Wateropleidingen brengt praktijkgerichte waterkennis op een hoger peil

ADVANCED WASTEWATER TREATMENT

Information

Target group:	Experienced operators of domestic and industrial wastewater treatment plants
Entry level:	Vocational level
Entry level description:	Higher vocational education and having the diploma of course *Wastewater Treatment for Process Controllers*
Duration:	10 days

Learning targets

The advanced course is the successor of the basic course. This course includes the same topics as the basic course, but it provides extensive information about the various subjects of wastewater treatment. The chemical, biological and physical processes are handled separately, addressed with the corresponding calculations. Using this knowledge and calculations, the participants will be able to indicate whether the process is good and effective.

The participants are taught about the various components of a wastewater treatment plant. A plant consists of pipes, pumping installations, tanks and every component has a specific function in the treatment process. The participants can describe the functioning of each component separately, but also the function of a component in the whole system. The management of the whole process, including the control of the sludge and treated water, is part of the course, as well as trouble shooting. Topics like cost management, safety and energy reduction are also included.

Content

Generally the same topics as the basic course are elaborated, but more deeply on the background, calculations and performance. The course exists of the following topics:

- Relevant legislations and regulations
- Mechanical separation techniques
- Chemical, physical and biological treatment techniques
- Nitrogen cycle, removal of nitrates and phosphates
- Different plan lay-outs
- Operating, maintenance and process control
- Wastewater treatment plant operation
- Quality and safety

Course material

Course book and hand-outs of the presentations.

Extra

This course includes a field visits to wastewater treatment plants.