



Exemplar for PG Online template

This resource can be used as an example of how the teaching, learning and assessment sections of the PG Online Course template have been populated in the case of the following programme:

Programme Title: Master's in environmental engineering: Fully Online Part time programme.

The number sections below refer to corresponding numbered sections in the PG Online Course template, as provided by Academic Affairs. Paragraphs in *italics* are the example wording.

2. Course Design

Course design should take into account the learners needs and follow a curriculum alignment process, demonstrating coherence between learning outcomes, assessment activities, and teaching strategies.

a) Intended learners and modes of delivery

Who are the intended learners? Write a short statement outlining how the modes of delivery meets the needs of the intended learners.

The intended participants are professionals in civil engineering seeking to extend their understanding of, and develop potential solutions to, environmental challenges relevant to the construction industry. Learners will hold an NFQ level 8 honour's degree from a STEM or cognate discipline at a minimum, or equivalent.

An online delivery approach suits the needs of professionals who may not be in a position to travel to Trinity, and who have already developed the learning skills associated with higher education.

Learners will be encouraged to share their experiences of the environmental issues they face within their own industry/business context and to develop a solution to one such challenge. A mix of synchronous and asynchronous activities will enable participants to collaborate and to form a supportive community of learning. Synchronous activities will include attending online seminars given by experts in the field, working in groups and question and answers sessions with the lecturer which will provide learners with the opportunity to engage with experts in the field and to collaborate with their peers to co-create knowledge. Students will access resource materials (e.g. pre-recorded lectures) and participate in discussion fora asynchronously enabling them to consolidate their knowledge and to learn from one another.

b) Programme aim

The programme aim is a short statement that outlines the broad purpose, intended content and direction of the programme.

The Masters in Environmental Engineering aims to prepare learners to develop and implement solutions to environmental issues they encounter within the construction and engineering sector. Programme participants will develop insight into a range of environmental challenges and how these might be addressed in their professional context. The programme will explore the themes of water, air, noise and soil pollution, within a construction context, and how we may develop solutions for these challenges in order to protect the environment and society.

c) Programme Learning Outcomes

Programme learning outcomes indicate what a learner should be able to know/do/demonstrate by the end of a programme of study.

On successful completion of the programme learners should be able to:

PLO1 Identify and describe succinctly and effectively the environmental challenges facing society today

PLO2 Evaluate and explain how these challenges are manifested within the construction industry

PLO3 Appraise and evaluate current solutions to environmental problems encountered on construction projects

PLO4 Consult and work with experts in various fields in the realisation of solutions to construction-related environmental challenges

PLO5 Research, analyse and formulate potential solutions to environmental challenges within the construction industry

PLO6 Describe and communicate effectively, the relevant advantages and disadvantages of various solutions to a lay audience

PLO7 Undertake an independent, original and professional research project that integrates their knowledge and understanding of environmental issues facing the construction industry.



d) Assessment Strategy

A programme-focused approach to assessment establishes the full breadth of assessments across a programme and considers the type of assessment (and if individual/group), sequence, timing, range of assessments and relationship to programme outcomes.

How is the programme to be assessed? Consider the timing, load, range of assessments and how assessment activities relate to programme outcomes.

The programme includes a project-focused capstone assessment with a focus on real-world application (PLO7). Assessments at module level have been mapped to ensure programme coherence. Learners will be required to research, develop and present a documented solution to a construction-related environmental challenge that they have encountered in their industry (PLO4, PLO5, PLO6, PLO7). The skills required to complete this assessment will be assessed and built upon throughout the programme. Formative and summative assessment activities include MCQs, group discussion, and case-based investigations (PLO1, PLO2, PLO3, PLO4). At an early stage in the programme, learners will be asked to identify a challenge that they have encountered in their own work, so that they can design and develop a solution alongside the acquisition of new knowledge and skills (PLO7).

The assessment strategy acknowledges the needs of the learners in that projects will emanate from their work environment. In the event that a learner cannot identify a relevant project a selection of suitable projects will be made available by the programme team.

e) Teaching Strategies

Teaching and learning strategies should align with programme aims, outcomes and assessments, and may reflect discipline-specific pedagogies.

What kind of teaching strategies will apply across the programme?

Lecture material and self-directed readings will form the basis of new knowledge acquisition (PLO1, PLO3, PLO4, PLO7). Scaffolded online discussions and groupwork will be used to encourage dialogue and debate, allowing for the development of critical analysis skills (PLO2, PLO3), and knowledge co-creation. Case studies and independent investigations will be used to help develop expertise and critical analysis skills (PLO2, PLO3, PLO4). Groupwork and design thinking problem-solving sessions will be used to develop learners' abilities to work together and collaborate to find novel solutions (PLO5, PLO7). Mini presentations of oral, written and multimedia forms, will be used to support learners in developing effective communication skills (PLO6, PLO7). One to one sessions with a project supervisor will support the students in the undertaking of a research project (PLO7).

f) Building learning communities

In face-to-face (or in-person) teaching, social connections are made between learners and staff, and amongst learners, when they physically meet in lecture halls, labs and other teaching spaces. This so-called 'social presence' requires distinct scaffolding when in an online environment.

What steps will be taken to support lecturers and learners in an online environment?

The programme structure will be clearly signposted within the VLE and in alignment with the information shared in the programme handbook. The first communication with learners will be via an online discussion forum inviting learners and facilitators to introduce themselves and their desires/expectations for the programme. A live online session, where all learners and facilitators will be required to attend, will kickstart the programme and the learning community. During this session the programme outline and objectives, netiquette rules, and timeframe for response to learner requests by facilitators will be agreed. In addition technical aspects such as the skills required to engage with the platform will be outlined.

Learners will be encouraged to use discussion fora for communication with each other and with facilitators. Provocative prompts will be used within group discussion fora to encourage learner debate and dialogue. Groups that are formed for learning and/or assessment purposes will be allocated a facilitator whose responsibility will be to keep them on track and ensure the group is functioning effectively.

Supports in the form of oral, video and/or written guidelines will be provided alongside each learning activity to ensure a common understanding of the programme requirements. A midway evaluation check-in will be used to orient the module appropriately to learner needs. Formal feedback will be gathered after module completion to inform future planning.

g) Technical Requirements

Identifying the technologies and software applications required to support the teaching, learning and assessment on a programme helps both staff and learners prepare for the programme.

Outline the Technical Requirements (e.g. Blackboard, Zoom, Teams, Panopto, laptops, internet, discipline specific software tools, etc)

Module materials will be made available to participants through the VLE. A high-speed internet connection, a laptop/device able to run common office software (e.g. Zoom, MS Word, Excel), and a headset as a minimum will be required to access the VLE resources and engage with synchronous



activities. Due to the nature of the programme, access to XXX software will be provided for the duration of the programme. Module assignments are to be submitted online through TurnItIn within the VLE platform and in accordance with College regulations around academic integrity.

h) Supporting Diverse Learners

To what extent are diverse learner needs accommodated in teaching, learning, and assessment activities? E.g. advanced sharing of lecture material, assessment variety and schedule, use of lecture capture software

The programme structure and learning material resources will be shared through the VLE. A range of resource formats will be in use across the programme (e.g. written and/or audio/visual materials), although not all resources will be made available in all formats. Where possible, closed captioning will be used to support remote teaching. Online lecture-style teaching events will be recorded and shared with participants through the VLE. Module/programme assessment follow the College policies around accessibility and reasonable accommodations. Teaching will take place in alignment with College's term/semester structure. Planned absence from teaching events (e.g. on religious grounds) is by advance notice to the programme director.

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