

## **ANEXA: lista subdomeniilor de cercetare.**

*Este obligatoriu ca subdomeniile să corespundă unui domeniu de studii specific postului scos la concurs, iar acest domeniu să fie relaționat în mod explicit cu disciplinele din fișa postului.*

### **Agricultural sciences**

Agricultural products  
Agronomics  
Enology  
Forest sciences  
Phytotechny  
Soil science  
Temperate agriculture  
Tropical agriculture  
Zootechnics

### **Anthropology**

Communication anthropology  
Cultural anthropology  
Ethnology  
Medical anthropology  
Physical anthropology  
Social anthropology

### **Architecture**

Design  
Landscape architecture  
Naval architecture

### **Arts**

Arts management  
Fashions studies  
Fine arts  
Handicrafts  
Performing arts  
Visual arts

### **Astronomy**

Astrophysics  
Cosmology

### **Biological Sciences**

Biodiversity  
Biological engineering  
Biology  
Botany  
Laboratory animal sciences  
Nutritional sciences

Zoology

### **Chemistry**

Analytical chemistry  
Applied chemistry  
Biochemistry  
Combinatorial chemistry  
Computational chemistry  
Heterogeneous catalysis  
Homogeneous catalysis  
Inorganic chemistry  
Instrumental analysis  
Instrumental techniques  
Molecular chemistry  
Organic chemistry  
Physical chemistry  
Reaction mechanism and dynamics  
Solar chemistry  
Structural chemistry

### **Communication sciences**

Audio-visual communication  
Business communication  
Editing  
Graphic communication  
Journalism  
Media studies  
Online information services  
Public relations  
Publishing  
Science communication  
Speech communication

### **Computer science**

3D modelling  
Autonomic computing  
Computer architecture  
Computer hardware  
Computer systems  
Cybernetics  
Database management  
Digital systems  
Informatics  
Modelling tools  
Programming  
Systems design

### **Criminology**

### **Cultural studies**

European studies

Middle-Age studies  
Regional studies  
Renaissance studies  
Third world studies

## **Demography**

## **Economics**

Administrative sciences  
Agricultural economics  
Applied economics  
Banking  
Business economics  
Cadastral survey  
Commercial economics  
Construction economics  
Consumer economics  
Cyclical economics  
Econometrics  
Economic policy  
Economic systems  
Economic theory  
Economics of development  
Environmental economics  
Financial sciences  
Fishery economics  
Food economics  
Health economics  
Home economics  
Industrial economics  
International economics  
Knowledge economy  
Labour economics  
Labour market economics  
Land economy  
Local public economics  
Macroeconomics  
Management studies  
Marketing  
Microeconomics  
Political economy  
Production economics  
Social economics  
Tourism studies  
Transport economics  
Valuation  
Veterinary economics

## **Educational sciences**

Education  
Learning studies  
Research methodology  
Teaching methods



## **Engineering**

Aerospace engineering  
Agricultural engineering  
Biomaterial engineering  
Biomedical engineering  
Chemical engineering  
Civil engineering  
Communication engineering  
Computer engineering  
Control engineering  
Design engineering  
Electrical engineering  
Electronic engineering  
Geological engineering  
Industrial engineering  
Knowledge engineering  
Maritime engineering  
Materials engineering  
Mechanical engineering  
Microengineering  
Nuclear engineering  
Precision engineering  
Process engineering  
Project engineering  
Simulation engineering  
Sound engineering  
Surveying  
Systems engineering  
Thermal engineering  
Water resources engineering

## **Environmental science**

Earth science  
Ecology  
Global change  
Natural resources management  
Water science

## **Ethics**

Ethics in health sciences  
Ethics in natural sciences  
Ethics in physical sciences  
Ethics in social sciences

## **Geography**

Cartography  
Economic geography  
Geopolitics  
Historical geography  
Human geography  
Regional geography  
Social geography

## **Geosciences**

Geology  
Hydrology

## **History**

Ancient history  
Archaeology  
Art history  
Church history  
Contemporary history  
Economic history  
Genealogy  
Heraldry  
History of agriculture  
History of design  
History of law  
History of performance  
History of philosophy  
History of religions  
History of science  
History of social sciences  
Local history  
Mediaeval history  
Modern history  
Music history  
Numismatics  
Palaeography  
Political history  
Prehistory  
Sigillography  
Social history

## **Information science**

Archivists  
Diplomatics  
Documentation  
Information management  
Library science

## **Juridical sciences**

Agrarian law  
Canon law  
Comparative law  
Criminal law  
Environmental law  
European law  
Finance law  
Fiscal law  
Health law  
Informatic law  
International law

Judicial law  
Juvenile law  
Labour law  
Media law  
Medical law  
Private law  
Public law  
Roman law  
Social law  
Transportation law

### **Language sciences**

Language  
Linguistic  
Philology

### **Literature**

African literature  
American literature  
Asian literature  
Austronesian literature  
Comparative literature  
European literature  
Greek literature  
Hamito-Semitic literature  
Literary criticism  
Writing

### **Management sciences**

### **Technology**

Biotechnology  
Chemical technology  
Energy technology  
Environmental technology  
Future technology  
Electrical technology  
Dating techniques  
Communication technology  
Computer technology  
Construction technology  
Graphic technics  
High vacuum technology  
Space technology  
Standardisation of technology  
Telecommunications technology  
Sound technology  
Safety technology  
Production technology  
Quantum technology

Remote sensing  
Transport technology  
Vacuum technology  
Water technology  
Pharmaceutical technology  
Knowledge technology  
Laboratory technology  
Marine technology  
Internet technology  
Interface technology  
Industrial technology  
Information technology  
Instrumentation technology  
Materials technology  
Measurement technology  
Nanotechnology  
Nuclear technology  
Optronics  
Mining technology  
Medical technology  
Military technology  
Micro-technology

### **Religious studies**

Biblical studies  
Church studies  
Comparative religion  
Non-Christian religions  
Pastoral studies.

### **Sociology**

Sociology of religion  
Sociology  
Sociology of labour enterprise  
Sociology of enterprise  
Social shaping of technology  
Societal behaviour  
Socio-economic research  
Social changes  
Rural sociology  
Educational sociology  
Macrosociology

### **Psychological sciences**

Psychology  
Psycho-analytic studies  
Behavioural sciences  
Cognitive sciences

### **Neurosciences**

Neurology  
Neurophysiology  
Neuropsychology

Neuroinformatics  
Neurochemistry  
Neurobiology

### **Pharmacological sciences**

Clinical pharmacology  
Cosmetology  
Pharmacognosy  
Pharmacy  
Toxicology  
Veterinary pharmacology

### **Mathematics**

Combinatorial analyses  
Computational mathematics  
Discrete mathematics  
Chaos theory  
Applied mathematics  
Algebra  
Algorithms  
Geometry  
Mathematical analysis  
Statistics  
Probability theory  
Mathematical logic  
Number theory

### **Philosophy**

Ethics  
Metaphysics  
Epistemology  
Aesthetics  
Logic  
Philosophical anthropology  
Epistemology  
Phenomenology  
Philosophy of law  
Philosophy of science  
Semiotics  
Systematic philosophy

### **Medical sciences**

Cancer research  
Epidemiology  
Health sciences  
Veterinary medicine  
Medicine

### **Political sciences**

Science and society  
Policy studies  
Public awareness of science  
Public policy  
Governance

## **Physics**

Crystal growth  
Quantum mechanics  
Relativity  
Solid-state physics  
Optics  
Neutron physics  
Electronics  
Mathematical physics  
Metrology  
Statics  
Statistical physics  
Surface physics  
Thermodynamics  
Electromagnetism  
Condensate matter properties  
Acoustics  
Classical mechanics  
Computational physics  
Chemical physics  
Biophysics  
Applied physics