

# Higher Education Degree Accreditation Handbook A Guide to CIEEM Accreditation for

**MSc Courses** 

**July 2016** 



### **Our Mission:**

To raise the profile of professional ecological and environmental management and to promote the highest standards of practice for the benefit of nature and society

The Chartered Institute of Ecology and Environmental Management (CIEEM) is the professional membership body for ecologists and environmental managers in the UK and Ireland. Members of CIEEM protect and enhance biodiversity through their knowledge and skills.

Our work includes establishing and upholding the standards of competence and conduct of ecologists and environmental managers through the implementation of a Code of Professional Conduct. We encourage innovation, knowledge transfer and best practice as part of a sustainable approach to nature conservation.

Established in 1991, we have members working within local authorities, government agencies, industry, environmental consultancy, teaching, research and non-governmental organisations.

For information on all aspects of CIEEM's work visit http://www.cieem.net

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#### 1 Introduction to CIEEM accreditation

### 1.2 Purpose and aims

The purpose of the higher education degree accreditation programme is to influence the number of graduates leaving higher education with the relevant skills and knowledge needed to gain employment in the profession. Through accreditation of degree programmes and named pathways CIEEM will recognise those that, by their content and delivery, are most likely to produce such graduates. CIEEM accreditation will also raise the profile of ecology and environmental management as a career choice as well as providing an opportunity for CIEEM, industry and academia to develop stronger links – benefiting graduates and the profession as a whole.

CIEEM will support Higher Education Institutions (HEIs) in developing undergraduate and postgraduate degree programmes that meet both the needs of employers and student aspirations: currently many graduates do not have all the key skills and areas of knowledge that early career stage ecologists and environmental managers require<sup>1</sup>. There is particular concern over the level of specialist technical and practical skills. CIEEM seeks to enrich the learning experience of students and their potential employability through advice, guidance and enhanced opportunities.

Through introducing a higher education degree accreditation scheme, CIEEM aims to:

- Influence the content of relevant ecological and environmental degrees in order to ensure that the core areas of knowledge and skill identified as required by employers are adequately covered;
- Provide support for programme leaders in maintaining delivery of these core areas, particularly in relation to practical skills;
- Signpost prospective students towards those degree programmes and named pathways which are recognised as being most relevant to the profession;
- Raise the profile of CIEEM amongst academic institutions and academics;
- Raise the profile of CIEEM amongst students and potential students;
- Facilitate closer links between employers in industry and accredited degree programmes;
- Develop in graduates the knowledge and skills which, with appropriate experience,
   would allow them to become competent practitioners (see Competency Framework).

<sup>&</sup>lt;sup>1</sup>http://www.cieem.net/ecological-skills

### 1.2 Benefits of accreditation to HEIs

Accreditation helps higher education institutions demonstrate their commitment to graduate success in employment. Official course data on Unistats<sup>2</sup> indicates those undergraduate programmes that have attained accreditation, giving a mark of assurance that a programme meets certain professional standards and therefore could improve employment prospects. Accreditation is an influential consideration for students and their advisors when selecting a degree. Benefits for HEIs include both practical support and marketing value to prospective students, specifically:

- Recognition that the programme is relevant to potential employers;
- Recognition that the programme enables entry to professional membership;
- Support from a professional body to maintain delivery of core areas of knowledge and skills;
- An enhanced opportunity to create closer links with industry.

### 1.3 Period of accreditation

Postgraduate taught degree programmes are eligible for accreditation for a maximum period of 5 years. After 5 years re-accreditation is required.

If a degree programme is due for re-validation within 5 years, the maximum period of accreditation will be the same as the remaining period of validation – for example, if a programme is to be re-validated in 3 years, accreditation will be for 3 years only.

During the period of accreditation, programme leaders will be required to submit an annual return to CIEEM outlining any changes to the degree programme and/or delivery team. Hels will be notified if any changes require the programme to be reassessed for accreditation but this will only be in the case of significant changes affecting compliance with the eligibility criteria.

### 1.4 Cost of accreditation

The administrative cost of submitting an expression of interest to CIEEM is £250.

<sup>&</sup>lt;sup>2</sup>http://unistats.direct.gov.uk/find-out-more/about-the-data/

The additional cost of submitting a full application and gaining a 5 year accreditation from CIEEM is £3500. For those programmes where the next validation of the degree is less than 5 years, the cost of accreditation will be reduced to reflect this.

### 1.5 Assessment panel

HEIs that apply and are deemed eligible for accreditation will be evaluated by a CIEEM assessment panel. The role of each panel is to review information submitted by an HEI in relation to agreed mandatory learning outcomes, conduct a site-based assessment and make a recommendation to CIEEM.

An assessment panel usually consists of two assessors. Some panels may be accompanied by a member of the CIEEM Secretariat for support and benchmarking purposes. All assessors have high levels of experience in ecology and environmental management and are up-to-date with current best practice. Most are experienced in quality assurance and assessment and some will have academic teaching experience.

An assessment panel will be convened for each HEI that submits a full application for degree accreditation. Care will be taken to ensure that there are no conflicts of interest and all information submitted by the HEI will be confidential.

### 1.6 Responsibilities of accreditation partners

Clear and open communications are essential for ensuring the success of the accreditation process. To assist this, CIEEM has developed a framework of responsibilities for the parties involved in accreditation – see Appendix 1.

### 2 Requirements for accreditation

Relevant taught Masters degree programmes (MSc) are potentially suitable for accreditation by CIEEM. Relevance is defined by the technical competences covered by <u>CIEEM's Competency Framework</u> (CIEEM recognises two types of taught Masters programmes that are eligible for accreditation:

### Non-specialist taught Masters degrees

Non-specialist taught Masters degrees provide a broad curriculum of learning building on the full content (knowledge and skills) required for accreditation of an undergraduate degree (see Appendix 2). Graduates of non-specialist taught Masters degree programmes should be able to perform at the Basic level (as defined by CIEEM's Competency Framework) across a wide range of technical competency areas. The accreditation application must demonstrate how the institution ensures that those undertaking the Masters programme have covered this content in sufficient depth and/or provides opportunities for students to acquire this knowledge whilst undertaking the degree programme.

### **Specialist taught Masters degrees**

Specialist taught Masters degree programmes have a narrow scope (covering fewer technical areas of CIEEM's <u>Competency Framework</u>) but provide a greater depth of learning sufficient to enable graduates to perform at the Capable level (as defined by CIEEM's <u>Competency Framework</u>) in these technical competency areas. The accreditation application must still demonstrate how the institution ensures that those undertaking the specialist Masters programme have covered the broad content expected of an undergraduate programme depth and/or provides opportunities for students to acquire this knowledge whilst undertaking the specialist Masters degree programme.

As with undergraduate degrees, all postgraduate programmes must have a proven track record, relevant core content should be compulsory and the programme must have been offered for a minimum of one academic year in order for it to be assessed.

### 2.1 Essential criteria

For accreditation to be awarded by CIEEM, a degree programme or named pathway must meet six essential criteria:

- a) Assessors must be satisfied that programme content and learning outcomes are relevant<sup>3</sup> and adequately prepare graduates to enter the profession (see 'Learning outcomes' below).
- b) At least one member of the core academic staff team must be a Full Member of CIEEM.
- c) Assessors must be satisfied that the standard of assessment and teaching provides the underpinning of competence for graduates entering the profession.
- d) Assessors must find evidence of sufficient high quality, relevant, practical work (a minimum of 15 days) to prepare graduates for the profession. *The HEI must demonstrate how this is relevant and assessors must find a balance across the technical skills covered in CIEEM's Competency Framework.*
- e) The HEI must demonstrate a commitment to continual self-improvement in programme content, delivery, student support and staff development.
- f) The aims, objectives, learning outcomes and methods of teaching on the programme must align with the aims of CIEEM e.g. raising the profile of ecology and environmental management and aiding the development of new ecologists for the profession.

The essential criteria above are the current accreditation criteria as of January 2015. The accreditation criteria will be reviewed in light of emerging professional standards and may be periodically reviewed and if appropriate revised. Accredited institutions will be consulted as part of any review of criteria

### 2.2 Learning outcomes

The learning outcomes required for accreditation fall within three broad areas: knowledge and understanding, practical skills and professional skills. The outcomes closely align with CIEEM's <a href="Competency Framework">Competency Framework</a> at the basic (non-specialist taught Masters) or capable (specialist taught Masters) competence level<sup>4</sup>.

These outcomes have been identified by those working in the profession as particularly important to potential employers. Table 1 sets out the full set of general and specific learning outcomes required for accreditation of a postgraduate degree programme.

<sup>&</sup>lt;sup>3</sup> Relevance is defined by the technical themes and sub-themes of CIEEM's <u>Competency Framework</u>
<sup>4</sup> http://www.cieem.net/competency-framework

Table 1: Lea	rning outcomes re	quired for accreditation of a taught Masters degree programme
General	Knowledge and	Graduates degree must be able to demonstrate their knowledge and
learning	understanding	understanding of key ecological concepts and processes and of the
outcomes		environmental policies and practices appropriate to managing the natural
required all		environment. A graduate must be able to critically evaluate major principles
accredited		and practices taught on a programme and appreciate the wider context in
Masters		which they are applied within the profession
degree	Practical skills	Graduates must be able to demonstrate that they possess the practical skills
programmes		required by the profession relevant to the degree and demonstrate that they
		have the competence (as defined by the CIEEM Competency Framework)
		appropriate to the nature of the degree.
	Professional skills	Graduates must be able to demonstrate that they have developed the
		professional skills required to enter a graduate role within the profession
		effectively as outlined in the CIEEM <u>Competency Framework</u> – transferrable
		competence themes
Specific	Ecological	Describe and confidently discuss the underpinning principles and theories of
learning	Concepts	ecology and environmental management
outcomes	230000	Explain how these principles and theories influence the work of practitioners
for non-	Human Ecology	Discuss the ecological impact of human activity (e.g. environmental pollution,
specialist	and Impacts	climate change) and its relevance to the work of practitioners of ecology and
taught	and impacts	environmental management
Masters		Discuss human impact on the distribution of animals, plants and invasive
programmes		species, giving a range of examples
	Biodiversity	Discuss and describe the principles and concepts of biodiversity and nature
	Conservation	conservation and its relevance to the work of practitioners of ecology and
	Conscivation	environmental management
		Provide examples of national, international and global nature conservation
		initiatives and critically assess their impact and effectiveness
	Environmental	Describe and discuss national and international environmental legislation and
	Policy and Law	policy frameworks, summarising their purpose and giving examples of how
		they impact on the work of ecologists and/or environmental managers
	Environmental	Show knowledge and understanding of principle concepts and techniques used
	Management	by practitioners of ecology and environmental management
		Demonstrate an understanding of sustainability and relate this to relevant
		government policy
	Species	Demonstrate the ability to practise basic survey techniques and understand
	Identification and	their strengths and limitations
	Survey Skills	Understand taxonomic hierarchies and classification. Understand the
		challenges and approaches to species identification and show practical
		experience of identifying at least one major taxonomic group down to species
		level (e.g. flowering plants, insect orders, mammals etc.)
		Explain how to apply or create sampling techniques to gather appropriate
		survey data
	Professional Skills	Demonstrate the development of basic professional skills to promote career
	. To reconciliat onling	development
		Show understanding of the need to continue professional development after
		graduating.
		Programme.

Specific	Ecological	Describe and confidently discuss the underpinning principles and theories of
Learning	Concepts	their specialist degree topic.
Outcomes		Explain how these principles and theories influence the work of practitioners of
for specialist		ecology and environmental management
taught	Policy and	Describe and discuss relevant national and international environmental
Masters	Legislation	legislation and policy frameworks, summarising their purpose and giving
programmes		examples of how they impact on the work of practising ecologists and/or
		environmental managers
	Technical Skills	Demonstrate the ability to undertake practical skills at the Capable level in one
		or more technical sub-theme areas of CIEEM's Competency Framework
	Professional Skills	Demonstrate the development of professional skills to underpin career
		development
		Show understanding of the need to continue professional development after
		graduating.

### 2.3 Knowledge and skills

Accredited programmes will need to deliver the knowledge and skills central to future employability within the profession and membership of CIEEM and deliver the necessary learning outcomes. For postgraduate programmes it is assumed that all or most of the 17 curriculum areas listed in Appendix 2 have been covered at undergraduate level. However programme leaders will be required to demonstrate how the depth of knowledge and skills the students have gained at undergraduate level is assessed and how any gaps are addressed through the taught programme. It will be important to show how the programme content builds on the curriculum areas (knowledge and skills) shown in Appendix 2.

To be eligible for accreditation a postgraduate degree must also include a minimum of 15 days of practical work where students practise a skill relevant to the technical themes of the CIEEM Competency Framework. Practical work should normally include a balance of the following: taught residential and non-residential fieldwork and associated laboratory work such as laboratory-based taxonomic and identification skills, data analysis and GIS mapping. Practical work also includes supervised and small group student-led practical work where this relates to the acquisition of skills of direct relevance to the profession (and the Institute's graduate membership criteria), for example baseline ecological surveys, conservation management plans, ecological impact assessment etc. Practical activities to be used as a basis for accreditation should not include skills demonstrations where students do not get to practise the skill.

Student-led projects, work placements and/or site visits are not included in the definition of practical work but may contribute to achieving learning outcomes and should be recorded in the description of programme content.

The 15 days of relevant practical work is a minimum and there is an expectation that programmes may need to have more in order to evidence achievement of the learning outcomes. The 15 days minimum must include a substantial proportion (at least 60%) of supervised field-based practical work.

### 3 Process of accreditation

The process of accreditation will normally take one year. Expressions of Interest for MSc programmes should be submitted in June, and if this is successful, a full application should be submitted in October. A site-based visit to an HEI from a CIEEM assessment panel will usually take place in March, followed by a decision from the CIEEM Governing Board in June.

### 3.1. Summary of CIEEM Accreditation Process

### Stage one

- ✓ Enquiry from HEI to CIEEM.
- ✓ HEI submits **expression of interest** to CIEEM to demonstrate that the degree programme or named pathway is eligible for accreditation.
- ✓ CIEEM review eligibility of programme and, if appropriate, invites the HEI to make a full application.

### Stage two

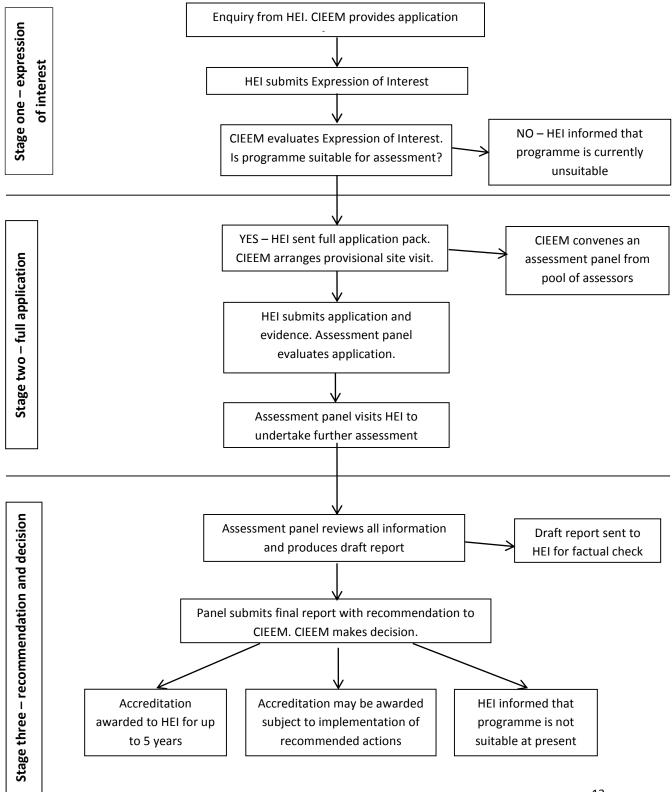
- ✓ HEI submits **full application** with supporting documentation.
- ✓ Assessment panel evaluates the application.
- ✓ Assessment panel visit HEI to undertake further assessment.

### Stage three

- ✓ Assessment panel make a recommendation to CIEEM's Governing Board
- ✓ CIEEM review recommendation, make a decision and inform HEI.
- ✓ If accreditation is awarded the HEI will be entitled to call the degree 'CIEEM accredited' and to use the 'CIEEM Accredited Degree' logo on information materials. The HEI will also be offered the opportunity to be presented with their certificate of accreditation at a CIEEM event.

The key stages and steps in the accreditation process are shown in Figure 1.

**Figure 1: CIEEM Accreditation Process** 



### 3.2 Accreditation Stages

### 3.2.1 Stage one: Expression of Interest

HEIs seeking accreditation are required to submit an initial application, or 'expression of interest', using a proforma supplied by CIEEM. This gives HEIs the opportunity to set out briefly why the degree programme is appropriate for CIEEM accreditation and how the HEI ensures that students have, or can acquire during the Masters programme, a basic level of understanding in the 17 areas of knowledge and skills expected to have been covered at undergraduate level (as shown in Appendix 2). A copy of the application form and guidance for submitting an expression of interest is shown as Appendix 3. The deadline for an HEI to submit an expression of interest is usually June of each year for MSc programmes

CIEEM will check the eligibility of the programme for accreditation. Those that incorporate all the core areas of knowledge and skills, have a principal member of the academic team who is a Full or Fellow member of CIEEM and meet the minimum relevant practical skills requirement (as outlined in Section 2) will be invited to submit a full application.

### 3.2.2 Stage two: Full Application

To submit a full application for accreditation an HEI must provide payment in full and the following **essential information**:

- Programme aims
- Methods of assessment
- Programme learning outcomes
- Modes of delivery
- List of modules
- Curriculum content
- Details of relevant practical work (see Section 2) throughout the programme
- Professional skills and practice, information on links with industry
- Names and curriculum vitae of staff with details of development and training
- Improvement in quality of programme, external examiner reports etc
- Facilities available to students

- Pastoral, academic and welfare support
- Student satisfaction
- Graduate employment record
- Selection of assessments done by students (information to be made available during site-based assessment from CIEEM panel)

Guidance and an example application form for submitting a full application is given in Appendix 4.

All information supplied by an HEI will be evaluated by a two-person assessment panel. Each assessor will undertake an independent 'desk-based assessment' of the information supplied. Panel members will then meet to review findings before undertaking a one-day visit to the HEI<sup>5</sup>.

The visit will give the assessment panel the opportunity to have discussions with staff and students, view the department and facilities, and see examples of project work and dissertations. An example of the timings and procedures followed during a typical assessment visit are given in Appendix 5.

### 3.2.3 Stage three: Recommendation and Decision

The assessment panel will produce a draft report based on their desk-based assessment and visit to the HEI. This report will be sent to the HEI for fact checking and to give the HEI an opportunity to provide any clarification. The report will then be finalised by the panel and a recommendation made to CIEEM. In exceptional cases further information or clarification may be required before a decision can be made.

The panel will make one of the following recommendations:

- The programme should be accredited;
- The programme should not be accredited until the HEI implements the actions identified by the panel;
- The programme should not be accredited.

<sup>5</sup> For most programmes a one-day visit will be sufficient. However accreditation of multiple degrees with common core modules and a number of optional routes may require a longer site-visit. The additional costs for this will need to be borne by the HEI. The CIEEM Secretariat will advise programme leaders as necessary.

### i) Accreditation awarded

Degrees and degree pathways approved by CIEEM will be awarded accreditation for up to 5 years. The HEI will receive a certificate of accreditation from CIEEM and a 'CIEEM Accredited Degree' or 'CIEEM Accredited Degree Pathway' logo to use, and the programme will be listed on the CIEEM website with a link provided to the HEI's webpages. In addition, graduates of the programme will be eligible for graduate membership of the Institute without the requirement of a separate eligibility assessment. Students on accredited programmes will be able to join CIEEM at a discounted rate.

### ii) Accreditation subject to implementation of actions

For those programmes where accreditation is subject to implementation of specific actions, the HEI must carry out the actions and submit appropriate documentation to CIEEM within one year of assessment by the CIEEM panel. Following satisfactory receipt of evidence of the actions having been undertaken, a recommendation for accreditation may be made. However if the assessors consider the changes to be relatively minor they may recommend that accreditation is awarded without delay, with the requirement for the necessary actions to be undertaken before the first annual return. Failure to do so could then lead to accreditation being suspended.

### iii) Accreditation not awarded

Programmes that do not currently meet the criteria for accreditation will be given guidance by CIEEM on the areas that require attention. A programme may not meet accreditation for a number of reasons, for example:

- The programme does not provide the learning outcomes, knowledge and skills that are essential for graduates entering the profession;
- Poor feedback from students and external examiners;
- The programme does not demonstrate improvements following external examinations and reviews.

If accreditation has not been awarded, an HEI may re-apply for accreditation when the HEI is confident that the issues have been addressed.

CIEEM has an appeal procedure should an HEI believe that the assessment was not conducted appropriately in a fair and transparent manner or where there is evidence that relevant information was not taken into account. However disagreement about a judgement does not constitute grounds for appeal. Appeals will be considered at the discretion of CIEEM and further information is available in Appendix 6.

### 4 After accreditation

### 4.1 Guidelines for publicity

Participation in the accreditation process should remain confidential until a degree programme has been officially awarded accreditation by CIEEM.

HEIs with accredited degree programmes will be entitled to:

- Promote the accredited degree and its advantages to students in marketing materials;
- Use the CIEEM accredited degree logo on all materials that relate to the accredited programme;
- Use the CIEEM accredited degree logo on the HEI webpages that relate to the accredited programme;
- Use the CIEEM accredited degree logo on the UCAS website where the HEI's name appears in relation to the accredited degree programme;
- Use the CIEEM accredited degree logo on other marketing materials that relate to the accredited programme following permission from CIEEM;
- Use the following statement for the Key Information Set in relation to the accredited programme:
  - "This programme is accredited by the Chartered Institute of Ecology and Environmental Management for delivering the knowledge and skills required for graduate membership of CIEEM";
- Use the following statement on the HEI's webpages: "This programme has been accredited by the Chartered Institute of Ecology and Environmental Management. Degree accreditation by CIEEM recognises programmes that prepare graduates with the knowledge and skills central to the profession of ecology and environmental management. The accreditation criteria require that the programme meets specific learning outcomes including defined levels of relevant practical skills. A graduate of an accredited degree programme will be eligible for graduate membership of CIEEM without the requirement of a separate eligibility assessment."

HEIs accredited by CIEEM must not imply that other institutions without CIEEM accreditation are not offering relevant, high-quality programmes. CIEEM maintains the right to request the removal of its name and all of its trademarks including its logos from printed or electronic material or publications at any time.

### 4.2 Changes after accreditation

As the anniversary of the accreditation date approaches CIEEM will contact the HEI and ask them to submit an annual return using a template provided at the time for that purpose. The HEI must inform CIEEM on their Annual Review Form, of any of the following 'significant' changes (or planned changes) to accredited programmes:

- The core course teaching team no longer includes a Full member or Fellow of CIEEM
- Learning outcomes no longer match the framework that the course has been accredited against
- Changes to the relevant practical element within the accredited programme

Any change to modules or a programme which requires internal review by the HEI should be regarded as a major change and reported to CIEEM

CIEEM reserves the right to request that an HEI submit an accredited degree programme for reaccreditation before the due date or to remove accreditation from a degree programme if significant changes are made which it believes will adversely affect the learning outcomes.

### 4.3 Re-accreditation

HEIs which have an accredited degree programme will be contacted by CIEEM towards the end of the accreditation period to invite them to submit their programme for re-accreditation.

### **Appendices**

### Appendix 1 – Responsibilities of accreditation partners

Clear and open communications are essential. To assist this, CIEEM has developed the following framework of responsibilities for the parties involved in accreditation.

CIEEM staff and accreditation panels are responsible for:

- ensuring that the policies and procedures of the accreditation process are transparent and consistently applied
- ensuring that HEIs are well-informed prepared for the visit
- pursuing only data and information necessary to judge whether the essential criteria for accreditation are met
- focusing on financial and other resources only to the extent that they affect compliance with accreditation criteria
- keeping all key stakeholders appropriately informed at all stages of the process
- communicating consistent and accurate information at all stages of the process
- recognising and disseminating good practice while recognising the need for confidentiality
- providing opportunities for objective review and resolution of differences should any arise during the accreditation process
- comply with the code of conduct and confidentiality agreement of the CIEEM accreditation process

### Higher Education Institutions are responsible for:

- studying the relevant CIEEM criteria, policies and procedures
- providing clear, accurate and complete information in applications for accreditation and all associated paperwork
- committing key staff (academic and administrative) to the accreditation process
- informing CIEEM of the reasons why accreditation is being sought, in the context of institutional and programme aims and strategic direction
- providing information in a timely manner if a need is identified during the accreditation process

### Both parties are responsible for:

- ensuring that all documentation is sent within set deadlines agreed by both parties
- providing for candid and constructive evaluation of the accreditation process
- ensuring open exchange if issues and concerns are identified by any party
- encouraging flexibility, openness and co-operation in considering potentially beneficial variations of the accreditation process

# Appendix 2 – Knowledge and skills: required curriculum content of an undergraduate degree/degree pathway for accreditation

### A. Ecological Concepts

- 1. Ecological organisational concepts and classification e.g. biomes, biotopes, ecosystems, habitats, communities, populations, species, organisms
- 2. Principal world/UK biotopes, biogeographical regions and habitats—e.g. forests, wetlands, coasts, oceans, grasslands, deserts, polar, boreal, temperate, tropical and sub-tropical, man-made habitats (e.g. agriculture and urban)
- 3. Ecological Concepts- e.g. energy flow, nutrient cycling, species diversity, habitat diversity, succession, ecosystem change, ecosystem services. Population ecology e.g. carrying capacity, migration, dispersal, the role of limiting environmental factors, competition, predation. Community ecology e.g. food webs, trophic structures, interspecific and intra-specific relationships
- 4. Abiotic factors and impact on animal and plant distribution e.g. hydrology salinity, water flow; geomorphology landforms and their influence on ecological processes and landscapes, soil development and soil characteristics

### B. Human Ecology and Impacts

- 1. Economic and social aspects of ecology and the natural environment, historic and current land use, landscape ecology, agricultural ecology, urban ecology, ecosystem services and impact and influence of ecotourism
- Environmental pollution climate change (causes, impacts and mitigation), major pollutants and their sources, critical loads, effect on ecosystems (e.g. acidification (causes and effects on freshwater, forest and upland ecosystems), eutrophication (freshwater ecosystems)and nutrient enrichment (terrestrial ecosystems)

### C. Biodiversity

1. Biodiversity – Concepts of biodiversity (genetic biodiversity, species biodiversity, community biodiversity, habitat diversity), concepts of threat vulnerability, rarity. Major causes of biodiversity loss

### D. Environmental Policy and Law

- 1. Environmental policy and legal frameworks Awareness of contemporary environmental policy approaches economic and legal.
- National environmental policy, related policy and legal frameworks Relevant planning policy and guidance, impact of planning policy on the environment, development control both landscape-scale planning policy (e.g. river basin management plans, green infrastructure, integrated coastal management) or site scale (e.g. habitat and species designations)

### E. Environmental management

- 1. Assessing impact of change environmental impact and risk assessment, avoid mitigate compensate hierarchy. Stakeholder consultation. Managing potential user conflict
- 2. Management planning (e.g. for habitats, resources, recreation). Habitat and species management principles and techniques of species and habitat translocation
- Sustainability concept and principles of sustainability including conventions, international agreements and governmental policies, the meaning of low carbon economy and green economy.

### F. Species Identification and Survey Skills

- 1. Identification –principles of biological classification and taxonomy, use of biological keys. Practical experience of a range of taxa.
- Survey Design and Sampling Strategies Survey methods and practice e.g. vegetation description, habitat description, species survey methods, Phase 1 habitat survey techniques, National Vegetation Classification
- 3. Does the entire programme meet the minimum relevant practical work requirements for CIEEM accreditation? (30 days for BSc, 15 days for MSc)

#### G. Professional Skills

- 1. Technical report requirements; professional ethics; industry requirements
- 2. Data management, interpretation and data analysis. Data presentation

### Appendix 3 – Example form for submitting an Expression of Interest – MSc



### **Higher Education Degree Accreditation**

### Expression of Interest – postgraduate degree programmes

Please use this form to submit an initial application for accreditation of a postgraduate degree programme. CIEEM will use this information to check the eligibility of the degree programme for accreditation against the published criteria. A response will be sent within 4 weeks. Programme leaders of suitable programmes will then be invited to submit a separate, full application for accreditation.

Name of HEI:	
Department:	
Title of programme and degree type:t	
Is this degree programme a general taught N	Masters or a specialist taught Masters?
Programme leader/lead contact:	
Email/Tel no. of lead contact:	
Signature/E-signature:	Date:

The current administrative cost of submitting an expression of interest is £250 + VAT Please send a cheque made payable to the 'Chartered Institute of Ecology and Environmental Management' or an official purchase order.

Please send the completed form by email to <a href="mailto:accreditation@cieem.net">accreditation@cieem.net</a> and include your payment (by email or a cheque by post). If you have any queries or need further information, please contact:

**HEI Degree Accreditation** 

Chartered Institute of Ecology and Environmental Management

43 Southgate Street, Winchester, Hampshire SO23 9EH

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# Section 1: Please briefly describe (max 500 words) why the degree programme should be accredited by CIEEM. For example:

<ul> <li>The key reasons why the programme is suitable for accreditation</li> <li>How the programme will benefit from accreditation</li> <li>How the students will benefit from accreditation</li> </ul>			
Section 2: Please list the prir together with their qualificat of your academic delivery tea membership criteria on the C information.	ions and professional m should be a full mer	membership status. mber or fellow of CIE	At least one member EM. Please refer to the
Name of academic staff member	Role in delivery of degree programme	Qualifications	Professional memberships
member	degree programme		memberships
Section 3: For postgraduate programmes it is assumed that all or most of the core curriculum areas listed in Appendix 1 should have been covered at undergraduate level.  Please briefly describe (max 750 words):  - How the knowledge and skills students have gained at undergraduate level is assessed and how (any) gaps are addressed through the taught programme  - How the programme builds on any or all of the curriculum areas listed in Appendix 1  - How the programme provides a broad base of learning relevant to the ecology and environmental profession or How the programme provides an in-depth learning experience relevant to one or more technical areas of CIEEM's Competency Framework.			

The programme **must** deliver a minimum of 15 days of relevant practical work as defined by the technical competencies in the CIEEM <u>Competency Framework</u>. Please confirm that this is provided: **yes / no** 

# Appendix 4 – Example application form and guidance for submitting a full application for a non-specialist postgraduate degree



### **Higher Education Degree Accreditation**

### **Application for CIEEM Accreditation (Non Specialist Postgraduate Degree)**

Thank you for your interest in accreditation by CIEEM. Please use this form and guidance to submit your application. CIEEM will use this information to evaluate the degree programme against the published criteria for accreditation.

The cost of submitting a full application and gaining a 5 year accreditation from CIEEM is currently £3500. For those programmes where the next validation of the degree is less than 5 years, the cost of accreditation will be reduced to reflect this:

Accreditation for 3 years £3000 Accreditation for 4 years £3300

If a programme fails to achieve accreditation, an HEI may be entitled to a refund of up to £1500.

Please complete section 1 and section 2 below (including Tables 1, 2 and 3) and a separate report providing the 'information required by CIEEM'. Send this completed form, your report and any other associated documents by email to <a href="mailto:accreditation@cieem.net">accreditation@cieem.net</a> in either Word or PDF formats.

Please send a cheque made payable to the 'Chartered Institute of Ecology and Environmental Management' or send an official purchase order by email. For any queries or for further information, please contact:

HEI Degree Accreditation

Chartered Institute of Ecology and Environmental Management

43 Southgate Street, Winchester, Hampshire SO23 9EH

E: accreditation@cieem.net

T: 01962 868626

Section 1		
Name of HEI:		
Department:		
Title of degree programme:		

Programme leader /lead contact:		
Email/Tel no. of lead contact:		
Signature/E-signature:	Date:	

### Section 2: Required information for accreditation

For accreditation to be awarded by CIEEM, a degree programme or named pathway must meet six essential criteria:

- 1. Assessors must be satisfied that programme content and learning outcomes are relevant<sup>6</sup> and adequately prepare graduates to enter the profession.
- 2. A principal member of academic staff must be a Full member or Fellow of CIEEM.
- 3. Assessors must be satisfied that the standard of assessment and teaching provides the underpinning of competence for graduates entering the profession.
- 4. Assessors must find evidence of sufficient high quality field work being taught to prepare graduates for the profession.
- 5. The HEI must demonstrate a commitment to continual self-improvement in programme content, delivery, student support and staff development.
- 6. The aims, objectives, learning outcomes and methods of teaching on the programme must align with the aims of CIEEM e.g. raising the profile of ecology and environmental management and aiding the development of new ecologists for the profession.

To demonstrate that a degree programme meets the six criteria please submit a report that provides the following information:

- Course aims
- Methods of assessment
- Programme learning outcomes
- Modes of delivery
- List of modules and how these relate to the learning outcomes
- Curriculum content

<sup>&</sup>lt;sup>6</sup> Relevance is defined by the technical content of CIEEM's Competency Framework

- Relevant practical work
- Professional skills and practice
- Staff experience, development and training
- Improvement in quality of course
- Facilities available to students
- Pastoral, academic and welfare support
- Student satisfaction
- Graduate employment

Explanatory guidance on what this information should include is given in Appendix 1.

Please note that your report can include all of the information required within one document, or you can submit an 'overview' report with additional, separate documents. Please ensure that reports are fully cross-referenced and please also complete Table 1 below to ensure that we are able to find easily all of the required information

Information required by CIEEM	Name of document(s) that provides the required evidence. Please ensure that this matches the document file name so that it can be easily identified.	Section and page numbers in document to be used for evaluation by CIEEM
Programme aims		
Methods of assessment		
Programme learning outcomes		
Modes of delivery		
List of modules / units of study		
Curriculum content		
Relevant practical work		
Professional skills and practice		
Staff experience, development and training		

Improvement in quality of	
course	
Facilities available to students	
Pastoral, academic and welfare support	
Student satisfaction	
Graduate employment record	

To further assist the evaluation of your application, please also complete Table 2 & 3 below:

Table 2: Please map the programme content to the learning outcomes, using the grid below (page 28)

A: Knowledge and understanding	Graduates degree must be able to demonstrate their knowledge and understanding of key ecological concepts and processes and of the environmental policies and practices appropriate to managing the natural environment. A graduate must be able to critically evaluate major principles and practices taught on a programme and appreciate the wider context in which they are applied within the profession
<b>B</b> : Practical skills	Graduates must be able to demonstrate that they possess the practical skills required by the profession relevant to the degree and demonstrate that they have the competence (as defined by the CIEEM Competency Framework) appropriate to the nature of the degree.
C: Professional skills	Graduates must be able to demonstrate that they have developed the professional skills required to enter a graduate role within the profession effectively as outlined in the CIEEM Competency Framework – transferrable competence themes
D: Ecological Concepts	Describe and discuss the underpinning principles and theories of ecology and environmental management.  Explain how these principles and theories influence the work of practitioners

E: Human Impacts and Ecology	Discuss the ecological impact of human activity (e.g. environmental pollution, climate change) and its relevance to the work of practitioners of Ecology and Environmental Management. Discuss human impact on the distribution of animals, plants and invasive species, giving a range of examples
<b>F:</b> Biodiversity Conservation	Discuss and describe the principles and concepts of biodiversity and nature conservation and its relevance to the work of practitioners of ecology and environmental Management. Provide examples of national, international and global nature conservation initiatives and critically assess their impact and effectiveness
G: Environmental Policy and Law	Describe and discuss national and international environmental legislation and policy frameworks, summarising their purpose and giving examples of how they impact on the work of practising ecologists and/or environmental managers
H: Species Identification and Survey Skills	Demonstrate the ability to practise basic survey techniques and understand their strengths and limitations. Understand taxonomic hierarchies and classification. Understand the challenges and approaches to species identification and show practical experience of identifying at least one major taxonomic group down to species level (e.g. flowering plants, insect orders, mammals etc.) Explain how to apply or create sampling techniques to gather appropriate survey data.

### Key to Table:

- T indicates curriculum area taught in this module i.e. part of the Syllabus
- A indicates curriculum area is part of module Learning Outcomes and is therefore assessed

Name of Module	T=Taught	Α	В	С	D	E	F	G	Н
	A =Assessed								

• **Table 3** will provide a clear summary of the relevant practical work provided by the degree programme, divided into fieldwork and laboratory work.

	Table 2: Sui	mmary of relevant prac	tical work provide	ed by degree/degree pathw	ay –		
			Ple	ase add additional rows to t	he table as i	needed	
Year/	Module –	Type of practical	Intended	Relevant theme /	F = field	Hours	
		work activity	learning	subtheme in CIEEM			
Level	code and		outcomes	Competency Framework	L = lab		
	name						
Example Level 4	ECO123	Plant identification	Survey skills	Surveying – species identification	F	6	
				Field	dwork total		
				Laboratory	work total		
				Practical	work total		
	<b>Note: Relevant</b> practical work is work where students are actively engaged in 'doing' rather than looking and listening.						
	and inclusive skill example etc. whe Not described to days of the 15 days of the second states of the 15 days o	associated lab work such a udes supervised and small is of direct relevance to the mple baseline ecological su Practical activities to be us ere students do not get to p eligible (but may contribu cription of course content): of practical work is a minin	as lab-based taxono group student-led p profession (and the urveys, conservation sed as a basis for ac practise the skill. Ite to achieving lear student-led project num and there is an	re): Taught residential and non- pomic and ID skills, data analysis, practical work where this relates in management plans, ecological correditation should not include s rning outcomes and should be re ts, work placements, site visits. In expectation that programmes comes. The 15days minimum m	GIS mapping s to the acquiship criteria), for impact assessialls demonst ecorded in the may need to l	. Also sition of or sment rations	

substantial proportion (at least 60%) of supervised field-based practical work.

### Section 3: Appendices with supporting information

### Appendix 1 Guidance on information required for accreditation

To demonstrate that a degree programme or named pathway meets the six essential criteria, your application to CIEEM must include the information outlined below. Please note that this guidance is not fully comprehensive and you may wish to submit additional information in support of your application if you consider that this would assist our evaluation.

Information required	quired Guidance on the information required	
by CIEEM		
Programme aims	Provide detailed information	
Methods of	Proportion of written exams, coursework and practical work	
assessment	Relevant Key Information Sets	
Programme learning	Provide detailed information. Note that the learning outcomes	
outcomes	required for CIEEM accreditation are given in Appendix 2 below.	
Modes of delivery	Type of course e.g. full-time / part-time / sandwich course	
	Contact hours and individual study expected in each year of the programme	
	Details of tutorial and similar arrangements including contact hours,	
	size of groups and personal tutorial contacts	
	<ul> <li>Describe any special provisions that have been made for part-time or off-campus students, students with disabilities etc.</li> </ul>	
List of modules /	Outline compulsory modules and optional modules	
units of study	Explain pathways (module combinations) offered	
Curriculum content	Include detailed content and the learning outcomes of each module	
	Explain how the depth of knowledge and skills the students have	
	gained at undergraduate level is assessed (e.g. entrance criteria and	
	assessment) and how any gaps are addressed during the course.	
	Show clearly how the course content builds on the curriculum areas	
	(knowledge and skills) shown in Appendix 3. Highlight any areas of	
	specialism relevant to CIEEM's <u>Competency Framework</u> . Please	
	indicate clearly all the relevant text within the course descriptions	
	when providing evidence.	
Practical work	Summarise practical experience gained throughout the programme	
	and in which year of study	
	Give details of any fieldwork and other relevant practical experience	
	such as laboratory work. State whether compulsory or optional, and	

	at what stage in the course undertaken. Include information on the purpose of any practical work, the learning outcomes expected and how these are assessed.
	Provide the number of hours of the degree programme spent on
	practical work, broken down into fieldwork and other types of
	practical work such as laboratory work.
	Please ensure that Table 2 above is completed and submitted to
	CIEEM to assist with evaluation.
	• During the site visit by the CIEEM Assessment Panel – Provide a
	selection of assessments done by students during/following practical
	work that show the skills learnt.
Professional skills and	Explain how professional skills are taught and developed
practice	<ul> <li>skills for lifelong learning and understanding the need for</li> </ul>
	continuing professional development
	<ul> <li>report writing; problem solving; critical analysis;</li> </ul>
	interpersonal/team work skills; self-management;
	communication skills; IT; data management, interpretation and
	presentation; project planning, professional codes of conduct
	Explain how teaching is linked to professional practice e.g. guest
	speakers; application of learning to professional practice; links to,
	and roles of, professional bodies
Staff experience	Submit names and CVs of staff
	Include information on skills and experience, including fieldwork
	<ul> <li>Include details of professional memberships</li> </ul>
	Provide details of how staff are kept up-to-date with the teaching
	profession and the profession of ecology and environmental
	management e.g. best practice, new research, changes in policy etc.
Improvement in	Demonstrate methods of quality control, self-evaluation and
quality of course	continual improvement in quality of the programme
	Provide course leader's annual self-assessment report
	Provide external examiner reports and other quality control reviews
	such as periodic reviews for the previous 3 years
	Provide most recent validation or revalidation report
	Provide most recent QAA report where this includes particularly
	relevant information to the programme
Facilities available to	Outline the availability of:
students	<ul> <li>Library resources, including physical and electronic resources and</li> </ul>
	the information skills provision/support required for students to
	use these effectively
1	

		<ul> <li>Use of online learning systems, including lecture notes,</li> </ul>
		background information, discussion boards, formative
		assessment
		<ul> <li>Other IT resources – e.g. specialist software provided</li> </ul>
		<ul> <li>Laboratory resources – student access to equipment such as</li> </ul>
		microscopes and other equipment
		<ul> <li>Other specialist resources – e.g. for practical work</li> </ul>
	•	Describe any other opportunities available to students, such as
		participation in research seminars
Pastoral, academic	•	Summary of support for students
and welfare support		<ul> <li>Induction arrangements</li> </ul>
		<ul> <li>Placements, work experience opportunities or study abroad</li> </ul>
		<ul> <li>Careers advice</li> </ul>
		<ul> <li>Pastoral and welfare support</li> </ul>
	•	Refer to any features of the curriculum that may raise issues
		associated with equality and diversity and how you address these
	•	Provide response to National Student Survey on student support
Student satisfaction	•	Details of staff / student meetings
	•	Mechanisms for students to give feedback e.g. annual reviews and
		unit reports
	•	Results of student surveys
	•	Relevant Key Information Set
Graduate	•	Provide details of graduate success in finding employment and
employment		destination of graduates
	•	Relevant Key Information Set
t.		

### Appendix 5 – Typical timetable for a visit to an HEI

9:00				
Assessor	Assessors arrive			
9:15	9:15			
Introduc	tion and overview of the degre			
	Welcome and introductions	Introduction of key members of academic staff and the assessment panel.		
	Purpose of the day	Assessment panel briefly explain the role of the site visit within the accreditation process.		
	Overview of the programme	HEI summarise their case for accreditation, outline the programme, including ethos, content, perceived benefits of CIEEM accreditation, practical work undertaken etc. It is recommended that HEI do this using a Power Point presentation or based around a paper document. Provides HEI opportunity to explain how the programme meets the accreditation criteria and prepares students for the workplace.		
10:30 Question	ns and discussion			
	Questions from the assessment panel	Opportunity for assessors to ask questions and seek clarification of any issues arising from their 'desk assessment' of the application.		
12:00 Working	lunch and student interviews			
	Assessment panel meet with students	Panel have a private meeting with students to gain their perspective of the programme. This should include at least 2 or 3 students from each year, recent graduates and student representatives from staff/student liaison meetings.		
13:30 Review o	13:30 Review of student work			
	Assessment panel view examples of student work	Panel view student work from all years and across the range of modules. Work should include a range of examples, showcasing good, poor and intermediate levels of work:  - Marked examination scripts including the examination papers, model answers, and marking schemes  - Marked samples of coursework with feedback given to students		

15:00 Tour of faci		<ul> <li>Individual final year project dissertations including the marks and marking schemes used</li> <li>Marked project work</li> <li>Marked fieldwork reports</li> <li>Copies of poster displays</li> <li>Industrial training reports submitted by students and employers (for sandwich programmes)</li> <li>The review of student work is to ensure that this is meeting the minimum requirements defined by the knowledge and skills criteria set out by CIEEM.</li> </ul>
fa tl n	Assessment panel view acilities and equipment hat are particularly noteworthy to support earning	<ul> <li>The brief tour of facilities should highlight:</li> <li>How field-based research and best practice are taught to students</li> <li>The range of laboratory and computer work undertaken by the students and how this contributes to professional skills</li> <li>Health and safety procedures, lab skills, correct use of equipment etc.</li> <li>Note that each member of the panel may view different facilities to keep within the 45 minutes available.</li> </ul>
15.45 Assessor m	neeting	
А	Assessment panel discuss he findings of the site visit	A meeting of the assessors in private to review their overall findings of the desk assessment and site visit.
16.45 Final meeti	ing with staff	
A d	Assessment panel meet department staff to provide eedback	An opportunity for the panel to comment on the desk-assessment and site visit, giving strengths and weaknesses. Also an opportunity for the HEI to ask any final queries about the accreditation process. Please note that the assessment panel is not able to disclose their view on whether they will be recommending accreditation to CIEEM.
17:00 Visit end		

### Appendix 6 – Appeal process

### **Grounds for appeal**

- Evidence of administrative, procedural or other irregularity in the conduct of the accreditation visit.
- Evidence of administrative, procedural or other irregularity in the conduct of the assessment panel or committee meeting responsible for reaching an accreditation decision.
- Evidence of new information available which could influence the accreditation decision.

### Procedure for lodging an appeal

A detailed written submission stating the grounds for seeking a review, together with a fee for £250 should be submitted to the Chief Executive Officer within 30 working days of receipt of the accreditation letter from CIEEM. This fee will be returned if the appeal is successful, and may otherwise be returned at the discretion of the appeal panel.

Appeals submitted outside the timescales specified above will normally be ruled invalid.

### Preparation for the appeal panel meeting

- Receipt of the appeal submission will be acknowledged.
- If the grounds for the appeal appear to fall within the criteria outlined above, the Chief Executive Officer will convene a meeting of the appeal panel.
- An appeal can be withdrawn at any stage.

The appeal panel will be formed as follows:

- Three full members or fellows of CIEEM, British Ecological Society or other relevant professional body or learned society, knowledgeable about the accreditation process, with one member nominated to act as chair.
- A member of the Secretariat will act as secretary to the appeal panel, but is not eligible to vote and does not count towards the quorum.
- Members of the appeal panel must not have been involved in the original accreditation visit nor have any involvement with the appellant academic institution.
- The appellant will be notified in writing of the composition of the appeal panel. Any objection to the composition of the panel should be supported in writing.
- The quorum shall be three appeal panel members, excluding the Secretariat officer.

### Additional representation at the appeal panel meeting

- Two representatives from the appellant academic or professional establishment will be invited to attend the meeting.
- One member of the original assessment panel will be invited to attend the meeting.

### Written evidence

Papers for the meeting of the appeal panel will be made available only to panel members, the secretary to the appeal panel, members of the original assessment panel, and to the appellant's representatives.

### The papers will include:

- the handbook on degree accreditation
- the appellant's letter of appeal together with any supporting documentation
- the original request for accreditation
- the visit report and decision letter
- additional information supplied by the assessment panel concerning the recommendation of the panel.

### Possible outcomes of an appeal

- The decision on accreditation is upheld and the appeal is dismissed.
- The appellant's appeal is allowed with the following possible outcomes:
  - The assessment panel is asked to reconsider its original recommendation in the light of the upholding of the appeal.
  - The assessment panel is asked to consider new evidence and review its recommendation.
  - The appeal panel requests a full re-assessment of the application for accreditation by a new assessment panel.

There is no right of appeal against the decision of the appeal panel. Once a decision has been made the Secretary to the appeal panel will notify the appellant of the outcome.

### Appendix 7 – Overview of the Competency Framework Themes and Subthemes

Ecological/environmental themes are in green, transferable themes are in blue.

Theme	Sub-theme	What this includes
Surveying	Habitat/species survey design	Setting appropriate objectives for surveys. Selecting techniques and designing methodologies to test objectives in line with best practice.
	Survey planning and fieldwork skills	Fieldwork skills including planning, selection and use of equipment.
	Species identification and evaluation	Species identification, application of knowledge of species ecology, and assessment of species status.
	Species handling	Safe and legal species handling techniques.
	Habitat identification and evaluation	Describing, classifying and evaluating habitats in accordance with best practice guidelines.
	Physical environment survey	Identifying and evaluating the influence of the physical aspects of the environment that affect the range and complexity of the biodiversity.
Environmental management	Habitat management	Setting objectives for habitat management plans.  Developing and implementing (using appropriate techniques and machinery) schemes for habitat management.  Monitoring the impact of habitat management.
	Habitat creation/enhancement	Setting objectives for habitat creation/enhancement plans.  Developing and implementing (using appropriate techniques and machinery) schemes for habitat creation/enhancement, including mitigation techniques.  Monitoring the impact of habitat creation/enhancement.
	Species management	Setting objectives for species management plans.  Developing and implementing (using appropriate techniques and machinery) schemes for species management, including mitigation techniques.  Monitoring the impact of species management.
	Sustainable environmental design	Designing and/or implementing effective sustainable environmental management solutions for biodiversity benefit.  Resolving complex or conflicting constraints to achieve positive outcomes for biodiversity.
	Environmental regulation compliance	Designing and implementing site-based projects involving interactions with other professional disciplines. Environmental risk management on sites.
	Biosecurity	Consideration of biosecurity issues and risks as part of project design.  Developing and implementing biosecurity protocols in accordance with best practice guidelines.

Environmental	Strategic Environmental	Undertaking Strategic Environmental Assessment for
assessment	Assessment	policies, plans and programmes.
	Environmental Impact Assessment	Undertaking Environmental Impact Assessment for development projects. Preparing Environmental Statements.
	Ecological Impact Assessment	Undertaking the ecological aspects of an Environmental Impact Assessment.
	Habitat Regulations Assessment, Appropriate Assessment/Natura Impact Statement	Undertaking Habitat Regulations Assessment or Appropriate Assessment, Production of a Natura Impact Statement (NIS).
	Regulatory aspects of environmental assessment	Specifying environmental assessment requirements for plans or projects.  Reviewing environmental assessment submissions on behalf of a competent authority or decision-making body.
Environmental governance, legislation and	Formulation	Developing and reviewing legislation, policy and guidance relating to ecological and environmental management
policy	Understanding and application	Understanding and applying relevant legislation, policy and best practice.
	Compliance and enforcement	Determining whether actions by third parties are compliant and understanding enforcement routes and penalties for non-compliance.  Managing casework.
Scientific method	Design	Setting appropriate scientific questions/hypotheses and designing methodologies to answer/test these.
	Implementation	Taking a methodology and implementing it appropriately, with a suitable programme and resources.
	Analysis	Carrying out appropriate analysis of results and information that is fit for purpose (statistical or otherwise).
	Interpretation and evidence- based reporting	Interpreting outcomes and drawing valid conclusions. Presenting findings clearly and appropriately to a range of audiences.
Formal facilitation, consultation, engagement and partnering	Formal facilitation, consultation, engagement and partnering	Engaging with stakeholders and statutory consultees. Designing and implementing consultation projects. Partnership building.
Public awareness and education	Formal ecological teaching and training Raising environmental awareness	Planning, delivering and evaluating teaching and/or training in ecological and/or environmental topics.  Designing and implementing activities to raise environmental awareness and understanding, using a range of media.

Professional conduct	Professional conduct	Commitment to high standards of professional practice, recognition of ethical considerations and obligations to the environment, to customers and to society.
Business management	Managing quality	Developing and delivering quality services and products.  Compliance with quality management systems (internal and/or external) and recognised standards.  Quality management auditing.
	Environmental resource efficiency	Developing and achieving environmental resource efficiency targets.  Raising awareness of resource efficiency and impact monitoring.
	Business planning	Strategic planning including use of strategic planning tools. Stakeholder engagement in business planning.
	Managing business	Financial, change and risk management. Operational management.
	Customer care	Commitment to, and practice of, high standards of customer care policy and practice.
Project management	Managing projects	Developing and implementing processes and systems to manage projects effectively. Stakeholder management.
	Evaluating projects	Undertaking critical external evaluation of projects led by others using a range of appropriate tools.
Information management	Data and document management	Establishing, promoting and using organisational processes to ensure effective data and document management.  Compliance with recognised internal and external data management protocols and legislation including data protection.
	Numeracy	Using a range of numerical techniques.  Modelling.
	Report writing	Producing clear, concise, factual and accurate written communications.
People management	Recruitment and selection	Recruiting staff and/or volunteers following equal opportunities and organisational policies in accordance with best practice guidelines.
	Developing people	Managing the performance of staff and volunteers.  Developing capabilities to enable others to achieve their full potential.
	Team working	Working collaboratively and cooperatively.  Managing teams.
	Leadership	Motivating people to act towards achieving a common goal, through direction, inspiration and effective communication.

Self management	Task management	Organising and prioritising work effectively to achieve desired goals. Being task-orientated. Delegating effectively. Achieving an appropriate work-life balance.
	Communicate effectively	Communicating accurately and clearly. Sharing knowledge effectively. Presentation skills. Negotiating and influencing skills.
	Learning and development	Recognising areas for personal development and seeking opportunities to develop knowledge, understanding and skills.
Health and safety	Occupational Health and Safety	Compliance with personal, organisational and statutory health and safety legislation, and organisational policy and protocols. Risk management. Health and safety auditing.

### **Appendix 8 CIEEM Competency Framework: Competence Levels**

Category	/	Definition	Descriptor of what competence at this level looks like
	1		NB: To be competent in an activity at this level you will be able to demonstrate the majority, if not all, of the bullet points.
Level 1	Basic	Has a basic knowledge with a simple understanding of terminology and concepts. Has some experience of practical application. Would be able to carry out standard tasks under supervision.	<ul> <li>You recognise the terminology and concepts and broadly understand what this activity is about.</li> <li>You have a basic understanding of the importance of this activity.</li> <li>You have some experience of practical application in this activity.</li> <li>You would not be expected to undertake tasks in relation to this activity unless under supervision.</li> </ul>
Level 2	Capable	Has the knowledge and experience essential to carry out standard tasks unsupervised confidently and consistently. Is likely to need to seek advice before carrying out complex or non-standard tasks.	<ul> <li>You understand the terminology and concepts and are aware of any drivers supporting this activity.</li> <li>You have experience of putting this activity into practice.</li> <li>You can carry out this activity to the expected standard when straightforward, following advice and guidance as necessary.</li> <li>You know where to source guidance and information regarding this activity and use this confidently.</li> <li>You can identify when things are generally being done as they should and you can spot if things are not right.</li> <li>You can judge your own limits with regards to this activity and, if appropriate, who to defer to in the event of needing further advice.</li> </ul>
Level 3	Accomplished	Has the knowledge and experience of this activity to carry out complex, specialist or non-standard tasks confidently and consistently. Is aware of alternative options and approaches and can provide guidance, instruction and advice to others on this activity.	<ul> <li>You are knowledgeable on this subject and are capable of explaining it to a range of different audiences.</li> <li>You have extensive experience of this activity in both straightforward and complex situations.</li> <li>You can deal effectively with difficult or complex issues relating to this activity and both propose and evaluate alternative solutions.</li> <li>You can make decisions confidently regarding this activity.</li> <li>You can provide guidance, instruction and advice to others and may provide mentoring and/or coaching about this activity.</li> </ul>
Level 4	Authoritative	Is widely recognised as an authority, both by others within the organisation and/or by external peers, for the knowledge and experience they demonstrate on the activity.	<ul> <li>You have a detailed level of knowledge relating to the activity and its application in many and varied circumstances.</li> <li>You are able to share your knowledge with others and have done so on many occasions with a wide range of audiences.</li> <li>You are routinely consulted on this activity by others in the profession.</li> <li>You can solve highly complex problems independently relating to this activity and may have set new related standards and industry benchmarks.</li> <li>You routinely provide authoritative guidance, instruction and advice to others.</li> <li>You may contribute to the development of industry policy, standards and guidelines relating to this activity.</li> <li>You may be called upon as an expert witness in relation to this activity.</li> <li>You may deliver training and education to others on this activity at all levels of competence.</li> <li>NB: At this Authoritative level you may demonstrate only three or four of the descriptor statements</li> </ul>