

## TVET in the Water Sector

### Course 3: Technical basics for TVET trainings in Wastewater disposal and treatment – relevant concepts, new facts and international experiences

Technical progress in the environmental field of wastewater is considerable. New processes, digitalisation and expanded operational concepts must also be incorporated into education and training. To this end, proven teachers and trainers also need regular technical training. In this course, you will discuss the essential technical developments of the past years and how these will be covered within TVET trainings in the future.

- **Content, elements, format and duration can be customized to the respective needs**

#### Learning outcomes

On completion of the training, participants

- Recognize the technical development in the water and wastewater sector
- Apply up to date subject knowhow as trainer.
- Use water sector specific learning methods in practice oriented training
- Create new exercises and practice oriented educational tasks

#### Contents

- Development in wastewater treatment (Phosphate elimination, 4th treatment step, Micro pollutants/ Treatment fit for reuse purpose, Disinfection)
- Energy efficiency in equipment and process (pumps, aeration, sludge / biogas management)
- Decentral solutions for wastewater and sanitation
- Operation & maintenance of sewage network as well as network rehabilitation
- Digitalization in wastewater - risks and chances
- Risk management, technical security and quality assurance, operational health and safety standards
- Technical standards and their relevance for up-to-date training
- Instruction techniques and teaching methods according to modern principles of adult training.

#### Formats

- Virtual or face to face
- Lectures, experience exchange
- Use of Learning Management System (Moodle based)

The practical approach includes cooperative work and self-learning.

#### Language

- English
- German
- Upon request: other languages with interpreters

#### Target groups

- TVET trainers and teachers
- Experienced trainers
- Water experts responsible for training for the wastewater sector

#### Participation requirements

- Experience in training in the water sector
- At least 5 years of professional experience

#### Duration

- 30 hrs (recommended)
- Virtual 5 days
- Face to face possible in 5 days (incl excursion)

#### Equipment

- Notebook / PC
- Stable internet connection
- Integrated or external microphone
- Webcam

#### Certificate

The participants will receive a certificate of participation after successful completion of the course.

#### Your contact

##### TVET Academy

Academy for International Cooperation  
Deutsche Gesellschaft für Internationale  
Zusammenarbeit (GIZ) GmbH

E [tvvet-academy@giz.de](mailto:tvvet-academy@giz.de)

I [www.giz.de/tvet-academy](http://www.giz.de/tvet-academy)