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Erasmus+ CBHE Project:
CREATING THE NETWORK OF KNOWLEDGE LABS
FOR SUSTAINABLE AND RESILIENT ENVIRONMENTS
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Study on the needs, constrains and possibilities for the development of postgraduate study programme *Sustainable and resilient environments*

WB Institution: **Higher technical professional school in Zvecan [HTPSZ]**

INTRODUCTION

- Increase in the number of natural, technological and other types of risks and threats affects the environmental pollution;
- Education is hereby viewed and defined as basic preventive measure in modern environmental protection system;
- Main goal - establishing and developing security awareness and culture, acquiring and raising the level of general and specific knowledge and skills for creation of sustainable and resilient development.

INTRODUCTION

- New master study program Protection at work - fire protection at HTPSZ would have given a huge contribution to the wider community through education of professional specialists;
- Professionally educated and trained specialized staff in the field of fire protection are important factors in the process of integration and operationalization of science and practice, using all their professional knowledge, skills and competencies.

RESEARCH

- Research has been conducted on the sample of 150 students from different study programs.
- the results indicate that almost all of them 140 (93.33%) want to acquire new knowledge about environmental protection and sustainable development;

CREATION OF MASTER DEGREE VOCATIONAL PROGRAM: PROTECTION AT WORK - FIRE PROTECTION

- Study program title: **Fire protection**
- Type of studies: **Master vocational studies** – duration two years (four semesters 120 ECST).
- Vocation: **Master professional engineer for protection at work – fire protection**
- Study program will be implemented through:
- compulsory subjects - covering basic knowledge that students need to master;
- elective courses - which profiles the student closer to their education;
- professional practice - which the student performs in the fourth semester;
- Master's thesis - that the student realizes in the fourth semester.

The objectives of the study program

- The objectives of the master of professional studies program derives from the basic goals and objectives of the HTPSZ as a scientific and educational institution as well as the study program purpose.
- The main objective of the study program is achieving competences and academic knowledge and skills in the field of fire protection engineering and application of scientific and professional achievements in order to solve the problem of fire protection and management so as development of modern fire protection systems.

The purpose of the study program

- The purpose of the study program of master professional studies is to educate students for Master professional vocation for protection at work- fire protection in accordance with the needs and concept development of economy and society in order to solve complex problems of fire protection in the workplace.
- The content of the study program will enable students to acquire knowledge, from the field of natural, technological, socio-humanistic and medical sciences; skills and competencies that will enable them to work on complex, multidisciplinary fire protection.

The structure of the study program

- The structure of the study program is compliant with the standards for accreditation of study programs of the first and second levels of higher education, in accordance with the Bologna Declaration and the Law on Higher Education.

Competence of graduates

- Mastering the master study program of professional studies of protection at work - fire protection provides general ability for:
- analysis of the problems in the work and environmental areas;
- prediction of solutions and consequences;
- mastering the methods, procedures and processes of identification and assessment of risks in the working environment;
- development of critical thinking and approached solving the current problems in the field of protection;
- application of knowledges in practice;
- development of competences and communication skills with immediate and wider environment;
- development of professional ethics.

CURRICULUM FOR MASTER PROFESSIONAL STUDIES, PROTECTION AT WORK - FIRE PROTECTION

- Study program includes 9 compulsory, 4 elective courses, which are selected from 8 offered, professional practice and master thesis.
- Each curriculum is evaluated with a certain number of ECST credits.
- In the structure of the study program the distribution of different types of curriculums is as follows:
- academic general education
- theoretical-methodological
- scientific expertise
- professional application

CURRICULUM FOR MASTER PROFESSIONAL STUDIES, PROTECTION AT WORK - FIRE PROTECTION

- First year:
- 1. The methodology of scientific research - compulsory
- 2. The dynamics of fire - compulsory
- 3. Protection of buildings against fire - compulsory
- 4. Risks in Manipulating Hazardous Substances - compulsory
- 5. Security of strategic energy facilities - compulsory
- 6. Maintenance of technical systems - elective
- 7. The economics of fire protection - elective
- 8. System Engineering - elective
- 9. Project Management - elective

CURRICULUM FOR MASTER PROFESSIONAL STUDIES, PROTECTION AT WORK - FIRE PROTECTION

- Second year:
- 1. Fire protection due to the effects of electricity - compulsory
- 2. Information technology in the protection - compulsory
- 3. Equipment for the intervention and rescue - compulsory
- 4. Safety and Health at Work - compulsory
- 5. Ventilation of fire-threatened areas - elective
- 6. Security and emergency education - elective
- 7. Design and maintenance of fire protection systems - elective
- 8. Management and Human Resource Development - elective
- 9. Professional Practice
- 10. Master's thesis