

## Universitatea Națională de Știință și Tehnologie Politehnica București Facultatea de Electronică, Telecomunicații și





### **COURSE DESCRIPTION**

### 1. Program identification information

1.1 Higher education institution	National University of Science and Technology Politehnica Bucharest
1.2 Faculty	Electronics, Telecommunications and Information Technology
1.3 Department	Electronic Devices, Circuits and Architectures
1.4 Domain of studies	Electronic Engineering, Telecommunications and Information Technology
1.5 Cycle of studies	Bachelor/Undergraduate
1.6 Programme of studies	Microelectronics, Optoelectronics and Nanotechnologies

2. Date despre disciplină

2.1 Course name (ro) (en)		Practică pedagogică de specialitate în învățământul preuniversitar 2 Specialized Teaching Practice in Pre-university Education 2					
2.2 Course Lecturer		NA					
2.3 Instructor for practical activities		NA					
2.4 Year of studies	3	2.5 Semester	II	2.6. Evaluation type	V	V 2.7 Course regime	
2.8 Course type		С	2.9 Course code	04.C.06.L.036	•	2.10 Tipul de notare	Nota

**3. Total estimated time** (hours per semester for academic activities)

3.1 Number of hours per week	0	Out of which: 3.2 course	0.00	3.3 seminary/laboratory	0
3.4 Total hours in the curricula	0.00	Out of which: 3.5 course	0	3.6 seminary/laboratory	0
Distribution of time:					
Study according to the manual, course support, bibliography and hand notes Supplemental documentation (library, electronic access resources, in the field, etc) Preparation for practical activities, homework, essays, portfolios, etc.					11
Tutoring				6	
Examinations				3	
Other activities (if any):				30	

3.7 Total hours of individual study	50.00
3.8 Total hours per semester	50
3.9 Number of ECTS credit	2
points	

### **4. Prerequisites (if applicable)** (where applicable)



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4.1 Curriculum	Completion of the courses Psychology of Education, Pedagogy I, Pedagogy II, Didactics of the Specialty, Teaching Practice 1
4.2 Results of learning	Specific to the psychopedagogical module for the teaching profession

**5. Necessary conditions for the optimal development of teaching activities** (where applicable)

5.1 Course	Not applicable
5.2 Seminary/ Laboratory/Project	In application schools

**6. General objective** (Reffering to the teachers' intentions for students and to what the students will be thought during the course. It offers an idea on the position of course in the scientific domain, as well as the role it has for the study programme. The course topics, the justification of including the course in the currcula of the study programme, etc. will be described in a general manner)

The course Teaching Practice is studied within the Psychopedagogical Training Program for certifying competencies for the teaching profession – Level II, dedicated to master's students who wish to train for a teaching career at the level of pre-university education, upper secondary cycle, in their field of specialization, having an applied character.

Through its applied specifics, the course develops competencies for designing and delivering teaching activities in upper secondary, post-secondary and university education, as well as knowledge of assessment methods in technical subjects.

**7. Competences** (Proven capacity to use knowledge, aptitudes and personal, social and/or methodological abilities in work or study situations and for personal and proffesional growth. They refflect the empolyers requirements.)

Specific Competences	<ul> <li>Carrying out lesson plans.</li> <li>Students' effective preparation and delivery of trial and final lessons.</li> <li>Analyzing lessons delivered by trainees.</li> <li>Initiating students in organizing extracurricular activities with pupils.</li> </ul>
Transversal (General) Competences	-

**8. Learning outcomes** (Synthetic descriptions for what a student will be capable of doing or showing at the completion of a course. The learning outcomes reflect the student's acomplishments and to a lesser extent the teachers' intentions. The learning outcomes inform the students of what is expected from them with respect to performance and to obtain the desired grades and ECTS points. They are defined in concise terms, using verbs similar to the examples below and indicate what will be required for evaluation. The learning outcomes will be formulated so that the correlation with the competences defined in section 7 is highlighted.)



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The result of knowledge aquisition through learning. The knowledge represents the totality of facts, priciples, theories and practices for a given work or study field. They can be theoretical and/or factual.

# Knowledge

- Defines the concepts specific to the course.
- Designs different types of teaching activities in upper secondary, post-secondary and university education.
- Identifies types of digital tools and technologies that can be used in planning and organization, in teaching—learning—assessment, in creating blended-learning contexts, as well as in communication with educational stakeholders (students, teachers, parents).
- Uses specific knowledge related to integrating new technologies in teaching activity and creating new teaching resources.
- Highlights causal relationships between social factors and the quality of the instructional—educational process.
- Develops and applies assessment instruments.

The capacity to apply the knowledge and use the know-how for completing tasks and solving problems. The skills are described as being cognitive (requiring the use of logical, intuitive and creative thinking) or practical (implying manual dexterity and the use of methods, materials, tools and intrumentation).

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- Develops teamwork skills and identifies possibilities for stimulating individual and group creativity.
- Identifies solutions and draws up plans based on knowledge in the psychopedagogy of adolescents, young adults and adults to optimize the teaching—learning process.
- Identifies types of activities carried out in upper secondary, post-secondary and university education.
- Properly fulfills requirements/work tasks.
- Selects and groups relevant information according to requirements/work tasks.
- Analyzes and compares the characteristics of the environments of origin of the presented cases.
- Properly interprets the causal relationships existing in the socio-educational field.
- Identifies appropriate intervention strategies in situations of educational crisis.
- Properly argues the way of solving/intervening in an educational crisis situation.
- Formulates pertinent conclusions adapted to the current socio-educational context.



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The student's capacity to autonomously and responsably apply their knowledge and skills.

- Selects suitable bibliographic sources and deepens their contents.
- Respects the principles of academic ethics by correctly citing the bibliographic sources used.
- Demonstrates receptiveness to new learning contexts.
- Collaborates with colleagues and teaching staff in carrying out teaching activities.
- Demonstrates autonomy in organizing the learning context or the problem situation to be solved.
- Identifies roles and responsibilities in a multidisciplinary team and applies techniques of effective teamwork and relationships.
- Responsibly applies the principles, norms and values of professional ethics in accomplishing professional tasks.
- Ability to communicate with higher hierarchical structures and with the subordinate team.
- Ability for professional relationships and complex communication with pupils and students.
- Ability for professional relationships and communication with the teaching practice mentor.
- **9. Teaching techniques** (Student centric techniques will be considered. The means for students to participate in defining their own study path, the identification of eventual fallbacks and the remedial measures that will be adopted in those cases will be described.)

The following teaching methods will be used: both expository (lecture, presentation using PPT or video materials) and conversational—interactive, based on discovery learning models facilitated by direct and indirect exploration of reality (experiment, demonstration, modeling) as well as action-based methods such as exercises and projects.

Starting from the analysis of master's students' learning characteristics and their specific needs, the teaching process will explore both expository methods (lecture, presentation, storytelling, explanation, description, debate) and conversational—interactive methods (conversation, problematization) based on discovery learning models facilitated by direct and indirect exploration of reality (experiment, demonstration, modeling), as well as action-based methods such as exercise, case study, practical work, project, role-play.

Both expository methods and activities of analysis, case studies and problem situations will be used in teaching activities, based on presentations or by using various teaching aids that will be made available to the master's students. The presentations use images and diagrams so that the information presented is easy to understand and assimilate.

This course covers information and practical activities aimed at supporting master's students in their learning efforts and in developing optimal collaborative and communication relationships in a climate conducive to discovery learning.

Practicing active listening and assertive communication skills will be pursued, as well as the mechanisms of constructing feedback, as ways of behavioral regulation in various situations and of adapting the pedagogical approach to the learning needs of the master's students.

The ability to work in a team will be practiced to solve different learning tasks, as well as knowledge of assessment methods in technical subjects.

#### 10. Contents

# Responsability and autonomy



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Bibliography:		
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### 11. Evaluation

Activity type	11.1 Evaluation criteria	11.2 Evaluation methods	11.3 Percentage of final grade		
11.4 Course					
11.5 Seminary/laboratory/project	Presentation of all required documents Correctness of the documents prepared. Delivery of the trial lesson and the final lesson	Formative assessment Portfolio	100%		
11.6 Passing conditions					
Obtaining at least 50% of the total score					

12. Corroborate the content of the course with the expectations of representatives of employers and representative professional associations in the field of the program, as well as with the current state of knowledge in the scientific field approached and practices in higher education institutions in the European Higher Education Area (EHEA)

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Date	Course lecturer	Instructor(s)	for practical a	ıctivities
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25.09.2025 NA NA

Date of department approval Head of department

Prof. Dr. Claudius Dan

Date of approval in the Faculty Council Dean

Prof. Dr. Ing. Radu Mihnea Udrea