



TUS

**Technological University of the Shannon:
Midlands Midwest**

Ollscoil Teicneolaíochta na Sionainne:
Lár Tíre Iarthar Láir

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**Dámh an n-Nolaíochtaí Feidhmeacha agus na Teicneolaíochta
Faculty of Applied Sciences and Technology**

Department of Applied Science

Report of External Validation Panel

External Validation Visit, 30th May 2023

for the

- Master of Science (Hons) in Advanced Medical Technologies
 - Postgraduate Diploma in Advanced Medical Technologies
- Certificate in Anatomy and Physiology with Biomechanics (10 credits) Level 9
- Certificate in Programming and Advanced Imaging for Medical Technology (20 credits) Level 9
- Certificate in Clinical Technology and Healthcare Technology Management (20 credits) Level 9

1.0 INTRODUCTION

This report outlines in summary form, the proceedings and findings of the External Validation Panel visit for the proposed

- Master of Science (Hons) in Advanced Medical Technologies
- Postgraduate Diploma in Advanced Medical Technologies
- Certificate in Anatomy and Physiology with Biomechanics (10 credits) Level 9
- Certificate in Programming and Advanced Imaging for Medical Technology (20 credits) Level 9
- Certificate in Clinical Technology and Healthcare Technology Management (20 credits) Level 9

held on 30th May 2023. The external validation visit was undertaken in accordance with TUS Academic Regulations for the development of taught programmes. An external validation panel makes an independent impartial judgement on a programme proposal.

2.0 GENERAL INFORMATION

2.1 Higher Education Provider

Provider	TUS: Midlands Midwest
Faculty	Faculty of Applied Sciences and Technology
Department	Department of Applied Science
Date of Visit	30th May 2023

2.2 Programme Evaluated

Programme Title	Master of Science in Advanced Medical Technologies
Award Title	Master of Science
Code	LC_SADVA_M09
NFQ Level	9
ECTS Credits	90
Award Class	Level 9
Delivery Mode	Full-time
Duration	2 years
Proposed Starting Date	September 2023
Contact	Dr. Daniel Walsh/Dr. Orlaith Borthwick/Mairead Dennehy

Programme Title	Postgraduate Diploma in Science in Advanced Medical Technologies
Award Title	Postgraduate Diploma in Science
Code	LC_SAMTM_NMY
NFQ Level	9
ECTS Credits	60
Award Class	Level 9
Delivery Mode	Full-time
Duration	1.5 years
Proposed Starting Date	September 2023
Contact	Dr. Daniel Walsh/Dr. Orlaith Borthwick/Mairead Dennehy

Programme Title	Certificate in Anatomy and Physiology with Biomechanics
Award Title	Higher Certificate in Science
Code	LC_SANAT_R09
NFQ Level	9
ECTS Credits	10
Award Class	Level 9
Delivery Mode	Full-time
Duration	6 months
Proposed Starting Date	September 2023
Contact	Dr. Daniel Walsh/Dr. Orlaith Borthwick/Mairead Dennehy

Programme Title	Certificate in Programming and Advanced Imaging for Medical Technology
Award Title	Higher Certificate in Science
Code	LC_SPROG_R09
NFQ Level	9
ECTS Credits	20
Award Class	Level 9
Delivery Mode	Full-time
Duration	12 months
Proposed Starting Date	September 2023
Contact	Dr. Daniel Walsh/Dr. Orlaith Borthwick/Mairead Dennehy

Programme Title	Certificate in Clinical Technology and Healthcare Technology Management
Award Title	Higher Certificate in Science
Code	LC_SCLIN_R09
NFQ Level	9
ECTS Credits	20
Award Class	Level 9
Delivery Mode	Full-time
Duration	12 months
Proposed Starting Date	September 2023
Contact	Dr. Daniel Walsh/Dr. Orlaith Borthwick/Mairead Dennehy

2.3 External Validation Panel of Expert Assessors

Name	Affiliation
Mr Damien Courtney	Fellow Emeritus CIT (Chairperson)
Dr. Sean Cournane,	Centre for Physics in Health and Medicine (CPHM), UCD
Dr. Tim Foran	St James's Hospital
Mr. Leighton Donovan	BD Research Centre Ireland Ltd
Mr. Seamus Mc Garrell	Student Representative

Secretary to Panel: Claire Frawley, TUS.

2.4 TU STAFF

Name	Affiliation
Dr. Maura Clancy	Dean of Faculty of Applied Sciences and Technology
Dr. Daniel Walsh	Head of Department Applied Science
Dr. Orlaith Borthwick	Head of Department of Flexible Learning
Programme Coordinator: Mairead Dennehy Programme Team: Tanya Beletskaya; Rachel Gorman; Fran Hegarty; Lisa Henihan; Philip Hennessey; Clodagh Moore; Patrick Leydon; Aisling Lynch; Denis O'Meara; Therese Raftery; Daniel Walsh; Sandra White;	

3.0 FINDINGS AND RECOMMENDATIONS OF EXTERNAL VALIDATION PANEL

3.1 Main Findings

The External Validation Panel of Assessors recommends approval of the proposed programmes and associated embedded awards:

- Master of Science (Hons) in Advanced Medical Technologies (90 Credits)
- Postgraduate Diploma in Advanced Medical Technologies (60 credits)
- Certificate in Anatomy and Physiology with Biomechanics (10 credits)
- Certificate in Programming and Advanced Imaging for Medical Technology (20 credits)
- Certificate in Clinical Technology and Healthcare Technology Management (20 credits)

3.2 Conditions

No conditions apply.

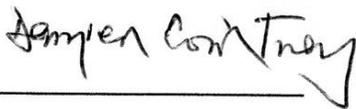
3.3 Recommendations

- 1) Explore opportunities to develop TUS research, particularly in the Medical Technology area to facilitate MSc projects.
- 2) Explore opportunities to liaise with TUS Midlands in the community development of the MSc.
- 3) Consider the opportunity to provide a part-time or lengthened option of the programme and make the flexibility known to applicants.
- 4) Consider including a mechanism for assessing a student's ability to progress to successfully transfer to the Dissertation, for example, taking on board completed module grades for this process.
- 5) Given the increase in resource requirement and projected increase in student numbers, consider additional Dissertation scientific support, specifically in the area of Medical Technology.
- 6) Develop a Guidebook for Supervisors that supports the management of the Dissertation.
- 7) Consider offering a greater weighting towards the presentation element of the Dissertation as a means to promote soft skills.

- 8) Consider delivering in-person/face-to-face lectures at an earlier juncture in Semester 1 to solidify group dynamics and network building.
- 9) Increase the level of reference to micro-processor/microcontroller content in the modules.
- 10) Build in scope for one-to-one support sessions or 'drop-in clinics' where applicable for the modules containing deeper programming content.
- 11) Develop a robust structure for continued delivery of specialised course content by external lecturers, including formalising joint appointments.
- 12) Consider additional equipment and laboratory resources/supports for the Dissertation component of the programme.

3.4 Commendations and Observations

- 1) The panel commends the quality of the programme submission and documentation and noted its comprehensive nature.
- 2) The panel commends the programme team and the collegial discussion in relation to the areas raised during the meeting.
- 3) The panel commends the outreach undertaken with clinical engineering and industry and the surveys conducted to enrich the module content.
- 4) The panel commends the programme team on exploiting a well-justified market gap.
- 5) The panel observed that the addition of Staff Profiles in the documentation would have been beneficial.



Signature of Chairperson

Date: 9/6/2023