



Teaching and Learning Strategy

CAT: Inspire, Inform, Enable

The Graduate School of the Environment (GSE) remains committed to providing world-leading education in sustainability. We are focussed on ensuring that those students graduating from one of our GSE programmes are inspired to bring about change, well informed with specialist subject knowledge and have mastered the skills that will enable them to work towards sustainability in whatever path in life they follow.

The Teaching and Learning Strategy was drafted in the winter of 2020-1 in consultation with all academic staff at the CAT Graduate School of the Environment. The strategy was then augmented in December 2015 to align with the three main sections of the QAA Quality Code and the requirement for enhancement. The strategy went out to review to all academic staff and the final document was presented to the Academic Council. The next stage is to present the GSE Academic Council in January 2017. The agreed strategy will then enter a system of annual review as part of the annual quality enhancement process as overseen by the Academic Council. A timetable for the development of the strategy and its review process is given below (Table 1).

Table 1: Timetable of the design and implementation of the GSE Teaching and Learning Strategy

Date	Task	
Review		
Winter 2020-1	Draft Teaching and Learning Strategy section relating to 'assuring and enhancing academic quality' was drafted and circulated to senior academic staff for comment	Complete
February 2021	Draft Teaching and Learning Strategy, sections on 'setting and maintaining academic standards', 'information provision' and 'continuous enhancement' drafted.	Complete



April 2021	Draft Teaching and Learning Strategy to be presented to the Academic Council for discussion and Approval	Complete
April 2022	Annual review of the Teaching and Learning Strategy, of progress made against the indicators. Action Plan for Enhancement reviewed and updated.	

The Graduate School will do this through the setting and maintaining academic standards (Part A of the QAA Quality Code), assuring and enhancing academic quality (Part B of the Quality Code), through providing accurate information on our education provision (Part C of the Quality Code) and an additional section focussing on the continuous enhancement of our teaching and learning.

Table 2: The GSE Teaching and Learning Strategy

Setting and Maintaining Academic Standards

The GSE aims to ...	Indicators
<ul style="list-style-type: none"> Maintain academic standards on existing programmes 	<ul style="list-style-type: none"> Review of course syllabus and content in line with QAA benchmarks, professional body accreditation and 'levelness' in keeping with updates in these areas. Update programme and module specifications as required
<ul style="list-style-type: none"> Ensure compliance with national and international standards when designing new academic programmes 	<ul style="list-style-type: none"> Design new programmes by aligning to QAA subject benchmarks and accreditation requirements, by using naming conventions and



Centre for Alternative Technology

Canolfan y Dechnoleg Amgen



	<p>by alignment to correct academic standards. Ensure these are explicit in learning outcomes and aligned assessment tasks.</p> <ul style="list-style-type: none"> • Publish clear procedures for the design and development of new programmes
<ul style="list-style-type: none"> • Integrate internal and external review into the assessment of existing and new programmes. 	<ul style="list-style-type: none"> • External examiner recommendations, input from professional practice and industry, the validating body, student representation and alumni.

Assuring and enhancing academic quality

GSE aims to ...	Indicators
<ul style="list-style-type: none"> • Inspire students to investigate global sustainability and biodiversity issues and their solutions and to want to bring about change. • Teach students using enthusiastic, knowledgeable and skilled staff. • Ensure teaching staff have access to training to enhance teaching and learning skills and are kept informed about changes to teaching and learning techniques, such as improvements in teaching technology and availability of new academic information to students. • Inspire by the inclusion of guest speakers from a wide variety of renewable energy and sustainability disciplines. • Facilitate debate and critical analysis through developing a collaborative, friendly and thought-provoking atmosphere 	<ul style="list-style-type: none"> • The production of high quality dissertations/major design projects covering a range of contemporary sustainability, renewable energy and energy issues. • A staff base of academics, professional practitioners and consultants. • Staff take an active part in peer-observation of teaching and take part in available training opportunities. Training needs are fed back to Academic Council following annual professional reviews of lecturers' performance. • The involvement of external speakers which enhances the module delivery.



Centre for Alternative Technology Canolfan y Dechnoleg Amgen



<p>between students and between students and staff, and through a focus on evidence-based studies.</p> <ul style="list-style-type: none">• Use a variety of teaching, learning and assessment methods to inspire.• Use module and programme data, etc. for identifying good practice/areas for intervention and review programmes with poor metrics for teaching, for review and support towards improvement	<ul style="list-style-type: none">• Student feedback at the end of modules to gauge student engagement.• Student engagement in spoken debates, group seminars, on-line discussion forums, on-line tutorials, written debates in essays or projects and reference to competing theories in peer-reviewed literature.• Appropriate use of mixed teaching methods such as lectures, group seminars, student-led learning, practical activities, on-line activities.• KPIs of teaching metrics such as engagement and progression increase
<ul style="list-style-type: none">• Inform students of the knowledge base behind the multi-disciplinary science of sustainability and of the potential solutions.• Garner an appreciation of the value of peer-reviewed evidence and information.• Encourage critical analysis of scientific theory, renewable energy engineering and physical building options and of political and social ideas as appropriate to the study topic.	<ul style="list-style-type: none">• Assess student understanding by employing a variety of formative and summative assessment techniques aligned to learning outcomes.• The inclusion of debate, critical analysis and an understanding of uncertainty in student's work, with an appreciation of the value of peer-reviewed literature.• High proportion of students gaining merit or distinction degree classes by producing work at Masters level which is deemed worthy of >60%, and confirmed as such by moderation and external markers.



Centre for Alternative Technology Canolfan y Dechnoleg Amgen



- Enable students to be able to bring about positive change towards sustainability by embedding skills based on professional practice in teaching, learning and assessment.
- Employ staff with up-to date experience of working in key areas of sustainability, , who have consultancy or research expertise.
- Set assessments will embed work-related skills.
- Develop programme and module curricula which include content based on up-to-date case-studies, examples, theories and ideas taken from current best practice or from new information gained from academic or applied research.
- Encourage inclusion and diversity by incorporating diverse examples from different nations, industries and ensure an international curriculum.
- Use teaching and learning activities which make best use of CAT's unique on-site living laboratory as a tool to practice skills, compare techniques, and examine the practicality of sustainability, land-use management, building and energy options as appropriate to the study topic.
- Continue to develop CAT's living laboratory to provide real world practical experiences within the curriculum.
- Develop CATs online experience for students. Improve digital facilities to allow remote engagement with tutors and course materials.

- Students entering sustainability and related professions, gathered by destination surveys/Linked-In/alumni networks.
- Ensure that the complement of teaching staff are actively involved in professional practice, consultancy or research by ensuring HEA accreditation, CPD, involvement in consultancy projects or publication of peer-reviewed literature.
- Annual monitoring of module curriculum to ensure staff current professional or academic experience is embedded in teaching, learning and assessment activities.
- Annual review of teaching and assessment materials to ensure inclusion of international examples.
- Develop formative and summative assessment pieces which are aligned to work skills; such as practical reports, data analysis, presentation skills.
- Assess feedback of online provision in comparison with onsite activities.



Centre for Alternative Technology Canolfan y Dechnoleg Amgen



- Produce graduates who are knowledgeable and skilled in their subject area.

Provision of Information

GSE aims to ...	Indicators
<ul style="list-style-type: none"> • Provide clear and accessible information to potential applicants on our educational programmes including overview of syllabus, the fees, additional living and subsistence costs, employment destinations of graduates and wider student experience. 	<ul style="list-style-type: none"> • Clear website information including downloadable programme handbooks, overviews of course content, entry requirements, fees policy, graduate destination information and information on the wider student experience such as the provision of student views, and links to student blogs. • The existence of the above information as hardcopy documents for posting to potential applicants who prefer to receive information in hardcopy format. • Operation of open days which allow potential students to meet, either on site or virtually through video conference software, tutors, existing students, see teaching spaces and accommodation, and ask questions about the course and wider student experience.



Centre for Alternative Technology Canolfan y Dechnoleg Amgen



<ul style="list-style-type: none"> • Provide clear information about the admission procedures, entry requirements, time-line of application, decision and appeals 	<ul style="list-style-type: none"> • Downloadable and hardcopy information on the degrees content, fees, admissions requirements and timelines for application, decisions and appeals.
<ul style="list-style-type: none"> • Work with our validating institutions in the provision of transcripts and certificates to students to denote achievement. • Work with our validating institution to provide updates to students on module marks following assessment boards as they progress through the course. 	<ul style="list-style-type: none"> • The timely provision of certificates and transcripts to all appropriate students, • Marks provided to students via provisional marking accompanying feedback, as transcripts from the validating institution, and the opportunity for students to discuss their marks and progress with a member of academic staff.
<ul style="list-style-type: none"> • Keep accurate records on the academic progress of students enrolled, their mode of study, fees status and on the demographic, ethnic, age and other equal opportunities data. Such data will be made available to official departments eg HEFCW, DfE, HESA, the QAA and BEIS as required. 	<ul style="list-style-type: none"> • Consistent databases used across the degree programme areas. • Information reviewed at Academic Council meetings to ensure completeness and to review student achievement across the programmes. • Data that is provided in the correct format and timely manner to HEFCW, DfE, HESA, the QAA and BEIS.

Enhancement

GSE aims to ...	Indicators
<ul style="list-style-type: none"> • Review all student and staff feedback at Academic Council meetings, review all complaints and identify commonalities, and share examples of good practice. 	<ul style="list-style-type: none"> • Academic Board oversees continuous review and improvements. • The annual publication of an Action Plan for Enhancement based on all staff and student feedback, training needs, good practice, analysis of student achievement data and with input from



Centre for Alternative Technology Canolfan y Dechnoleg Amgen



- Run an Academic Council which will review student progression, and the wider student experience, employing our validating bodies academic monitoring reports (UEL – Collaborative Annual Monitoring (CAM) report, LJMU - Continuous Monitoring and Enhancement (CME) report), external examiner comments and opportunities to enable the student to become a whole learner.
- Engage students in the review and development both of the current academic offer and the wider student experience, and in the development of potential new programmes.
- Incorporate external input into the review and development of courses, for instance from the external examiners, external academic members of the Academic Council, academic based trustees and employers and accrediting institutions.
- Develop and maintain GSE student alumni to develop networks supporting employability and continued engagement with CAT
- Set and review a GSE Action Plan for Enhancement annually.

academic staff, students and external individuals and bodies. This will include updates on actions from the previous year.

- Development of active alumni.
- The online publication of the Action Plan for Enhancement on the annually.



Centre for Alternative Technology Canolfan y Dechnoleg Amgen



Date Document Approved: April 2021

By: Academic Council

Version 2.0

To be Reviewed by: April 2024