

POSTGRADUATE DIPLOMA THESIS

1. GENERAL

SCHOOL	ENGINEERING		
DEPARTMENT	INFORMATICS AND COMPUTER ENGINEERING		
LEVEL OF STUDIES	POSTGRADUATE		
COURSE CODE		SEMESTER	3 rd
COURSE TITLE	Postgraduate Diploma Thesis		
INDEPENDENT TEACHING ACTIVITIES <i>(In case credits are allocated to distinct parts of the course, e.g., Lectures, Laboratory Exercises, etc. If credits are allocated uniformly to the entire course, state the weekly teaching hours and total credits.)</i>	WEEKLY TEACHING HOURS	CREDITS	
		30	

2. CONTENT

The Postgraduate Diploma Thesis (PDT) aims to enable the student to analyze complex problems in the broader scientific area of next-generation communication networks, distributed computing, and systems. It helps students manage scientific knowledge and resources and present their work both in writing and orally in the most correct and effective manner. The PDT is an extensive project completed at the end of the studies, when the student has acquired and assimilated the required basic and advanced knowledge. It is a synthetic work with the primary goal of consolidating how the knowledge acquired can be combined to solve complex problems and applications.

The importance of the Thesis is significant and weighty. In this context, students are encouraged to work on topics at the forefront of science and technology in next-generation communication networks, distributed computing, and systems, focusing on originality and research interest. During the thesis execution, the student learns to define problems, identify and utilize relevant work from other scientists, develop strategies for solving and implementing solutions, work independently, gather information from experienced individuals, take initiative, and organize efforts efficiently.

Indicative Outline:

Weeks 1-3:

Field research, collection, study, and analysis of the bibliography. Concise description and delimitation of the topic, emphasizing its significance and scientific interest. Identification of research directions, partial goals, expected contribution, and structure of the PDT deliverable document.

Weeks 4-7:

Followed methodologies and tools. Determination of the methodological approach, detailed analysis and description of the subject, analytical specifications, and design of the proposed solution. It is recommended to divide (where possible) into sub-sections, partial analysis/design, and synthesis of results. Writing corresponding

paragraphs/sections of the PDT deliverable document.

Weeks 8-12:

Development, implementation, and documentation of the proposed solution. Evaluation within a predetermined methodological framework, assessment and interpretation of results based on the bibliography and the predefined comparative framework, extraction of conclusions. Writing corresponding paragraphs/sections of the PDT deliverable document.

Week 13:

Completion of the writing of the PDT deliverable document. Emphasis is placed on the final recording of data and assumptions, the completeness of the bibliography, the structured presentation and commentary on the results, the summary of the subject and goals, the discussion of any problems (and how they were addressed), the innovative elements and research contribution of the PDT, and future research prospects.