Ecctis

Evaluation and Benchmarking of the Diploma in Software 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 Software Technology, which was completed in December 2023.

The Diploma in Software Technology is one of 170 programmes delivered by the College in areas such as software engineering, information communication, computer science, finance and economics, and applied foreign languages.

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 Software Technology seeks to develop students' knowledge in web application development, AI application development, and other knowledge and technical skills. 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 2763 hours' guided learning time. Reflecting its vocational focus, the Diploma combines classroom-based study with practical-based simulated learning and a 15-week internship, which provides an important practical experience, where students are able to apply their knowledge.

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

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[1] To date, a total of 36 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 Software Technology, namely it demonstrated that:

- The breadth of content within the programme is extensive and covers a wide range of fundamental software engineering topics which provides students with a solid foundation.
- The use of various teaching methods, including lectures and practical assignments, allows for a diverse and engaging learning experience.
- The inclusion of practical assignments reflects an emphasis on hands-on experience and application of knowledge.
- The 15-week internship experience enhances the aptitude and professional behaviours of the students by giving them the opportunity for hands-on, practical learning in the workplace, under the guidance of expert tutors.
- The College publishes annual regulations and rules that clearly set out minimum entry and eligibility criteria, admission processes, roles and responsibilities and oversight mechanisms.
- There are clear, documented processes in place for programme design, development and approval which integrate strong engagement with industry experts, consideration of market demand, benchmarking, and College-level oversight.
- There are appropriate and sound rules in place to govern the exam lifecycle.
- Students receive a comprehensive handbook, and the campus intranet is a significant source of information.

In terms of international comparability, the Diploma in Software 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
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> - **Information**
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>   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 feasible. Ensure that learning outcomes explicitly target higher level 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 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.