Quality Management Implementation Details

Part 1: Institutional Channels for Student Participation in Quality Monitoring

The programme fully upholds the student-centred principle, establishing institutional multi-layered channels for students to participate in teaching evaluation, academic culture supervision, and quality improvement suggestions.

1.1 Teaching Evaluation Channels

Student evaluations account for 40% of each instructor's comprehensive assessment via the university quality management platform, covering curriculum content, teaching methods, instructor competence, assessment fairness, and learning support. Student evaluation is organised twice each semester, including mid-semester process evaluation and end-semester summative evaluation.

1.2 Academic Culture Supervision

Each class appoints a student academic information officer to collect and report real-time feedback on teaching quality, learning environment, and student needs, forming a direct channel between students and the quality management system. Student information officers meet regularly with teaching secretaries and programme directors to communicate concerns and suggestions.

1.3 Quality Improvement Suggestions

Students can submit quality improvement suggestions through multiple channels including the university online platform, student representative meetings, and direct communication with programme directors. All suggestions are recorded, tracked, and responded to within specified timeframes, with adopted suggestions incorporated into teaching improvement plans.

1.4 Academic Early-Warning Mechanism

An academic early-warning mechanism delivers timely intervention for students at risk of failing courses or falling behind in graduation projects, with personalised tutoring and study plans developed by academic advisors to ensure on-time progression. Evaluation results are closely integrated with student academic development and growth support, fulfilling guiding, motivating, and remedial functions.

Part 2: Faculty Development and Teaching Capacity Enhancement

The programme prioritises continuous faculty development to enhance teaching quality and professional capabilities, providing multiple pathways for teachers to improve their professional literacy and teaching skills.

2.1 Overseas Visiting Scholar Programmes

The university provides consistent opportunities for faculty to participate in overseas visiting scholar programmes, enabling teachers to learn advanced teaching methodologies, cutting-edge disciplinary developments, and international quality assurance practices from partner universities.

2.2 Enterprise Secondments

Teachers are encouraged to undertake enterprise secondments to gain practical industry experience, understand real-world engineering challenges, and update their teaching content to reflect current industry practices. Enterprise secondments also strengthen industry-university cooperation and facilitate the development of practice-oriented teaching cases.

2.3 Vocational Qualification Certification

The university supports teachers in obtaining relevant vocational qualifications and professional certifications, enhancing their ability to guide students in professional practice and certification examinations. This includes certifications in electrical engineering, automation, and related fields.

2.4 Teaching Workshops and Training

Regular teaching workshops and training sessions are organised to enhance teachers' pedagogical skills, including training in outcome-based education (OBE), blended teaching, project-based learning, and digital teaching tools. New teachers receive structured onboarding training, and all teachers participate in continuing professional development activities throughout the academic year.

2.5 Teacher Ethics Construction

The programme prioritises teacher ethics as the primary assessment criterion for all faculty evaluations, promotions, and awards, implementing a one-vote veto mechanism to uphold the baseline of educational integrity. Regular teacher ethics education and training activities are conducted to strengthen teachers' professional ethics and commitment to student-centred education.

Part 3: Organisational Guarantee and OBE Institutional Framework

3.1 Functional Department Responsibilities

All university functional departments operate in synergy to standardise teaching delivery for the programme:

- Academic Affairs Office: Enforces quality standards for major undergraduate teaching processes, coordinates curriculum construction, and supervises teaching operation management

- Teaching Quality Monitoring and Evaluation Center: Organises teaching supervision, student evaluations, and special audits; analyses quality data and provides improvement recommendations
- Human Resources Department: Responsible for teacher recruitment, professional development, performance appraisal, and teaching team construction
- Student Affairs Office: Manages student development, academic counselling, scholarship administration, and student participation in quality management
- Admissions and Employment Office: Responsible for enrollment management, graduate employment statistics, and employer feedback collection

3.2 OBE Institutional Framework

Centred on the Outcome-Based Education (OBE) philosophy, the programme leverages the university's complete institutional toolkit to build a standardised teaching management system focused on student learning outcomes:

- Top-Level Closed-Loop Institutional Guidance: Annex F-1 Implementation Measures for Undergraduate Education and Teaching Quality Assurance acts as the core overarching document, establishing a closed-loop quality assurance mechanism of objective setting – standard operation – monitoring and evaluation – follow-up feedback – continuous improvement
- Oversight of Training Objective Rationality: A regular review mechanism ensures talent training aligns with industrial and occupational demands, with stakeholder feedback integrated into training scheme revisions
- Three-Tier Progressive Attainment Evaluation: The programme adopts a three-tier quantitative evaluation system covering courses, graduation requirements, and training objectives to fully quantify training effectiveness and identify quality gaps
- High-Quality Faculty Support for Undergraduate Teaching: Mandatory teaching obligations are set for faculty, with all professors required to deliver a minimum of 32 teaching hours of undergraduate courses each academic year

3.3 Multi-Dimensional Monitoring System

The programme establishes a five-in-one full-cycle teaching monitoring system integrating administrative oversight, expert supervision, leadership class visits, peer review, and student feedback. Each university and school-level supervisor completes a minimum of 32 class observation hours per semester, with unannounced visits by all administrators at all levels. Regular pre-semester readiness inspections, mid-semester operational audits, and post-semester summary reviews ensure continuous quality improvement.