

## HKIQEP ACCREDITATION SCHEME REQUIREMENTS FOR ENVIRONMENTAL DEGREE PROGRAMMES – UNDERGRADUATE LEVEL

### 1. Definitions and Abbreviations

Accreditation Scheme	The HKIQEP scheme under which environmental programmes of academic institutions may submit application towards
HKIQEP	Hong Kong Institute of Qualified Environmental Professionals Limited
HKIQEP Syllabus	The syllabus for HKIQEP Professional Assessment (Part I)
Institution	The academic institution applying for HKIQEP accreditation
Programme	The academic programme applying for HKIQEP Accreditation

### 2. HKIQEP Accreditation Expected Programme Outcomes

Graduates of HKIQEP accredited environmental programmes are expected to possess the following competences:

- i) Apply fundamental knowledge in environmental science and environmental management.
- ii) Apply appropriate breadth and depth in specific areas related to environment.
- iii) Appropriately use and critically analyze a range of environmental data, tools and techniques to evaluate environmental problems.
- iv) Work independently as well as in a group environment, as a leader or member, to tackle environmental problems.
- v) Formulate effective and innovative solutions to environmental problems by integrating and applying concepts from environmental science, management, policy and legislations, and sustainability.
- vi) Communicate effectively both verbally and in writing.
- vii) Recognize personal needs and engage in life-long development.
- viii) Adhere to professional and ethical responsibilities.

### 3. Accreditation Scheme Requirements

#### 3.1. Programme Design:

Institutions shall have flexibility in Programme design while ensuring the Programme has sufficient breadth and depth to provide students with fundamental and specific knowledge as well as skills to further develop as an environmental professional.

The Programme shall demonstrate adequate aims and objectives to meet their programme intended learning outcomes and course outcomes, as well as the HKIQEP Accreditation Scheme expected programme outcomes. The Programme shall also demonstrate an appropriate plan to deliver the Programme objectives

and outcomes by considering the detailed curriculum, and teaching and learning strategies.

The typical syllabus for Programmes seeking Accreditation shall comprise of the following three sections:

### 3.1.1. Fundamental Knowledge (Mandatory)

Fundamental knowledge of environment professionals shall include TWO areas: (i) Environmental Science and (ii) Environmental Management.

The Institution shall refer to the HKIQEP Syllabus for the subjects included in the fundamental areas. The Institution is recommended to also include additional topics that are not listed in the HKIQEP Syllabus. The HKIQEP Syllabus will be reviewed and amended from time to time and the Institution is advised to ensure the latest version is being referenced.

The Programme MUST demonstrate the core and/or elective courses have adequate coverage of the fundamental areas in term of contact hours, teaching and learning strategies, assessment methods, hours spent in practical work and training, and the expertise and qualification of academic staff to deliver the courses.

### 3.1.2. Specific Areas (Mandatory: At least two out of seven areas)

In addition to the two fundamental knowledge, SEVEN specific areas have been identified. They are (i) Environmental Policy and Legislations; (ii) Sustainability; (iii) Air; (iv) Environmental Impact Assessment and Health Impact Assessment (EIA & HA); (v) Noise; (vi) Waste; and (vii) Water.

The Institution shall refer to the HKIQEP Syllabus for the subjects included under each area. The Institution is recommended to also include additional topics that are not listed in the HKIQEP Syllabus. The HKIQEP Syllabus will be reviewed and amended from time to time and the Institution is advised to ensure the latest version is referenced.

The number of specific areas granted to the Programme is subject to the Institution's submission and evidence showing sufficient coverage in their courses of the concerned areas in term of contact hours, teaching and learning strategies, assessment methods, hours spent in practical work and training, and the expertise and qualification of academic staff to deliver the courses.

### 3.1.3. Complementary Skills Training (Mandatory)

Apart from environmental knowledge, appropriate skills and competencies are also important for students to further develop as an environmental professional.

Complementary skills training includes but are not limited to practical work (e.g. field work and laboratory), practical training (e.g. internship programme), project work (e.g. final year project and capstone project), and courses for effective communication, and professional ethics and conduct.

The Institution shall demonstrate the provision of courses related to complementary training to develop skills for analytical method, multi-disciplinary collaboration, and problem solving. The Institution shall also justify how the Programme can prepare students for life-long learning, professional ethics and conduct, and effective communication. Communication includes, but is not limited to outward-facing communication, sensitivity to listen carefully, and the awareness to adapt and respond to stakeholders.

### **3.2. Staffing**

Staffing is an important factor in the delivery of environmental degree Programmes. It takes into account the composition, size, quality and commitment of academic staff as well as number of support and office/administration staff to provide general support to the Programme. Considerations for staffing include managerial, academic, support (i.e. technical, laboratory, research and others) and office/administration staff.

The Institution shall demonstrate the assignment of appropriate personnel in management level and composition of academic staff to ensure Programme objectives and outcomes are met. Furthermore, staff to student ratio of the Programme should be sufficient for appropriate delivery of the programme. The quality and commitment of academic staff in delivering the courses shall be demonstrated through the consideration of their adequate range of expertise, qualification and experience, as well as their involvements in research publications, consultancy work and scholarly activities.

The Programme shall demonstrate the provision of sufficient office/administration and support staff with appropriate qualification and experience, to ensure general operations (e.g. management of laboratories) of the Programme.

### **3.3. Resources:**

The Institution shall ensure the Programme is equipped with sufficient finance provisions (including financial situation and/or budget allocation) and other resources to support Programme operations and meet Programme outcomes. Other resources include core facilities (e.g. library and IT supports) and departmental facilities (e.g., laboratories, workshops and private study areas), and other reference facilities and new technologies etc.

**3.4. Students:**

The intake and output quality of students, entry requirements, qualification of intake students, academic award arrangements, graduate employment statistics, and employer perceptions are integral components of the Accreditation Scheme.

Although specific requirements for minimum entry for admission and the selection criteria of the Programme are not established, the Programme shall demonstrate appropriate criteria and/or provisions to ensure students have adequate background knowledge in fundamental science and environmental related topics so that the majority of students are able to complete the Programme at the expected standard.

The Programme shall encourage students to engage with environmental professionals where they can participate in relevant events and activities to enhance their competencies.

**3.5. Programme Quality Assurance:**

An effective quality assurance system in the Programme can assure and enhance the quality of Programme delivery as well as maintain and improve academic standards.

The Institution shall demonstrate the provision of sufficient and effective internal and external quality assurance systems (e.g. international advisory committees and external examiners) in term of committees and methods. The former is to review and evaluate the programme outcomes and other aspects relating to the programme (e.g. curriculum, Programme objectives and outcomes, teaching and learning processes, subject content, and Programme development), while the latter is to maintain academic standards with reference to local and international benchmarks.

Furthermore, the Institution shall implement improvement actions after internal and external quality assurance system assessments. Results of these improvements actions shall demonstrate the proper functioning of the assurance systems and continuous improvement of the Programme.

**3.6. Programme Development and Sustainability:**

Programme development and sustainability is an important element of an environment degree Programme. The Institution shall demonstrate continuous development and improvement of the Programme in order to ensure it meets local and international professional and academic standards.

Institutional policies and resources shall be available (e.g. adequate teaching and research performance reviews and reward mechanism) to provide training support to academic staff to ensure their continued teaching competence and professional development.

The Programme shall demonstrate how to integrate with the profession and industry, and how it responds to the latest local and international standards and requirements (e.g. external advisory committee and benchmarking).



Hong Kong Institute of Qualified Environmental Professionals Limited (HKIQEP)  
香港合資格環保專業人員學會有限公司 (香港環專會)

Plans shall be in place for the continuous development and improvement of the Institution and the Programme to meet local and global needs.