Study program: Information Technology

Course title: RESEARCH WORK

Course status: mandatory

Number of ECTS credits: 1

Prerequisite courses: /

Course objectives

Application of basic, theoretical-methodological, scientific-professional, and professional-applied knowledge and methods to solve specific problems within the chosen field. Within this part of the final thesis, the student studies the problem, its structure, and complexity and, based on the conducted analyses, draw conclusions about possible ways of solving it. Studying the literature, the student becomes familiar with methods intended for solving similar tasks and engineering practices in solving them. The goal of the students' activities within this part of the final thesis is to gain the necessary experience through solving complex problems and tasks and recognizing opportunities for applying previously acquired knowledge in practice.

Learning outcomes

Enabling students to independently apply previously acquired knowledge from different areas they studied, in order to see the structure of the given problem and its systemic analysis in order to draw conclusions about possible ways to solve it. Through the independent use of literature, students expand their knowledge in the chosen field and study different methods and works related to similar issues. In this way, students develop the ability to conduct analyses and identify problems within the given topic. Through the practical application of acquired knowledge from various fields, students develop the ability to see the place and role of engineers in the chosen field, the need for cooperation with other professions, and teamwork.

Content of the course

It is formed individually in accordance with the needs and the field covered by the given topic of the final paper. The student studies professional literature, professional and diploma theses of students dealing with similar topics, and performs analysis in order to find a solution to a specific task that is defined by the task of the final paper.

Literature

- [1] D. Bjekić: Research methods and scientific communication, Technical Faculty, Čačak, 2010.
- [2] Contemporary textbook literature, professional, scientific, and graduate papers relevant to the chosen topic of the final paper

Teaching methods

Consultations and online consultations, mentoring work, individual work, method of content analysis, documentation and literature from the field of reference for the topic, possibly empirical research and data collection in the field; independent writing of a professional paper, shaping of a scientific-professional text, preparation of a presentation and public oral defense of the work in a monologue, and then in a dialogic form.

Evaluation (maximum number of points 100)