

Study program: Communal Engineering
Course: Specialist Paper
Status of course: compulsory
ECTS credits: 15
Pre-requisites: 42 ECTS credits
<p>Aims of the course:</p> <ul style="list-style-type: none"> - systematization of theoretical and practical knowledge acquired in the study program and during professional engineering practice, - acquiring knowledge about the method, structure and form of writing the reports after performing analyzes and other activities carried out within the given topic of a specialist paper, - gaining experience in writing papers in which it is necessary to describe issues, implement methods and procedures and obtain results, - developing students' ability to publicly present the results of independent work prepared in a suitable form and respond to comments and questions on the subject.
<p>Learning outcomes:</p> <ul style="list-style-type: none"> - training students for systematic approach in problem solving, - conducting analyzes as well as applying acquired knowledge to other fields in order to find solutions to the given problem. Self-study and problem- solving in the subject area. - applying the experience in practice when solving problems in the field of their profession, - gaining ability to participate in the assessment of quality of the environment. - applying new technologies and scientific knowledge in accordance with European standards and directives in the Republic of Serbia.
<p>Content:</p> <p>After collecting 42 ECTS credits, the student approaches the preparation of a specialist paper. Specialist paper is a student research-practical work in which he/she is invited to solve practical problems and apply methodology of practical research in one of the fields of the study program. Procedures and forms related to professional practice are given on the website of the college: http://www.vtsnis.edu.rs/preuzimanja_dokumenata.html</p> <p>Specialist paper is written from any scientific-professional or professional-applicative subject but integrates knowledge and skills from several subjects. The teacher of this selected subject is the mentor of the student's specialist paper. Mentor is an active participant in all stages of the specialist paper, and, if necessary, during the preparation of the paper, he/she incl. comm. from the company (with the professional practice of the student) and other teachers at the College. In addition to the basic overview of the existing literature and / or legal-technical regulations in the selected field, spec. paper should contain at least 2 of the follow. elem. – analyt., budgetary, design or experim. aspects. The paper is written on an individual basis, and it is desirable that it is related to the specific knowledge acquired through the course of engineering professional practice in an organisation. Then, it should focus on problem solving, calculating, designing, etc. ie. meeting the goals of the paper. The paper should be supported by practical work or experiment, which involves experiment planning, data collection, processing and analysis, and the creation of written communication.</p> <p>After the research, the student prepares the specialist paper in the prescribed form containing the following chapters: Introduction, Aim of the paper, Theoretical research, Experimental research (Practical work), Results and discussion, Conclusion and Review of the used literature. Afterwards, the student submits the written version of the paper, which the commission examines and approves of for presentation. The presentation is public. It is done individually in accordance with the needs and the narrow area of specialist studies which it covers by the given theme of a specialist paper. The student prepares and presents written specialist paper publicly in agreement with the mentor and in accordance with the prescribed rules and procedures.</p>
<p>Methods of practice:</p> <p>Mentor, interactive, practical, laboratory, individual work. During the preparation of specialist paper, the student is consulted by a mentor and, if necessary, by other professors who deal with a narrow area that is the topic of specialist paper. Student writes a specialist paper and after obtaining consent from the assessment and defense commission, he/she submits the binded copies to the commission. The defense of the specialist paper is public, and the student is obliged, after the defense, to give oral answers to the questions and remarks raised.</p>
<p>Grading system (maximum 100 points), grading scale from 5 to 10: below 51 points grade 5, grade 6 from 51-60 points, grade 7 from 61-70 points, grade 8 from 71-80 points, grade 9 from 81-90 points, grade 10 from 91-100 points. The assessment of the final work is carried out based on the general success of the student, the grades from the subject from which the student is doing specialist paper, the assessment of the quality of the written paper, and the quality of the oral presentation and the defense of the specialist paper.</p>