



Ollscoil  
Teicneolaíochta  
an Atlantaigh

Atlantic  
Technological  
University

## VALIDATION REPORT

1.	<b>Title of Programme(s): (incl. Award Type and Specify Embedded Exit Awards)</b>	Higher Diploma in Engineering in Automation and Digital Manufacturing
2.	<b>NFQ Level(s)/ No. ECTS:</b>	6 ECTS
3.	<b>Duration:</b>	1 Year
4.	<b>ISCED Code:</b>	0720 - Manufacturing and processing
5.	<b>School / Centre:</b>	School of Engineering
6.	<b>Department:</b>	Electronic & Electrical Engineering
7.	<b>Type of Review:</b>	New Programme validation
8.	<b>Date of Review:</b>	
9.	<b>Delivery Mode:</b>	Blended
10.	<b>Panel Members:</b>	Dr Brendan O'Donnell, Niall Morris, Camila D Bastiani, Neasa Flannery, Des Foley
11.	<b>Proposing Staff:</b>	Carine Gachon Jack Saad Stephen Foy Gabriel Farragher Trevor Clohessy Keith Connaughton (Medtronic) Shane Coss (Thermoking) Dermot O'Neill (Cobotic Skillnet)
12.	<b>Programme Rationale:</b>	This programme is part of a suite of programmes aiming to support industry in the transition to Industry 4.0. The programme offers a conversion route for Manufacturing Engineers (or cognate) who wish to re-direct their career towards Automation and Digital Manufacturing.
13.	<b>Proposed Student Intake:</b>	
14.	<b>Stakeholder Engagement:</b>	Local industries were consulted and part of the proposing team
15.	<b>Graduate Demand/Employment:</b>	Relevant skills are in high demand
16.	<b>Entry Requirements, Access, Transfer &amp; Progression:</b>	The entry requirement for the programme is a Bachelor (H) in Manufacturing Engineering (or cognate, including Mechanical, Electronic, Electrical Engineering) with a minimum of one year working in the manufacturing industry. As the digital transformation project is an applied project to be conducted in Industry, applicants should either be employed or have an agreement with a company that will allow

		<p>them to conduct their project in their manufacturing facilities.</p> <p>English Language Requirements will be as determined by GMIT and as published in the Access, Transfer and Progression code.</p> <p>RPL</p> <p>Transfer: N/A</p>
17.	<b>Programme Structure:</b>	<p>The programme uses blended delivery with lectures, labs, online delivery, and industry content. In addition, students can expect to engage with significant self-directed research, assignments, projects, and study. This programme aims to retrain engineers working (or having worked) in the manufacturing industry. This programme is delivered over 52 weeks, 26 of which include a mix of synchronous and asynchronous learning in addition to weekly on-site workshops.</p>
18.	<b>Learning, Teaching &amp; Assessment Strategies:</b>	<p>In designing the programme, the programme design team considered the balance between formative and summative assessments. They have also ensured that a range of assessment methodologies are utilised as appropriate to assess the module and programme learning outcomes, including the development of transferable skills. Taking into consideration their background and work situation, the programme is designed to take advantage of this prior or/and current experience to allow flexibility in their learning while minimising the requirement for face-to-face interaction with their lecturers. It is important for students and lecturers to measure progress; therefore, a number of modules use regular low stake assessments that are usually synchronised or embedded with the learning material. They act not only as summative assessments but also as formative ones since they help students extract and reinforce the key points of the lessons. These assessments demonstrate that students have acquired the skill targeted by the lesson. They are embedded in the laboratory work so as not to increase the workload on students. At the beginning of the semester, the programme board will meet to discuss the assessment schedule to avoid over-assessment and spread the workload as evenly as possible across the semester. Each lecturer will discuss their assessment schedule with students and publish it on their Moodle page. As the assessment strategy of the programme is highly reliant on project work, opportunities to resubmit the projects will be afforded to students. They will also be offered repeat assessments and exams to cover the other learning outcomes.</p>
19.	<b>Resource Implications:</b>	
20.	<b>Synergies with Existing Programmes:</b>	
21.	<b>Findings and Recommendations:</b>	<p><b>Commendations:</b> The proposers are commended for identifying this cohort of students and designing a programme to target them.</p> <p><b>Conditions:</b> No conditions</p>

		<b>Recommendations:</b> <ul style="list-style-type: none"> <li>• The programme board should spend time in matching student background to modules – consideration of most appropriate pathways, advisory sessions, RPL and so on</li> <li>• Project composition (e.g. business case weighting) should be revisited. If business weighting is to be maintained, training should be considered.</li> <li>• Ensure project is at Level 8, especially the research elements (e.g. literature review)</li> <li>• Topics are excellent but programme board will need to review level of content and expectation being placed on student</li> <li>• SDG Goals need to be brought out more in the document</li> </ul>	
22.	FAO: Academic Council:	Approved:	
		Approved subject to recommended changes:	
		Not approved at this time:	
	Signed:		
		Chair	Secretary