

SYLLABUS

1. Data about the program of study

1.1	Institution	Technical University of Cluj-Napoca
1.2	Faculty	Faculty of Electrical Engineering
1.3	Department	Power Systems and Management
1.4	Field of study	Energy Engineering
1.5	Cycle of study	Master of Science
1.6	Program of study/ Qualification	Modern Power Systems
1.7	Form of education	Full time
1.8	Subject code	26.00

2. Data about the subject

2.1	Subject name	Dissertation Defense			
2.2	Course responsible/ lecturer	All the teaching staff involved in the program Assoc.Prof.Eng. Horia BELEIU, PhD			
2.3	Teachers in charge of Seminars/ Laboratory/ Project				
2.4 Year of study	II	2.5 Semester	2	2.6 Type of assessment (<i>E – exam, C – colloquium, V – verification</i>)	E
2.7 Subject category	<i>DF – fundamental, DD – in the field, DS – specialty, DC – complementary</i>				DS
	<i>DI – compulsory, DO – elective, Dfac – optional</i>				DI

3. Estimated total time

3.1 Number of hours per week:	-	of which	3.2 Course	-	3.3 Seminar	1	3.3 Laboratory	-	3.3 Project	-
3.2 Total hours per semester	-	of which	3.5 Course	-	3.6 Seminar	14	3.6 Laboratory	-	3.6 Project	-
3.7 Individual study:										
(a) Manual, lecture material and notes, bibliography										
(b) Supplementary study in the library, online and in the field										
(c) Preparation for seminars/laboratory works, homework, reports, portfolios, essays										
(d) Tutoring										
(e) Exams and tests										
(f) Other activities										
3.8 Total hours of individual study <i>[sum (3.7(a) to 3.7(f))]</i>										
3.9 Total hours per semester <i>[sum of 3.4 and 3.8]</i>										
3.10 Number of credit points						10				

4. Prerequisites (where applicable)

4.1	Curriculum	The knowledge included in the disciplines of the university curriculum.
4.2	Competences	-

5. Requirements (where appropriate)

5.1	For the course	Online or onsite
5.2	For the applications	

6. Specific competences

Professional competences	The ability to provide a synthetic and intuitive presentation of the main objectives accomplished and the results obtained after completing the dissertation. The ability to logically and concisely present the theoretical and practical components included in the dissertation. The ability to apply the knowledge gained about power systems during the question session with the committee.
Cross competences	1. Promoting logical reasoning, both convergent and divergent, practical applicability, evaluation and self-evaluation in decision-making. 2. Efficient use of linguistic skills and knowledge of information and communication technology. 3. Promoting initiative, dialogue, cooperation, a positive attitude and respect towards others, diversity and multiculturalism, and continuous improvement of one's own activity.

7. Expected learning outcomes

On completion of the discipline, the student will be able to demonstrate:

Knowledge	Knows the fundamental principles and concepts of educational theory and practice applicable to pre-university education. Critically understands modern methodologies of teaching, assessment and educational management.
Skills	Designs and implements teaching activities adapted to the specific characteristics of the student group. Uses appropriate methods and techniques for assessing competences in diverse educational contexts.
Responsibility and autonomy	Demonstrates autonomy in designing the teaching approach and in taking educational decisions. Shows responsibility towards continuous professional development and promotes ethical values in teaching activity.

8. Discipline objectives (based on specific competencies acquired)

8.1 General objective	Writing a thesis that addresses a current topic in Modern Power Systems. • Establishing the research objectives and creating the research program. • Synthesizing the documentation related to the thesis. • Writing the thesis. • Creating a concise and intuitive presentation of the main objectives achieved and the results obtained upon finalizing the thesis.
8.2 Specific objectives	

9. Contents

IT'S NOT THE CASE

10. Alignment of course content with expectations of the epistemic community, professional associations, and representative employers in the field

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11. Assessment

Activity type	10.1 Assessment criteria	10.2 Assessment methods	11.3 Weight in the final grade (%)
10.4 Probe 1	Evaluation of fundamental and specialized knowledge (N1)	Online/onsite	50%
10.5 Probe 2	The presentation and public defense of the dissertation (N2)	Online/onsite	50%

Date of completion	Lecturers	Title/ Surname/ Name:	Signature
September 2024	Course (Theoretical component)	All teaching staff	
	Applications	All teaching staff	

Date of approval in the council of the Department of Power Engineering and Management September 2024	Head of Department: Assoc. Prof. Eng. Horia G. BELEIU, PhD
Date of approval in the Faculty of Electrical Engineering Council September 2024	Dean: Assoc. Prof. Eng. Andrei C. CZIKER, PhD