

HSE Professional

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Faculty	Faculty of Safety Engineering
Type of study	Follow-up Master
Language of instruction	English
Code of the programme	N1022A020001
Title of the programme	HSE Professional
Regular period of the study	2 years
Coordinating department	Department of Occupational and Process Safety
Coordinator	prof. Dr. Ing. Aleš Bernatík
Key words	Fire Safety, HSE Management, Safety and Security, Environmental Protection, Occupational Safety

About study programme

Applicants will be admitted to the study program in full-time study at the master's follow-up study. There is no exam in the admission procedure. Graduates of bachelor study programs of similar specialization may be admitted to study. Assessing the content of previous courses and comparing them with the required basics is done by the program guarantor on the basis of a comparison of curriculum subjects and teaching ranges. The results of previous studies will be taken into account. The final decision will be made by the Dean.

Graduate's employment

The aim of the study is to equip the graduate with competencies enabling him to successfully apply himself in the labor market in the field of HSE (Health, Safety, Environment).

Study aims

The aim of the study program is to prepare risk management professionals - in the areas of occupational safety, health and environmental protection, fire protection in the context of an integrated safety concept, which is currently being promoted in multinational companies around the world. The study program is multidisciplinary, includes: risk analysis, risk prevention, treatment of residual risks (emergency and crisis planning), see full risk management cycle according to ISO 31000, using OHSAS (ISO 45001), ISO 14000 and ISO 22301.

Graduate's knowledge

Upon completion of the HSE Professional Study Program, the student will be prepared in terms of the following knowledge:

- Demonstrate knowledge of HSE policy, frameworks, principles, standards and regulations, taking into account technical, ethical and societal issues.
- Demonstrate research-based knowledge and a comprehensive understanding of all risk management steps (based on risk-based decision-making).
- Understand the complexity of working conditions, process safety, and business continuity, and the ability to correlate health issues, socio-economic, political, physical and environmental vulnerabilities.

Graduate's skills

Upon completion of the HSE Professional Program, the student will be prepared in terms of the following skills:

- Apply adequate methodologies to the theoretical and practical issues of HSE management based on scientific approaches and best practices.
- Identify, analyze and evaluate risks and vulnerabilities and propose adequate evidence-based prevention and risk reduction.
- Implement and monitor integrated risk reduction, risk response and recovery activities.
- Pass academic findings to an interdisciplinary audience.
- Effectively communicate with stakeholders of HSE management, planning and operations (including public administration and self-government).
- Investigate incidents and accidents and implement lessons learned.
- Work with complex systems, including uncertainty, identify and handle emerging risks and apply the precautionary principle.
- Monitor and evaluate safety and health indicators, make decisions based on them.

Graduate's general competence

The graduate of the study program is equipped with the necessary range of technical, natural sciences and social disciplines, to the extent sufficient to solve complex safety problems in practice. While studying, the emphasis is on acquiring skills, especially through internships and guided practice. Graduates are also prepared for scientific research, especially in the field of safety and security.

Study curriculum

- form Full-time (en)