

Evaluation and Benchmarking of the Diploma in Mold Design and Manufacturing from Changzhou Vocational Institute of Mechatronic Technology

Context and scope

Changzhou Vocational Institute of Mechatronic Engineering commissioned Ecctis for an independent evaluation and benchmarking of its Diploma in Mold Design and Manufacturing, which was completed in October 2023.

The Diploma in Mold Design and Manufacturing is one of over 40 programmes delivered by the College, across nine schools, including the School of Mechanical Engineering, School of Information Engineering, and the School of Mold 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 Mold Design and Manufacturing seeks to develop students' knowledge in plastic mould design, mould intelligent manufacturing, and project management. 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 2500 hours' guided learning time. Reflecting its vocational focus, the Diploma combines classroom-based study with practical-based simulated learning and a 28-week industrial internship in the third year of study, enabling students to practice and apply their knowledge in an industrial working environment.

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

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 Mold Design and Manufacturing, namely it demonstrated that:

- The technological knowledge and practical skills students must demonstrate are in line with RQF Level 5 expectations.
- A significant focus on practical skills ensures that graduates can adapt well to various generalist and niche roles within manufacturing related industries.
- Mapping between Programme and Module Level Outcomes indicates there is a reasonable level of structural coherency within the programme.
- The College has clear admissions processes that are managed effectively and linked closely to employment and society's needs.
- The College has clear processes for the design, approval, and periodic review of programmes to ensure that they achieve the objectives set for them and respond to the needs of students, industry and society and they also have effective mechanisms to involve relevant stakeholders in programme development and review.
- 'Teaching and learning' on the programme is well planned, covering all aspects of theory and practice; there is good use of internships to develop practical and employment skills.

In terms of international comparability, the Diploma in Mold Design and Manufacturing 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

Changzhou Vocational Institute of Mechatronic 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.
- Revising assessment briefs to ensure sufficient testing of critical thinking skills such as analysis and evaluation, coherent with the new learning outcomes.
- Developing a Plagiarism detection policy that is implemented consistently across all modules for the detection of plagiarism in electronic submissions of written work.
- 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, 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.