AC 3: Graduate Programs

Rationale

This credit recognizes institutions that have formal sustainability education programs and learning requirements for graduate students. Academic programs provide a path for students to study sustainability topics in depth, which better prepares them to address sustainability challenges. Learning requirements help provide students with a grounding in the concepts and principles of sustainability so that they are able to apply them in their professional fields. Formal education programs also provide a home for sustainability scholars within the institution.

Applicability

Applicable to institutions that offer at least 25 distinct **qualifications** at the Master's, Doctoral, or equivalent level (**ISCED levels** 7-8).

Points available

A maximum of 8 points are available for this credit.

Criteria

3.1 Graduate programs with sustainability-focused learning requirements

An institution earns 4 points when it offers at least one sustainability-focused degree or major for graduate students. Partial points are available. An institution that offers at least one sustainability-focused certificate, concentration, or minor for graduate students AND/OR at least one graduate qualification focused on a subject other than sustainability that has a **sustainability-focused learning requirement** earns 2 points.

Measurement

Report on the current status of the formal **education programs** offered by the institution to graduate students.

To qualify as sustainability-focused, the primary focus of a program must be on the integrated concept of sustainability or the interdependence of ecological and social/cultural/economic systems. This focus must be evidenced by the published title and/or description of the program, either explicitly (e.g., "Sustainability Studies") or implicitly, by addressing a sustainability challenge using a systems approach (e.g., "Climate Change, Agriculture and Food Security").

A qualification focused on a subject other than sustainability qualifies if it:
- Requires the successful completion of a **sustainability-focused course**,
- Has one or more specified **sustainability-focused learning outcomes** and associated assessment criteria, AND/OR

- Provides a direct pathway to a sustainability-focused job or career (e.g., a certificate in renewable energy systems).

Documentation

Report the following information in the online Reporting Tool.

- Does the institution offer at least one sustainability-focused degree or major for graduate students? (required)

  If Yes, the following field is also required:

  - List and description of the institution's sustainability-focused degrees and majors for graduate students. Include sufficient information to make clear the sustainability focus of each program.

- Does the institution offer at least one sustainability-focused certificate, concentration, or minor for graduate students? (required)

  If Yes, the following field is also required:

  - List and description of the institution's sustainability-focused certificates, concentrations, and minors for graduate students. Include sufficient information to make clear the sustainability focus of each program.

- Does the institution offer at least one graduate qualification focused on a subject other than sustainability that has a sustainability-focused learning requirement? (required)

  If Yes, the following field is also required:

  - List and description of the institution's graduate qualifications focused on subjects other than sustainability that have sustainability-focused learning requirements. Include information justifying the inclusion of each program, i.e., the minimum sustainability-focused criteria that must be met to successfully complete the program.

3.2 Percentage of graduate qualifications awarded that have sustainability-focused learning requirements

An institution earns 4 points when 50 percent or more of the graduate **qualifications** awarded indicate successful completion of an education program with sustainability-focused learning requirements. Incremental points are available and earned as outlined in Tables I and II.

Table I. Number of graduate qualifications awarded that have sustainability-focused learning requirements

Qualification type	Number of qualifications awarded
A. Sustainability-focused qualifications	

B. Qualifications focused on subjects other than sustainability that have sustainability-focused learning requirements	
Total →	

Table II. Points earned for indicator 3.2

Number of graduate qualifications awarded that have sustainability-focused learning requirements (Table II)		Total number of graduate qualifications awarded		Factor		Points earned
	÷		×	8	=	Up to 4

Measurement

Report the most recent annual data available from within the previous three years. An institution may report on the average of the previous three years rather than a single year.

Documentation

Report the following information in the online Reporting Tool.

- Performance year for graduate qualifications (required). The year the performance period ended.

- Total number of graduate qualifications awarded (required). Report the total number of undergraduate degrees, diplomas, certificates, and other awards conferred.

- Number of graduate qualifications awarded that are sustainability-focused (required). Report on the sustainability-focused degrees, certificates, majors, concentrations, and minors identified in indicator 3.1.

- Number of graduate qualifications awarded that are focused on subjects other than sustainability but have sustainability-focused learning requirements (required). Report on the qualifications identified in indicator 3.1 that require the successful completion of a sustainability-focused course, have specified sustainability-focused learning outcomes and assessment criteria, or provide a direct pathway to a sustainability-focused job or career.

The Reporting Tool will automatically calculate the following two figures:

- Total number of graduate qualifications awarded that have sustainability-focused learning requirements

- Percentage of graduate qualifications awarded that have sustainability-focused learning requirements

Glossary

Education program – A coherent set or sequence of educational activities designed and organized to achieve predetermined learning objectives or accomplish a specific set of educational tasks over a sustained period.

ISCED level – The International Standard Classification of Education (ISCED) is the international reference classification for organizing education programs and related qualifications by education levels and fields.

The levels identified in ISCED 2011 are:

0. Early childhood education
1. Primary education
2. Lower secondary education
3. Upper secondary education
4. Post-secondary non-tertiary education
5. Short-cycle tertiary education
6. Bachelor's or equivalent level
7. Master's or equivalent level
8. Doctoral or equivalent level
9. Not elsewhere classified

Qualification – Official confirmation, usually in the form of a document certifying the successful completion of an educational program or of a stage of a program. Qualifications can be obtained through: i) successful completion of a full program; ii) successful completion of a stage of a program (intermediate qualifications); or iii) validation of acquired knowledge, skills and competencies, independent of participation in such programs. This may also be referred to as a "credential". Examples of qualifications include degrees, certificates, diplomas, and the equivalent. [Adapted from the International Standard Classification of Education (ISCED).]

Sustainability challenge – An issue or situation that threatens or undermines ecological integrity, racial equity and social justice, or the ability of future generations to meet their needs (e.g., biodiversity loss, poverty and inequality, and climate change), OR a goal or objective that contributes to the resolution of such an issue or situation (e.g., ecosystem health, universal human rights, and renewable energy generation). To identify sustainability challenges, it may be helpful to reference the targets embedded in the Sustainable Development Goals (SDGs), the principles outlined in the Earth Charter, and/or the Doughnut of social and planetary boundaries.

Sustainability-focused course – A unit of instruction that has a primary and explicit focus on the integrated concept of sustainability and/or the interdependence of ecological and social/cultural/economic systems. This focus must be demonstrated in the title or high level description of the course. Sustainability-focused courses may include:

- Foundational courses with a primary and explicit focus on sustainability (e.g., Introduction to Sustainability, Sustainable Development, Sustainability Science).
- Courses with a primary and explicit focus on the application of sustainability within a field (e.g., Architecture for Sustainability, Green Chemistry, Sustainable Agriculture, Sustainable Business). As sustainability is an interdisciplinary topic, such courses generally incorporate insights from multiple disciplines.

- Courses with a primary and explicit focus on a major sustainability challenge that requires students to consider the interdependence of ecological and social/cultural/economic systems (e.g., Climate Change Science, Environmental Justice, Global Poverty and Development, Renewable Energy Policy). The focus of such courses might be on providing knowledge and understanding of the problems and/or the tools for solving them, but they should bring a systems thinking approach to the challenge.

Sustainability-focused learning outcome – A learning outcome that explicitly addresses either the integrated concept of sustainability or the interdependence of ecological and social/cultural/economic systems. Examples of sustainability-focused learning outcomes include:

- Students will be able to define sustainability and identify major sustainability challenges.
- Students will use appropriate evidence and tools to evaluate the carrying capacity of ecosystems as related to providing for human needs.
- Students will be able to apply concepts of sustainable development to address sustainability challenges in a global context.
- Students will identify, act on, and evaluate their professional and personal actions with the knowledge and appreciation of interconnections among economic, environmental, and social perspectives.