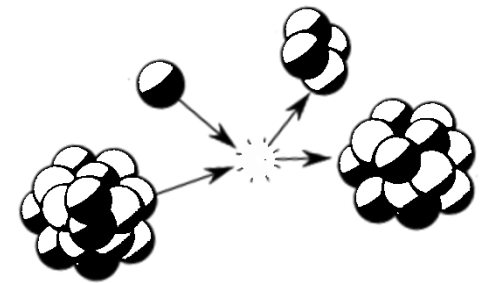


Vocational training and lifelong educational activities Slovak University of Technology in Bratislava

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SLOVAK UNIVERSITY OF TECHNOLOGY IN BRATISLAVA

- The oldest and largest technical university in Slovakia
- Continues the Mining Academy in Banská Štiavnica (1762 - 1918)
- Workplace: **Institute of Nuclear and Physical Engineering**
 - **7 prof., 12 assoc. prof., 3 assist., 11 R&D, 8 PhD., 3 technicians**



C-VET AND LIFELONG EDUCATION AT INPE

- Based on the history and wealth experience in various VET activities
 - **Postgraduate course in Operation of Nuclear Power Plants (1965 - 1987)**
- **Revised in 1997: Safety aspects of the operation of nuclear facilities**
 - Under supervision of assoc. prof. Ján Haščík
 - In total 19 completed courses with **383** trainees – The 20. The course is running.
- Double-semester program organised for employees working in the nuclear industry in Slovakia and the Czech Republic
- Lectures are provided by well-recognized university staff as well as by experts from the industry

POSTGRADUATE COURSE - STRUCTURE

- The first semester:
 - **90h long** - split into weekly camps.
 - Mainly lectured by academics.
 - **Technical tour** of selected nuclear facilities in Switzerland
 - NAGRA – Grimsel Test Site
 - Mont Terri Underground Rock Laboratory
 - NPPs Beznau and Liebstadt
 - ZWILLAG – Würenlingen (Interim storage of SF and RAW processing)
 - ENSI Brugg (Swiss Nuclear Regulatory Authority)
- **The exam from theoretical subjects is held on the 10th day after the end of lectures.**
 - Written part of the exam
 - Oral part of the exam

POSTGRADUATE COURSE - STRUCTURE

- The second semester:
 - **90-91h long** - split into weekly camps.
 - Mainly lectured by experts from the industry.
- **Final thesis**
 - Comparable to the simplified diploma thesis.
 - Usually focused on the interest or work experience of the trainee.
 - Supervisor – mainly from industry
 - Oponent – academicians or industry experts
- **The final defence in front of the committee of lecturers.**
- **Successful graduates are awarded a certificate.**

POSTGRADUATE COURSE - SUBJECTS

1 st semester	2 nd semester
Nuclear Safety	Safety Systems of Nuclear Power Plants
Nuclear Physics and Techniques	Accidents, incidents, and events affecting the safety of NPP operations
Nuclear Reactors	Safety culture and user effect
Safety Aspects of the Technological and Electrical Parts of a Nuclear Power Plant	Management of severe accidents
Radiation Safety and Protection Against Radiation	Management of RAW and SF
Material Aspects of Nuclear Power Plants	Reliability of NPPs
	Quality Management

POSTGRADUATE COURSE - PHOTOS



C-VET AND LIFELONG EDUCATION AT INPE

- The specific course utilizing knowledge from D&D of NPP:
 - **Decommissioning and Dismantling of NPPs**
 - 2011 – 17 participants
 - 2013 – 10 participants
 - 2016 – 10 participants
- **Revised in 2025: 11 participants**
 - Under supervision of assoc. prof. Róbert Hincá
- The structure and logic are the same as in the previous course.

POSTGRADUATE COURSE - SUBJECTS

1 st semester	2 nd semester
Nuclear Installations	Decommissioning of NPP A1 and V1 (Practical Experience)
Nuclear fuel cycle	Processing of Radioactive Waste
Dismantling and decommissioning in the international context	Storage and Disposal of Radioactive Waste, Radioactive Waste Repository
Dismantling and Decommissioning in a Global Context	Radiation Safety During Nuclear Power Plant Decommissioning
Planning, Cost Estimation, and Financing of NPP Decommissioning	

- **Visit to the Maintenance Training Centers in Paks (Hungary)**

C-VET – REACTOR PHYSICISTS

- Another type of activity CVET activity
 - **Periodic training of reactor physicists**
- Mandatory (by law) training for all reactor physicists in Slovakia
- Organised once a year
- The structure (5 days in total)
 - 1-day theoretical lectures
 - 3-days experiments at the research reactor (TU Wien, VR-1, BUTE)
 - 1-day visit to relevant nuclear research centre or infrastructure
- Smaller groups below 10 participants

TAKE-AWAYS

- **Long tradition of C-VET and Lifelong E&T at STU**
 - Nuclearized personnel
 - Nuclear-aware personnel
 - Sound mix of academia and industry knowledge
 - On request available in English
- **Specialized training for reactor physicists**
 - Close collaboration with the surrounding RRs
 - On request available in English

Thank you for your attention

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