

## **INTEGRAL WATER MANAGEMENT**

### **Information**

*Entry level:* Vocational level

### **Learning targets**

Societal issues such as energy, flooding, the housing challenge, biodiversity and quality of the living environment are closely intertwined with water management. Correct knowledge of the water system forms the basis for tackling these environmental, quality and climate issues. In addition, the ability to look at these issues from an integral perspective is essential to achieve successful solutions. Only together with stakeholders can you meet these challenges.

After completing this course, you will have sufficient basic knowledge of the water system. You know how the system of surface water, groundwater, soil and ecology works. And what disruptions and climate challenges there are and how to solve or prevent them. Within the reference frameworks of policy and legislation, you work with different stakeholders on current issues, applying water system knowledge. You experience what action perspectives there are for the various issues.

### **Content**

The training consists of an introduction (2-day parts), followed by two modules (28-day parts):

- **Introduction (2-day parts)**  
Challenges 21st century: climate change, KNMI scenarios, drought, flooding, subsidence, energy transition, sustainability, biodiversity, housing challenge, policy and legislation.
- **Water system (18-day parts)**  
Water and soil organizing, hydrological and ecological system, water balance, precipitation-discharge process, flow process and principles, saturated and unsaturated zone, relationship between ground and surface water, data and models, WFD, ecological key factors, water quality, disturbances, lakes, ponds, ditches, canals, streams and rivers.
- **Environment, climate, quality issues (10-day parts)**  
Linkage opportunities in the water chain, energy transition, circular economy, nature and agriculture, water safety, biodiversity, climate-proof city and region, stakeholders, Environment Act, strategic environmental management.