Ecctis

Evaluation and Benchmarking of the Diploma in Environmental Engineering Technology from Shenzhen Institute of Information Technology

Context and scope

Shenzhen Institute of Information Technology commissioned Ecctis for an independent evaluation and benchmarking of its Diploma in Environmental Engineering Technology, which was completed in November 2023.

The Diploma in Environmental Engineering Technology is one of 50 programmes currently offered by the College across subjects such as digital media, management, and information and communication.

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 Environmental Engineering Technology seeks to develop students' knowledge of environmental sanitation operation and management, and engineering technology. 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 2783 hours' guided learning time. Reflecting its vocational focus, the Diploma combines classroom-based study with practical-based simulated learning and a 15-week internship, applying environmental engineering principles and skills to solve real-life problems.

Upon completion, many students enter the workforce[2]; however, some students will be eligible to apply for top-up Benke (本科) / Bachelor degree programmes. These require a

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[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 97%.

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 Environmental Engineering Technology namely it demonstrated that:

- There is a formalised process for monitoring the quality and effectiveness of delivery, relevant to the modes of study employed.
- The training rooms and lab facilities allow for a strong link between practical and theoretical learning.
- Admission procedures are clearly documented and effectively executed.
- The link with Industry for placements offers good opportunities for students to develop experience and skills in workplace scenarios.

In terms of international comparability, the Diploma in Environmental 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

- **Information**

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

Engagement

Shenzhen Institute of Information Technology 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.
- 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.