CLEAN ENERGY AND WATER INSTITUTE



HYDROLOGICAL WATER MANAGEMENT PLANNING

Water management planning includes the measurement, storage, quality control and analysis of hydrologic data. An understanding of basic hydrologic assessments, including areas of uncertainties is required for successful planning of water management systems.

Our extensive water management experience has led to the accumulation of expert knowledge that we now offer to our clients.

The course provides participants with an understanding of the key aspects of hydrological data collection, management and analysis for water planning, including river basin modelling.

This understanding will assist in daily decision-making in water management and in designing and overseeing water management activities.

The practical aspects will draw on Entura's working knowledge and expertise, which is backed up by almost 100 years of experience in water operations as part of Hydro Tasmania, Australia's largest water manager.

COURSE CONTENT

Data collection

- The hydrological cycle
- Measuring hydrologic data: rain gauges, flow gauges
- Flow ratings and gaugings
- Data storage and quality

Data management and storage

- Data management systems
- Data uncertainties
- Data checking and editing
- Quality assurance and quality coding

Hydrologic analysis

- Why do we need to model water flows?
- Uncertainties in water assessment and how to minimise them
- Runoff coefficients
- Flow duration analyses
- Hydrologic modelling overview
- Flood modelling overview

PARTICIPANT PROFILE

- · Technical and engineering staff
- Middle to senior management with project management or oversight responsibilities

LEARNING OBJECTIVES

To provide participants with a knowledge of hydrologic data collection, storage, quality control, and analysis.

LEARNING METHODS

- Lectures
- Case studies
- Discussions

COURSE PROVIDERS

Entura's lecturers include:

- Accredited training professionals
- Technical specialists and professionals with extensive experience and qualifications in the industry

CUSTOMISATION

This course can be customised to suit participants' skill level or role.