

SYLLABUS

1. Program information

1.1 Higher education institution	Technical University of Cluj-Napoca
1.2 Faculty	Faculty of Electronics, Telecommunications and information Technology
1.3 Department	Communications
1.4 Field of study	Electronic Engineering, Telecommunications and Information Technologies
1.5 Cycle of study	Bachelor of Science
1.6 Study program / Qualification	Telecommunications Technologies and Systems/ Engineer
1.7 Form of education	IF – full-time education

2. Course information

2.1 Course title	Field-Specific Research for the Graduation Project	Course code	TST-E59.00/
2.2 Course coordinator	-		
2.3 Seminar/ laboratory/ project/ practical activity coordinator	<i>Diploma Thesis Coordinator</i>		
2.4 Year of study	4	2.5 Semester	8
2.6 Type of assessment	E		
2.7 Course status	Formative category		DS
	Optionality		DOB

3. Estimated total time

3.1 Hours per week	5	of which:	3.2 Lecture	-	3.3 Seminar	-	3.3 Laboratory	-	3.3 Project	-	3.3 Practical training	5
3.4 Hours per semester	70	of which:	3.5 Lecture	-	3.6 Seminar	-	3.6 Laboratory	-	3.6 Project	-	3.3 Practical training	70
3.7 Time distribution (hours per semester) for individual study and assessment:												
(a) Assessment												3
(b) Study using textbook, course materials, bibliography, and notes												18
(c) Additional documentation in the library, on specialized electronic platforms, and in the field												3
(d) Preparation for seminars/laboratories, assignments, reports, portfolios and essays												3
(e) Tutoring												3
(f) Other activities												-
3.8 Total hours of individual study and assessment (sum of (3.7(a))...3.7(f))										30		
3.9 Total hours per semester (3.4+3.8)										100		
3.10 Number of credits										4		

4. Prerequisites (where applicable)

4.1 curriculum	N/A
4.2 competencies	N/A

5. Requirements (where applicable)

5.1. for the development of the lecture	Cluj-Napoca
5.2. for the development of the seminar/ laboratory/ project	Cluj-Napoca

6. Specific competencies acquired

Professional competencies	C6. Solving specific problems of the broadband communications networks: propagation in different environment, circuits and equipment for high frequencies (microwaves and optical).
Transversal competence	CT1: Methodical analysis of the problems encountered in the activity, identifying the elements for which there are established solutions, thus ensuring the fulfillment of professional tasks.

7. Expected learning outcomes

Knowledge	N/A
Skills	N/A
Responsibility and autonomy	N/A

8. Course objectives (based on the grid of specific competencies acquired)

8.1 General objective of the course	Practice for the graduation project in order to obtain the degree in Telecommunications Technologies and Systems
8.2 Specific objectives	1. Experimental results and their interpretations

9. Contents

9.1. Activities	No. of hours	Teaching methods	Remarks
N/A			
References: 1. Recommended by the Diploma Thesis Coordinator On-line references: 2. Recommended by the Diploma Thesis Coordinator			

10. Alignment of the course contents with the expectations of the epistemic community, professional associations, and representative employers in the field related to the program

The discipline content and the acquired skills are in agreement with the expectations of the professional Competences acquired will be used in the following COR occupations (Electronics Engineer; Telecommunications Engineer; Electronics Design Engineer; System and Computer Design Engineer; Communications Design Engineer) or in the new occupations proposed to be included in COR (Sale Support Engineer; Multimedia Applications Developer; Network Engineer; Communications Systems Test Engineer; Project Manager; Traffic Engineer; Communications Systems Consultant).

11. Assessment

Activity type	11.1 Assessment criteria	11.2 Assessment methods and type of assessment: continuous	11.3 Weight in final grade
11.4 Course	-	-	-
11.5 Practice	Level of acquired knowledge and abilities	M= based on the relevance of the results obtained during the development of the diploma project. It represents a current estimate of the grade that the coordinator will propose to the evaluation board.	100%
11.6 Minimum performance standard Qualitative point of view <i>Minimal theoretical and practical knowledge:</i> ✓ Practice for the graduation project in order to obtain the degree in Telecommunications Technologies and Systems. <i>Minimal acquired competences:</i> ✓ Experimental results and their interpretations. Quantitative point of view ✓ Mark ≥ 5			

Completion date:	Course coordinators	teaching rank, title First name LAST NAME	Signature
16.06.2026			
	Practice	Diploma Thesis Coordinator	

Approval of the Head of the Department coordinating the course, only if this differs from the department organizing the study program

Head of Department

Date of approval by the Council of the Communications Department
19.06.2026

Head of Communications Department
Prof. Virgil DOBROTA, Ph.D.

Date of approval by the Council of the Faculty of Electronics, Telecommunications and Information Technology
30.06.2026

Dean,
Prof. Ovidiu-Aurel POP, Ph.D.