

Evaluation and Benchmarking of the Diploma in Wind Power Generation Engineering Technology from Jiuquan Vocational and Technical College

Context and scope

Jiuquan Vocational and Technical College commissioned Ecctis for an independent evaluation and benchmarking of its Diploma in Wind Power Generation Engineering Technology, which was completed in January 2025.

The Diploma in Wind Power Generation Engineering Technology is one of 60 qualifications delivered by the College in areas such as agriculture, forestry, civil engineering, medicine and health, tourism, and water conservancy.

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 Wind Power Generation Engineering Technology seeks to develop students' knowledge in mechanical drawing, electrical technology, installation and maintenance of wind turbines, and the fundamentals of wind farm construction. 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 2798 hours' guided learning time. Reflecting its vocational focus, the Diploma combines classroom-based study with practical-based simulated learning and a 390-hour internship in which students are able to develop their practical skills within real-world engineering enterprises.

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

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

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 HNDs, Diplomas of Higher Education and other UK Level 5 awards.

The study revealed several strengths of the Diploma in Wind Power Generation Engineering Technology, namely it demonstrated that:

- The high number of contact hours within the Diploma is a clear strength; within the Diploma, students experience far more contact time with tutors, arguably leading to more instruction and feedback.
- The opportunity for students to tailor learning through optional modules in specialist areas such as microcontroller technology, 3D modelling, and power plant equipment operation and maintenance is a strength of the Diploma.
- The inclusion of a diverse range of facilities related to wind turbine installation, disassembly, and maintenance is a strength of the Diploma that allows students to gain real-world experience in realistic facilities.
- The joint evaluation of students by both enterprise instructors and College teachers within the internship is a strength of the Diploma. Enterprise instructors can provide a real-world perspective on students' practical engineering skills alongside assessing soft skills such as communication, teamworking, and adaptability.
- The inclusion of policies for the admission of international students is an example of good practice that signals the College's internationalisation commitments to prospective students.

In terms of international comparability, the Diploma in Wind Power Generation Engineering 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

Evaluation and Benchmarking of the Jiuquan Vocational and Technical College Diploma in Wind Power Generation Engineering Technology: Executive Summary

• Information

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

Engagement

Jiuquan Vocational and Technical College has committed to further development and engagement encompassing:

- Writing new learning outcomes at programme and module-level, ensuring these are specific, measurable, and feasible. Ensure that learning outcomes explicitly target higher level of knowledge and critical thinking skills, in line with RQF Level 5 descriptors.
- Developing a programme assessment framework/plan.
- Adopting assessment and marking approaches that sufficiently test critical thinking skills such as analysis and evaluation.
- Ensuring that the processes for each stage of programme development are clearly defined and linear in approach.
- 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.
- Developing a unified internal quality assurance 'handbook' for the College to bring together all existing written policies and processes, and formalise any unwritten policies or processes.
- 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, 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.