

Evaluation and Benchmarking of the Diploma in Road and Bridge Engineering Technology from Guangxi Transport Vocational and Technical College

Context and scope

Guangxi Transport Vocational and Technical College commissioned Ecctis for an independent evaluation and benchmarking of its Diploma in Road and Bridge Engineering Technology, which was completed in March 2023.

The Diploma in Road and Bridge Engineering Technology is one of 45 programmes offered by the College in subject areas such as Automobile Inspection and Maintenance Technology, Modern Logistics Management, Electronic Information Engineering Technology, and Construction Engineering Technology.

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 Road and Bridge Engineering Technology seeks to develop students' knowledge in highway and bridge undertakings, serving front line production and management in highway and bridge engineering and other related industries. 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 1565 hours' guided learning time. Reflecting its vocational focus, the Diploma combines classroom-based study with practical-based simulated learning and an extended internship allowing students to apply practical skills within the industry.

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

Upon completion, many students enter the workforce²; however, some students will be 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 Road and Bridge Engineering Technology, namely that it demonstrated:

- Knowledge and skills content that are structured progressively for students expected to enter the workplace upon graduation.
- An emphasis on practical skills prepares students for employment in a wide range of specialised roles upon graduation.
- Engagement with enterprise and recognition of key trends in jobs and skills within the industry, ensuring graduates have strong employment prospects.
- Links with industry that ensure the programme meets the needs of industry and enables graduates to gain relevant employment.
- A rigorous monitoring and review process involving input from a wide range of internal and external stakeholders.
- A comprehensive review system ensures that published documents are accurate and relevant to teachers and students.

In terms of international comparability, the Diploma in Road and Bridge 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**

² The employment rate of graduates is typically above 62%.

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

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

- Rewriting the learning outcomes at programme and modular level to make them more specific and measurable and to establish the critical thinking skills that students are expected to demonstrate in the programme.
- Undertake a review of both the overall assessment framework and the existing assessments. Development of a mapping document to show how each assessment links to programme learning outcomes.
- Strengthening the validity of assessments by formalising assessment criteria used by assessors to grade students during third year internships and reviewing the process for the moderation of marked student work to ensure consistency in marking.
- 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.