# CLEAN ENERGY AND WATER INSTITUTE



### WIND FARM DEVELOPMENT

There are many factors that can impact the commercial success of a proposed wind farm. This course will help students identify, assess and mitigate some of the technical risks that may adversely impact the financial returns on a project.

Our extensive renewable energy development experience has led to the accumulation of expert knowledge that we now offer to our clients.

This course offers full access to Entura's detailed practical knowledge of wind farm development. The course material is derived from Entura's experience that began with some of the first wind power facilities in Australia and continues with our current activities and service to major investors and developers throughout the Asia-Pacific.

Entura brings a pragmatic approach to discussions of wind farm development, with experience in both the opportunities and the pitfalls of investing in wind energy projects.

After completing the course, participants will have sufficient technical knowledge to make successful decisions about developing or investing in a wind farm project.

## COURSE CONTENT PROJECT DEVELOPMENT

Prospecting

- site identification
- wind monitoring
- wind resource assessment
- GIS (geographic information systems)
- Development:
- project design and layout
- environmental and planning approvals
- community consultation
- grid connection Financing:
- project energy estimate prepare a business case
- P50, P75, P95 scenarios
- · identify, assess and mitigate risk
- FID (final design and final investment decision)
- wind turbine supply contracts
- power purchase agreements
- connection agreements
- generation registration licences
- construction and commissioning
- operations and maintenance

### TAILORED TECHNICAL MODULES TO SPECIFIC REQUIREMENTS

- Wind turbine technology
- Detailed project design
- Detailed project energy assessment
- Practical use of common software tools (e.g., WAsP)
- Environmental studies
- Planning studies
- Toolbox for monitoring performance of operational projects

#### PARTICIPANT PROFILE

- Managers and decision-makers considering investments in wind farms
- Project Managers

#### **LEARNING OBJECTIVES**

- To provide participants with a technical understanding of wind farms and the wind farm development process
- To develop an appreciation of the technical risks associated with wind farm development, and the potential impact on financial returns

#### **LEARNING METHODS**

- Lectures
- Case studies
- Discussions
- Site visit to a wind farm

#### **COURSE PROVIDERS**

Entura's lecturers include:

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

#### **CUSTOMISATION**

This course can be customised for large wind developments comprising many wind turbines, or smaller developments, such as remote power generation on an island.

COURSE DURATION 3-4 DAYS