

VALIDATION REPORT

1.	Title of Programme(s): (incl. Award Type and Specify Embedded Exit Awards)	Bachelor of Engineering (Hons) in Agricultural Engineering Bachelor of Engineering in Agricultural Engineering
2.	NFQ Level(s)/ No. ECTS:	8 and 7 240 and 180
3.	Duration:	4 years/3 years
4.	ISCED Code:	0710
5.	School / Centre:	School of Engineering
6.	Department:	Department of Mechanical and Industrial Engineering
7.	Type of Review:	Differential Validation
8.	Date of Review:	24 th June 2020
9.	Delivery Mode:	Full-time
10.	Panel Members:	Dr Seamus Lennon (Chair) Dr Trish O'Connell Mr Michael Gill Mr Ronan Gibbons Ms Carmel Brennan (Secretary)
11.	Proposing Staff:	Dr Carine Gachon Mr Oliver Mulryan Mr PJ McAllen Dr Gabriel J Costello Dr Edna Curley Mr Enda Kennedy Mr Gerard O'Donnell Mr Gabriel Costello
12.	Proposed Changes	The B.Eng. (level 7 and 8) in Agricultural Engineering were developed in collaboration with Mountbellew Agricultural College and commenced in 2017. The Programme Board proposed three changes: <ul style="list-style-type: none"> - The amendment of elements of structure and content to allow for the incorporation of additional agri science credits providing students with a better foundation in agriculture for application of engineering concepts and solutions and to allow the programme to become Green Cert Compliant which offers benefits to graduates working in farming. The main changes are additional credits each academic year, the reduction in scope and weighting of the work placement, the removal of two

		<p>engineering modules and the insertion of additional agriculture focussed modules.</p> <ul style="list-style-type: none"> - Rewriting of Programme Learning Outcomes to be better aligned with Engineers Ireland outcomes. - Development of a Higher Certificate exit award.
13.	Stakeholder Engagement:	Current students, the External Examiner and Teagasc have been consulted on the proposed changes to the programme. In particular there has been significant engagement with Teagasc in relation to the proposed changes and whether they comply with the Green Cert requirements.
14.	Graduate Demand:	Programme listing as qualified farmer status offers potentially offers significant benefits to graduates in respect of stamp duty, stock relief tax and duty manuals.
15.	Resource Implications:	The cost implications of additional agricultural content delivery is in the region of €21,000.
16.	Findings and Recommendations:	General:
		<p>The amendments to the structure and content of the programme to allow the programme to meet the educational criteria for qualified farmer status is approved subject to the condition (1) and recommendations (12) below.</p> <p>The proposed learning outcome changes are extensive and therefore deemed to be outside the remit of the Differential Validation Process.</p> <p>The Higher Certificate exit award is not approved at this time. If considering future submission, the Programme Learning Outcomes need to be rewritten to be aligned to the level 7 and level 8 Programme Learning Outcomes. The criteria for attainment need to be amended to reflect the credits contained within the first two stages of the programme. The potential demand for graduates of a Higher Certificate and their knowledge and skill set needs to be illustrated.</p>
		Special conditions attaching to approval (if any):
		<ol style="list-style-type: none"> 1. The original approved programme learning outcomes should be reinstated, with a minor modification reflecting the additional science content. These are to be submitted to, and reviewed by, the Chair and Secretary.

		Recommendations of the panel in relation to award sought:	
		<ol style="list-style-type: none"> 2. The Programme Board should continually monitor the retention rate of this programme in light of the additional workload for students, and the structure of the programme should be reviewed considering this. 3. The Programme Board should consider how engineering and science lecturers will work together to ensure that the science content is fully integrated, ensuring the programme is coherent with clear linkages between engineering and science content. 4. It should be made explicit in all programme communication and promotional material that students are required to take an additional 5 ECTS each year and the benefits of same. 5. Requirements for additional resources to deliver the programme and any suggestions around the material fee must be referred to the Executive Board. 6. The reading lists for the new modules need to be updated and the repeat mechanism should be clarified in all instances. 7. Amend the module descriptor for Drystock Production to reflect the proposed 3 hours for delivery. 8. The blended delivery of specified modules should be reflected in the module descriptors. 9. Consider inclusion of grading system in the indicative syllabus of Drystock Production. 10. Consider including robotic milking machines in the indicative syllabus for Dairy Production. 11. Include reference to forestry and organics in the indicative syllabus for Sustainable Farming and the Environment. 12. Consider including farm partnership and corporations in Farm Animal Health and Planning. 13. Consider increasing emphasis on safety in the Farm Management, Safety and Law module. 	
22.	FAO: Academic Council:	Approved:	
		Approved subject to recommended changes:	X
		Not approved at this time:	
	Signed:		
		Chair	Secretary