SYLLABUS

1. Data about the program of study

1.1 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 Program of study / Qualification	Telecommunications Technologies and Systems/ Engineer
1.7 Form of education	Full time
1.8 Subject code	TST-E58.00

2. Data about the subject

2.1 Subject name	Diploma Project Elaboration					
2.2 Subject area	Theoretical area: Methodological area: Analytic area:					
2.3 Course responsible	-					
2.4 Teacher in charge with seminar / laboratory / project	Diploma Thesis Coordinator					
2.5 Year of study	3	2.6 Semester	8	2.7 Assessment	V	2.8 Subject category	DS/DI

3. Estimated total time

3.1 Number of hours per week	4	of which: 3.2 course	0	3.3 Project	4
3.4 To Total hours in the curriculum	56	of which: 3.5 course	0	3.6 Project	56

Distribution of time	Hours
Manual, lecture material and notes, bibliography	0
Supplementary study in the library, online specialized platforms and in the field	0
Preparation for seminars / laboratories, homework, reports, portfolios and essays	0
Tutoring	0
Exams and tests	0
Other activities: Practical Work	44

3.7 Total hours of individual study	44
3.8 Total hours per semester	100
3.9 Number of credit points	4

4. Pre-requisites (where appropriate)

4.1 curriculum	N. A.
4.2 competence	N. A.

5. Requirements (where appropriate)

5.1. for the course	N.A.
5.2. for the seminars / laboratories / projects	N.A.

6. Specific competences

Professional competences	C6. Solving specific problems of the broadband communications networks: propagation in different environment, circuits and equipment for high frequencies (microwaves and optical).
Cross competences	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. CT2: Defining the activities in each stage and distributing them to the subordinates with the complete explanation of the duties, according to the hierarchical levels. It ensures the efficient exchange of information and inter-human communication. CT3: Adaptation to new technologies, professional and personal development, through continuous training. Use of printed documentation sources, specialized software and electronic resources in Romanian and in (at least) one language of international circulation.

7. Discipline objectives (as results from the key competences gained)

7.1 General objective	Development of diploma project (fundamentals and design parts) in order to obtain the degree Telecommunications Technologies and Systems.
7.2 Specific objectives	1. Obtaining the fundamental knowledge and designing the proposed solution of the diploma project. 2. Preliminary presentation in a competition such as the Student Symposium in Electronics and Telecommunications SSET (optional)

8. Contents

8.1. Project	Teaching methods	Notes
1. Research Planning		
2. State-of-the-art Study		
3. Fundamental Knowledge		
4. Solution Design	N/A	N/A
5. Theoretical Evaluation of the Solution		
6. Proposal for implementation/simulation methods		
7. Experiments Planning		
References: 1. Recommended by the Diploma Thesis Coordinator **On-line references** 2. Recommended by the Diploma Thesis Coordinator		

9. Bridging course contents with the expectations of the representatives of the community, professional associations and employers in the field

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).

10. Evaluation

Activity type	10.1 Assessment criteria	10.2 Assessment methods	10.3 Weight in the final grade
10.4 Course	-	-	-
10.5 Seminar/ Laboratory	The level of acquired knowledge and abilities	- Continuous formative evaluation - practical lab test	100%

10.6 Minimum standard of performance

Qualitative point of view
Minimal theoretical and practical knowledge:
  ✓ Development of diploma project: fundamentals parts in order to obtain the degree Telecommunications Technologies and Systems.
  ✓ Development of diploma project: design parts in order to obtain the degree Telecommunications Technologies and Systems.
Minimal acquired competences:
  ✓ Obtaining the fundamental knowledge and designing the proposed solution of the diploma project.
Quantitative point of view
Mark ≥ 5

Date of filling in: 20.06.2023	Responsible	Title First name SURNAME	Signature
	Applications	Diploma Thesis Coordinator	

DDate of approval in the Council of the Communications Department 11.07.2023	Head of Communications Department Prof. Virgil DOBROTA, Ph.D.
Date of approval in the Council of Faculty of Electronics, Telecommunications and Information Technology 12.07.2023	Dean Prof. Ovidiu POP Ph.D.