

Evaluation and Benchmarking of the Diploma in Analysis and Inspection Technology from Hebei Chemical & Pharmaceutical College

Context and scope

Hebei Chemical & Pharmaceutical College commissioned Ecctis for an independent evaluation and benchmarking of its Diploma in Analysis and Inspection Technology, which was completed in September 2024.

The Diploma in Analysis and Inspection Technology is one of one of 57 programmes currently offered by the College across subjects such as chemistry, medicine, IT, intelligent manufacturing, and e-commerce logistics. It aims to prepare students for roles within the quality inspection, technical services, and monitoring and testing services industries.

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 Analysis and Inspection Technology seeks to develop students' knowledge in areas such as inorganic chemistry, instrumental analysis technology, and industrial analysis. 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 2618 hours' guided learning time. Reflecting its vocational focus, the Diploma combines classroom-based study with practical-based simulated learning and a third year internship in which students develop their practical skills and knowledge within a real-world environment.

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 Analysis and Inspection Technology, namely it demonstrated that:

- There is clear and thoughtful progression of skills and knowledge throughout the Diploma, with content emphasising independent learning and critical evaluation.
- The internship provides an excellent opportunity for students to experience work situations and develop competence in carrying out industry related tasks.
- The Diploma implements a strong focus on practical learning, which aids students' ability to apply theory to practice.
- The College has access to a good number of well-equipped training facilities that support students in their practical learning.
- The practice of ensuring that a sizeable proportion of the teaching staff hold both academic and professional expertise is in line with international standards.
- The Student Teaching Appraisal Officers initiative is an innovative way of collecting student feedback and engaging students in the process of enhancing the provision.

In terms of international comparability, the Diploma in Analysis and Inspection 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

Hebei Chemical & Pharmaceutical College has committed to further development and engagement encompassing:

- Revision of learning outcomes across all programme modules, to ensure they are specific, measurable and feasible, and form a firmer basis for assessment design and marking
- Review of the overall assessment framework, including module assessments and their weighting to better understand how individual course elements are assessed
- Review of assessment strategies across modules to ensure they link appropriately to module learning outcomes and that assessment tasks better test higher cognitive skills expected at RQF Level 4 and 5
- 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.