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:	M125
Faculty/School(s):	Faculty of Engineering and Technology
Department(s):	Department of Computing

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

Title:	Award Type:	NFQ Level:	ECTS:	Duration	Delivery Mode:
Bachelor of Science (Honours) in Computer Science	Major	8	180	3 Stages	Full-Time

Date of Review:	10th April 2025

Review Panel

Panellist Role	Title	Name	Organisation	Job Title
Chair	Dr	Emmett Kerr	ATU	Head of Department of Electronic and Mechanical Engineering ATU
External Academic/Industry Discipline Expert*	Ms	Kathryn Harkin	FinTrU	Executive Director – Head of AI
Academic/Head of Department	Mr	Gareth Roe	ATU	Head of Department of Computer Science and Applied Physics
Vice President for Academic Affairs and Registrar (VPAAR) Nominee/Academic Secretary	Mr	Declan Courell	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.

Jade Lyons
Helena Gibson
Kevin Meehan
John Conaghan
Marinus Toman

Summary of Proposed Modifications

1. Replacement of the Semester 1 module *Digital and Social Communication* (10 Credits) with modules *Personal and Professional Development* (5 Credits) and *Web Fundamentals* (5 Credits). These 5 credit modules are already taught in semester 1 of other undergraduate Computing Programs.
2. Rewriting the Semester 2 module *Introduction to Cloud and Mobile Technologies* to become *Introduction to Cloud and Web Technologies*. This involves changing 50% of this module to have a focus on Web Technologies.
3. Minor rewriting of Semester 4 module *Client-Side Scripting*. This involves moving some content to the subject *Introduction to Cloud and Web Technologies.*
4. Swapping the Semester 3 module *Scripting with Python* with the Semester 4 module *Client-Side Scripting*. There are no proposed changes to the content of the module *Scripting with Python*. See point 3 for proposed change to *Client-Side Scripting*.
5. Swapping the Semester 3 subject *AI and Machine Learning* with the Semester 4 Subject *Data Analytics*. There are no proposed changes to the content of either syllabus.

Rationale for Modifications

1. Replacement of the Semester 1 module *Digital and Social Communication* (10 Credits) with modules *Personal and Professional Development* (5 Credits) and *Web Fundamentals* (5 Credits). These modules already exist in semester 1 of other undergraduate Computing Programs.

   Rationale - This change will allow students to gain more exposure to web fundamentals. Students on this course are lacking experience in this area due to covid related changes to the Leaving Certificate Computer Science course (a pre-requisite). In addition, these changes will allow students to take the module Personal and Professional Development with all other Computing first-years. This subject is designed to ease the transition into third level education and will thus benefit the learners.

2. Rewriting the Semester 2 module *Introduction to Cloud and Mobile Technologies* to become *Introduction to Cloud and Web Technologies*. This involves changing 50% of this module to have a focus on Web Technologies.

   Rationale - This change will address a skills shortfall in students which has become apparent when students attempt the module Team Project in Semester 4. Team Project is a shared module and students on the BSc in Computer Science are currently at a disadvantage.

3. Minor rewriting of Semester 4 module *Client-Side Scripting*. This involves moving some content to the subject *Introduction to Cloud and Web Technologies.*

   Rationale - This content is needed at an earlier stage.

4. Swapping the Semester 3 module *Scripting with Python* with the Semester 4 module *Client-Side Scripting*. There are no proposed changes to the content of the module *Scripting with Python*. See point 3 for proposed change to *Client-Side Scripting*.

   Rationale – The module *Client-Side Scripting* needs to be delivered earlier. This will help students with their *Team Project* and with other later modules.

5. Swapping the Semester 3 subject *AI and Machine Learning* with the Semester 4 *Subject Data Analytics*. There are no proposed changes to the content of either syllabus.

   Rationale – These subjects work better in the proposed order. It makes sense to study Data Analytics before Machine Learning.

Findings

Overall Finding

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

Reason for Overall Finding

Approved subject to condition(s) / recommendation(s)

Condition

- That the learning outcomes associated with the two rewritten modules are mapped to Bloom's Taxonomy, as appropriate for a level 6 programme.

Recommendation

Consider;

- sourcing more up-to-date literature for modules that can be changed.
- Liaising with the Exam Commission in relation to bringing Web Technologies back into Schools post-COVID
- The programme and module learning outcomes are reviewed at the next Programme Board.

Report Approval

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

Signed: Emmett Kerr **Name: Emmett Kerr** **Differential Validation Panel Chair**	**Date: 10/04/2025**