

PRACTICAL WORK SYLLABUS ¹

1. Information about the program

1.1 Higher education institution	Politehnica University Timisoara
1.2 Faculty ² / Department ³	ELECTRONICS, TELECOMMUNICATIONS AND INFORMATION TECHNOLOGIES / Communications
1.3 Field of study (name/code ⁴)	Electronics, Telecommunications and Information Technologies Engineering /202010
1.4 Study cycle/Type of study program ⁵	Master / Research Master
1.5 Study program (name/code/qualification)	Communications Networks / 20.20.10

2. Information about discipline

2.1a Type of practical work ⁶	Research practice 3						
2.1b Type of practical work in Romanian	Practică de cercetare 3						
2.2 Coordinator (holder) of applied activities ⁷	Prof. dr. eng. Corina Nafornta						
2.3 Year of study ⁸	2	2.4 Semester	3	2.5 Type of evaluation	V	2.6 Regime of discipline ⁹	DOB
2.7 Academic year ¹⁰	2025-2026	2.8. Cod of discipline	M232.25.03.C5				

3. Total estimated time (direct practical activities, partially assisted activities)

3.1 Number of hours fully assisted/week	11
3.2 Total number of hours fully assisted/sem.	14.29
3.3 No. of credits	8

4. Prerequisites (where applicable)

4.1 Curriculum	<ul style="list-style-type: none"> The aspects addressed in the previous semester at Research Practice 2 are continued.
4.2 Learning outcomes	<ul style="list-style-type: none"> Understanding the concept of scientific research

5. Mission of the Practical Work and conditions for its accomplishment¹⁰

5.1 Mission	<ul style="list-style-type: none"> Developing the student's research skills
5.2 Conditions required to carry out the practical work	<ul style="list-style-type: none"> It is carried out in our own laboratories, in research laboratories, or in partnership with the industry.

6. Learning outcomes ¹¹ acquired through practical work in accordance with the mission

Knowledge	<ul style="list-style-type: none"> C1. The student/graduate knows research methods, techniques and paradigms C7. The student/graduate knows the principles of professional communication C8. The student/graduate knows the terminology and conventions of technical communication C11. The student/graduate knows communication technologies and protocols
Skills	<ul style="list-style-type: none"> A7. The student/graduate presents ideas and results in academic/professional contexts A8. The student/graduate explains complex concepts for different audiences A9. The student/graduate applies complementary approaches in research projects A11. The student/graduate selects and applies communication methods appropriate to the context
Responsibility and autonomy	<ul style="list-style-type: none"> RA1 The student/graduate independently manages a research process and critically evaluates the results RA4 The student/graduate ensures the correctness and relevance of the conclusions drawn RA8 The student/graduate adapts to various professional communication contexts

7. Objectives of the discipline (related to the learning outcomes presented at point 6)

- Developing the student's research skills
- Identifying and correctly presenting the previously chosen topic
- Evaluating the existing techniques in the state of the art and proposing further developments
- Identifying points where specific innovative solutions can be found
- Knowing the principles of writing a research report
- Management of a research project
- Writing and publication of a scientific paper

8. Topics and activities for practical work¹²

8.1 Topics for practical work	
Proposal and implementation of solutions to solve research specifications; writing a research report and/or a scientific paper	
8.2 Type of activities	8.3 Duration
Scientific analysis and writing, implementation, presentation, management of research activity carried out through: - partially assisted activities	154

9. Student's assignments¹³

--

10. Evaluation

10.1 Evaluation criteria	10.2 Evaluation methods	10.3 Share of the final grade
Knowledge of specialized concepts and terms	Examination by the coordinator	1/3
Research methodology development	Examination by the coordinator	1/3
Ability to make an analysis on the chosen topic. The manner in which the research report is written.	Examination by the coordinator	1/3
10.4 Minimum performance standard (minimum amount of knowledge necessary to pass the discipline and the way in which this knowledge is verified ¹⁴)		
<ul style="list-style-type: none"> • The student is able to develop and comparatively analyze a solution to a research problem, including validating it through simulation/experimentation. 		

Date of approval in the Faculty Council¹⁵

07.10.2025

Dean
(signature)
Date of completion

25.09.2025

Head of Department
(signature)
Coordinator of applied activities
(signature)