## **Water quantity**

TARGET GROUP Policy advisors, technical advisors water management, environmentalists,

licensing and enforcement staff

**ENTRY LEVEL** Bachelor degree

DURATION 4 days PARTICIPANTS 16

TRAINERS South African and/or Dutch experts, certified by AquaDactics

INTRODUCTION Climate change is challenging our water management. Changing precipitation patterns and increasing temperatures are causing severe

droughts on one hand and flooding on the other.

In this course you learn how water quantity differs per region and how water is transported through the catchment areas. You will learn about precipitation and evaporation, about drainage and storage. The hydrology

of most common water systems like streams, rivers and lakes are discussed. You will calculate water balances and work with surface and

groundwater models.

**CONTENT** This course covers the following topics:

Geo-hydrology of South Africa

- Streams, rivers, lakes
- Catchments
- Run off, drainage, storage
- Water balance of a catchment
- Relation ground surface water
- Climate change
- Drainage in urban areas
- Models
- Saturated zone, relation surface and groundwater, urbanized areas
- Drought and flooding

COURSE MATERIAL Course book and hand-outs of the presentations

TRAINING APPROACH

In addition to classroom presentations this course comprises interactive and innovative training methods, such as group work, discussions, practical exercises, field work and role-plays.

EXTRA After successfully completing the modules Water Quality, Water Quantity and Integrated water management you will be awarded a diploma

Integrated Water Resource Management.