

Evaluation and Benchmarking of the Diploma in Electrical Automation Technology from 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 Electrical Automation Technology, which was completed in January 2024.

The Diploma in Electrical Automation Technology is one of over 60 programmes delivered by the College alongside qualifications covering water conservancy, surveying, robotics, big data, and cross-border e-commerce.

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 Electrical Automation Technology seeks to develop students’ knowledge in areas such as electrical engineering, power supplies and distribution, and industrial robotics. 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 equating to approximately 2799 hours’ guided learning time. Reflecting its vocational focus, the Diploma combines classroom-based study with practical-based simulated learning and a 16-week internship which allows students to develop their practical skills in a real workplace setting.

Upon completion, many students enter the workforce²; however, some students will be

¹ To date, a total of 36 countries have now referenced their national education systems to the EQF.

² The employment rate of graduates is typically 98%.

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 Electrical Automation Technology, namely it demonstrated that:

- Students have access to world-class facilities for practical teaching and learning, ensuring their skills are relevant and up to date for future employment.
- The College provides students with well-developed online tools for teaching and assessment.
- The College has produced impressive breadth and depth of technical content within the Major.
- Students benefit from having the opportunity to develop their practical skills and job-based knowledge by completing an integrated internship within a hydropower engineering company.
- The College performs regular programme reviews to ensure the content found within the Major reflects changes in the industry: keeping the content relevant helps to prepare a student to apply the skills they develop during their studies to real-life context and situations.
- Student satisfaction with teaching and learning is high.
- The College provides clear and precise guidelines for the recruitment, monitoring, and support for teachers.
- There is a high employment rate of graduates in related industry.

In terms of international comparability, the Diploma in Electrical Automation Technology 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:

- Writing new learning outcomes at programme and module level, ensuring these are specific, measurable, and that an indicative 60% of the programme targets a higher level of knowledge and critical thinking skills.
- Developing a programme assessment framework/plan.
- Adopting assessment and marking approaches that sufficiently test critical thinking skills such as analysis and evaluation.
- Ensuring that there is a clear policy on programme assessment plans. Assessments should be developed so that they are clearly linked to intended learning outcomes. There should be clear limits on the use and weighting of attendance as part of the assessment.
- 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.