

Evaluation and Benchmarking of the Diploma in Water Conservancy and Hydropower Construction Engineering Yellow River Conservancy Technical Institute

Context and scope

Yellow River Conservancy Technical Institute commissioned Ecctis for an independent evaluation and benchmarking of its Diploma in Water Conservancy and Hydropower Construction Engineering, which was completed in February 2023.

The Diploma in Water Conservancy and Hydropower Construction Engineering is designed to prepare students to work in the water conservancy and hydropower industry after graduation.

The main aims of the benchmarking were to:

- Establish comparability in the context of the UK through reference to the Regulated Qualifications Framework (RQF), and by extension, the European Qualifications Framework (EQF)¹
- Assess the extent to which the College's underpinning quality assurance meets a set of international standards.

Key findings

The Diploma in Water Conservancy and Hydropower Construction Engineering aims to develop high-quality technical and skilled talents in areas such as water conservancy construction, engineering technology and water conservancy management. In line with national requirements, the Diploma also encompasses "public basic courses" which include topics from arts, social sciences and science domains.

The general entry requirement for the programme is the National College Entrance Examination (NCEE, popularly known as the *gaokao* 高考) – comparable to GCE A Level / RQF Level 3 in the UK – or suitable marks in one of the College's own tests.

The Diploma is a three-year full-time programme. Reflecting its vocational focus, the Diploma combines classroom-based study with project-based learning and assessed professional practice in the form of an internship.

Upon completion, many students enter the workforce; however, some students will be

¹ To date, a total of 35 countries have now referenced their national education systems to the EQF.

eligible to apply for top-up Benke (本科) / Bachelor degree programmes. These require a minimum of two years of further study, which shows that the Diploma has similar academic progression routes to that of HND, Diploma of Higher Education and other UK Level 5 awards.

The study revealed several strengths of the Diploma in Water Conservancy and Hydropower Construction Engineering, namely that it demonstrated:

- Well-developed online tools for teaching and assessment.
- An impressive breadth and depth of technical content.
- An integrated internship within a hydropower engineering company.
- Regular programme reviews to ensure the content reflects changes in the industry.
- Student satisfaction with teaching and learning his highly rated.
- A high employment rate of graduates in related industries.
- Clear and precise guidelines for the recruitment, monitoring and support for teachers.

In terms of international comparability, the Diploma in Water Conservancy and Hydropower Construction Engineering has been found comparable to Level 5 of the RQF and EQF. It has also met international quality standards in the following five areas:

Admission

There is a pre-defined and published admissions policy ensuring transparency in the admissions policy and supporting consistency in admissions decisions

• Programme development, approval, monitoring and review

There is a clear process in place for the design, approval and monitoring of programmes

• Teaching and learning

There is a formalised process for monitoring the quality and effectiveness of delivery, relevant to the modes of study employed

• Assessment

Assessment provides a sufficiently fair, valid and reliable evaluation of the intended knowledge, skills and competencies

• Information

The information available to prospective students, current students and other interested stakeholders is accurate, transparent and clear for the intended audience.

Engagement

Yellow River Conservancy Technical Institute has committed to further development and engagement encompassing:

- Undertaking a comprehensive revision of the Diploma in Water Conservancy and Hydropower Construction Engineering documents at programme and module level to centre programme design around the intended learning outcomes.
- Consolidating the programme level 'standards' into a smaller group of overarching 'learning outcomes' that can apply to a broader range of modules
- Rewriting programme and module learning outcomes with clear command words to ensure that they are specific, measurable, and feasible.
- Undertaking a review of assessment, both the overall assessment framework and the
 existing assessments to ensure that higher cognitive skills expected at Level 4 and 5
 are assessed, and integrated and/or extended questions and reflective assessments
 carry substantial weighting, reducing the total marks assigned to questions purely
 testing recall and memory.
- Clearly setting out the criteria for awarding credit for classroom activities to ensure the validity and reliability of assessment in this area
- Outlining to students ahead of their placement the criteria for judgements made about learning during the internships to ensure students are aware of the areas they are being assessed on.
- Maintaining and ensuring adoption by all staff of the unified quality assurance handbook.

Ecctis is a gold-standard provider of services in international education, training, and skills, and in the development and recognition of globally portable qualifications. We are an internationally trusted and respected reference point for qualifications and skills standards.

We are UK-based and operate worldwide, with a global network and client base spanning 62 countries and 5 continents. We have a 20-year track record in international consultancy and development.

Ecctis provides official UK national agency services on behalf of the UK Government in qualifications, skills, and migration – including UK ENIC, formerly UK NARIC.

UK ENIC is the UK National Information Centre for global qualifications and skills. Following the UK's leaving the EU, the former UK NARIC recognition agency function changes from a NARIC (which is an EU-only title) to an ENIC (the wider European title for national recognition agencies) in order to meet the UK's continuing treaty obligations under the Lisbon Recognition Convention.

Since 2019, through our China representatives and Beijing office Nalike, and our UK China Council and UK NARIC China Council projects, we have conducted qualification benchmarking in China and fostered educational links between China and other countries, to support the internationalisation efforts of China's higher vocational colleges.