Differential Validation Report Form

Report of the Review Panel

Reference AQAE046 *Procedure for Approving and Implementing Changes to Programmes and* AQAE047 *Procedure for Approving and Implementing Changes to Modules.* Used for Major Changes to Programme(s) (Type A).

Programme Reference Number:	M101
Faculty/School(s):	Faculty of Engineering and Design
Department(s):	Department of Civil Engineering and Construction

Details of Programme(s) Reviewed (include embedded awards):

Title:	Award Type:	NFQ Level:	ECTS:	Duration	Delivery Mode:
MEng Geotechnical/Structural Engineering joint programme	Major	9	90	1 Sem	Full-Time Online
MEng Geotechnical Engineering with Structural Engineering	Major	9	90	2 Sem	Full-Time
MEng Structural Engineering with Geotechnical Engineering	Major	9	90	2 Sem	Full-Time
PG Cert in Geotechnical & Structural Engineering	Minor	9	30	2 Sem	Online
MEng in Road & Transport Engineering	Major	9	90	6 Sem	Part-Time Online
PG Cert in Road Maintenance Engineering & Network Management	Minor	9	30	2 Sem	Part-Time Online
PG Diploma in Engineering in Road & Transport Engineering	Major	9	60	4 Sem	Part-Time Online
L9 Special Purpose Award in Road Maintenance Engineering,	Minor	9	15	2 Sem	Part-Time Online
PG Cert in Road Engineering & Design	Minor	9	30	2 Sem	Part-Time Online
PG Cert in Bridge Engineering	Minor	9	20	2 Sem	Part-Time Online

Date of Review:	5th March 2025

Review Panel

Panellist Role	Title	Name	Organisation	Job Title
Chair	Mr	Thomas Dowling	ATU	Head of Faculty of Engineering and Technology
External Academic/Industry Discipline Expert*	Mr	Francis Fidgeon	CST Group	Director & Chartered Engineer
Academic/Head of Department	Dr	Alan Duggan	ATU	Lecturer in Civil Engineering
Vice President for Academic Affairs and Registrar (VPAAR) Nominee/Academic Secretary	Ms	Carmel Brennan	ATU	Assistant Registrar

*One or two external members of panel in total.

All external members of the panel have declared that they are independent of ATU (Atlantic Technological University), and all have declared that they have no conflict of interest.

Programme Board

The panel met the staff listed below during the review of the proposed modifications.

Dr Patrick Naughton	Dr Tomas O'Flaherty
Dr Ruth Quinn	

Summary of Proposed Modifications

The proposed changes are primarily to the assessment strategy in each of the following modules. There are also some minor changes to Learning Outcomes, indicative syllabi and delivery mode breakdown as indicated below for each module:

- ENG09029 Geotechnical Engineering I
  - Change in assessment strategy from 60% individual and group projects and 40% terminal end-of-semester examination to 100% individual and group projects.
  - Update to repeat assessment strategy to reflect removal of terminal exam and moving to 100% continuous assessment.
  - Removal of Learning Outcome 4.
  - Removal of reference to problematic/ soft soil from the indicative syllabus.
  - Removal of the workshop in online delivery mode.

- ENG09031 Soil-Structure Interaction
  - Change in assessment strategy from 60% individual and group projects and 40% terminal end-of-semester examination to 100% individual and group projects.
  - Update to repeat assessment strategy to reflect removal of terminal exam and moving to 100% continuous assessment.
  - Remove piles under axial load and integral bridge abutments from the indicative syllabus.
  - Removal of the workshop in online delivery mode.

- Rewording of Learning Outcome 5 from compare and contrast discrete spring and continuum modules for soil-structure interaction applications and replacement with conduct risk assessments in soil-structure interaction applications.

- ENG09035 Design of Building Structures
  - Remove 'advanced' from module description
  - Change in assessment strategy from 60% individual and group projects and 40% terminal end-of-semester examination to 100% individual and group projects.
  - Update to repeat assessment strategy to reflect removal of terminal exam and moving to 100% continuous assessment.
  - Update Learning Outcome 5 – removal of reference to BIM protocols as not the focus of the module.
  - Update existing indicative syllabus including reorganising order for clarity, rephrasing No.6 to appropriate terminology of 'actions', rephrasing No. 7, remove No.9 & 10 as not enough space in the module to cover the existing indicative syllabus listed. Confusing for students.
  - Removal of the workshop in online delivery mode.

- ENG09030 Geotechnical Engineering II
  - Change in assessment strategy from 60% individual and group projects and 40% terminal end-of-semester examination to 100% individual and group projects.
  - Update to repeat assessment strategy to reflect removal of terminal exam and moving to 100% continuous assessment.
  - In Learning Outcome 1: removal of incorporating BIM protocols where appropriate. o Removal of the workshop in online delivery mode.

- ENG09018 Design of Bridge Structures
  - Update to module descriptor to better reflect content.
  - Change in assessment strategy from 60% individual and group projects and 40% terminal end-of-semester examination to 100% individual and group projects.
  - Update to repeat assessment strategy to reflect removal of terminal exam and moving to 100% continuous assessment.
  - Update Learning Outcome 5 – removal of reference to BIM protocols as not the focus of the module.
  - Update indicative syllabus including rephrasing No.4, removing No.5 and reference to substructure as covered in other modules, removing No.9 for clarity as covered under No.8.
  - Removal of the workshop in online delivery mode.

- ENG09034 Structural Inspection and Assessment of Bridges
  - Change in assessment strategy from 60% individual and group projects and 40% terminal end-of-semester examination to 100% individual and group projects.
  - Update to repeat assessment strategy to reflect removal of terminal exam and moving to 100% continuous assessment.

There is no change to ECTS, modules, mode of delivery or any other aspect of the programmes these modules are on.

Rationale for Modifications

The proposed changes are similar across all modules and are considered together here:

- It is five years since these modules were last reviewed. It is uncertain when the next Programmatic Review will take place. The module Learning Outcomes and indicative syllabi require updating to keep the modules current.
- We have received suggestions from External Examiners and Engineer Ireland (the professional body accrediting this programme) on modifications and possible additional content/ topics to include in the programmes. Both have also suggested reviewing the delivery and assessment strategy
- In addressing these suggestions, the programme team felt that these modified/new areas/topics and revised assessment strategy would be better assessed through project work, than through traditional terminal exams.
- The revised assessment strategy with a focus on 100% CA will facilitate a wider variety of student deliverables across the programme and address the practical nature of these engineering design & analysis type modules.

Findings

Overall Finding

Approved without changes	
Approved subject to condition(s) and/or recommendation(s)	**X**
Rejected	

Reason for Overall Finding

The panel felt that the changes proposed were appropriate and well thought out. The panel commends the programme board on a progressive approach to student assessment. They also noted that the documentation and the presentation delivered to the panel was very clear and helpful in understanding the changes presented and their rationale.

Conditions

None.

Recommendations

1. Geotechnical Engineering I: Given the importance of problematic/soft soil, give consideration in the future whether there should be two different versions of this module targeting the needs of different cohorts.
2. Design of Building Structures: Ensure that students are clear about sharing information and the requirements of same, for example through BIM.
3. Ensure that there is clear communication to students in relation to permitted use of generative artificial intelligence in project work.
4. Review links in the modules to ensure that they are working in all instances.

Report Approval

This report has been agreed by the evaluation panel and is signed on their behalf by the chairperson.

Signed:  Name: Thomas Dowling Differential Validation Panel Chair	Date: 5th March 2025