Study program: Information Technology

Course title: GRADUATE THESIS

Course status: mandatory

Number of ECTS credits: 4

Prerequisite courses: Passed all exams and completed professional practice

Course objectives

- the ability of the candidate to independently and effectively solve a specific, more complex problem in the field of information technology,

- integration of knowledge and skills acquired as part of passed courses,

- development of the ability to apply theoretical knowledge and practical skills in future IT professional practice,

- acquiring knowledge about the method, structure, and form of writing reports after the analyzes and other activities carried out within the given topic of the diploma thesis,

- familiarization with the elements of scientific, and research work.

Learning outcomes

Graduate student:

- is able to integrate theoretical and empirical sources of knowledge in the field of information technologies

- analyzes the available study methodologies and procedures and chooses the most appropriate ones for the domain of the given professional problem

- systematizes and correctly uses professional literature, respecting copyright and professional and ethical frameworks of research work

- independently compiles a consistent report on his scientific and professional activities, systematically documents the theoretical and practical aspects of his work in the field of IT

Summary of topics

The content is defined individually in accordance with the topic of the diploma thesis and the reference status and methodology of the specific field of IT within which it is realized.

The student, in agreement with the mentor, prepares a diploma thesis in written form according to the standards provided for in the Rulebook on the final/diploma exam of the Faculty of Technical Sciences and general standards for the preparation of an independent professional, i.e. scientific-professional thesis.

Content-wise, the paper is based on a theoretical and/or empirical analysis of a specific problem and is written in the general form:

- 1. Introductory part (including: subject, goal, and field of application),
- 2. Theoretical-methodological part,
- 3. Organization of research,
- 4. Results and discussion,
- 5. Concluding considerations,
- 6. Attachments i
- Literature.

The student prepares and defends the written graduation thesis publicly in agreement with the mentor and in accordance with the prescribed rules and procedures.

Literature

Live and online consultations, mentoring work, individual work, method of content analysis, documentation and literature from the field of IT reference for the topic, independent work on practical aspects of problems that are solved in the laboratory and/or in real practice conditions; independent writing of a diploma thesis, shaping of a scientific-professional text, preparation of a presentation and public oral defense of the work in a monologue, and then in a dialogue form.

Evaluation (maximum number of points 100)