

DUAL EDUCATION FOR A CAREER AS RADIATION PROTECTION ENGINEER

The Karlsruhe Model of Cooperative Education in Radiation Protection with both, integrated academic studies and work experience

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The **Baden-Württemberg Cooperative State University, Karlsruhe** integrates academic studies and work experience in the field of radiation protection and health physics. Precondition for enrollment is a high school diploma and an apprenticeship with a qualified company.

The curriculum was developed with both, university and specialists of radiation protection of the industrial partners and was evaluated by the State Ministry of Environmental Issues to convey specific certification to the graduates to comply with the German Radiation-Protection Ordinance.

- **Students are both students at the University and employees** with a monthly salary at a dual enterprise.
- Periods of theoretical studies alternate with periods of work terms with an equal duration of 12 weeks two times each per year.



The **Karlsruhe Institute of Technology (KIT)** is both a university of the state of Baden-Wuerttemberg with teaching and research tasks and a national laboratory of the Helmholtz Association. It was founded by a merger of Forschungszentrum Karlsruhe (now KIT Campus North) and Universität Karlsruhe (now KIT Campus South).

WAK GmbH Decommissioning and Waste Disposal Company (WAK) is responsible for all dismantling activities of decommissioned nuclear test and prototype plants on the site of the KIT Campus North (former nuclear research centre). It also covers handling of radioactive waste.

KIT Campus North and WAK as collaborating companies provide together their students a unique opportunity to follow on-the-job-training periods in broad application areas.



The students pass training periods in:

- **Radiochemical Analysis, Alpha and Gamma Spectrometry Methods and Liquid Scintillation Counting**
- **In-Vivo-Measurements, Internal and External Dosimetry**
- **Working Place and Environmental Supervising**
- **Radiation Protection at dismantling pilot nuclear facilities**
- **Licensing and regulations**

This is completed by an **external practical training period in a hospital** (radiology, nuclear medicine).

The graduates of the Department of Safety, Health & Environment of the University of Cooperative Education are **Bachelor of Science** in the field of

- **Health physics and radiation protection**
- **Environmental engineering and**
- **Work - safety**

The graduates prospects are excellent. They work as

- **Radiation Protection Officers (in medical or nuclear field)**
- **Radiation Protection Experts in surveillance or authority bodies**
- **specialists in regulatory authorities, as consultants in multidisciplinary consulting enterprises**
- **specialists in process engineering (repositories etc.)**

and as well as work safety engineers and experts in environmental engineering.