



TUS

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

Ollscoil Teicneolaíochta na Sionainne:
Lár Tíre Iarthar Láir

www.tus.ie

Faculty of Applied Sciences & Technology

Department of Information Technology

Differential Validation Panel, 31th January 2025

for the

Bachelor of Science (Honours) in Software Development with Cyber Security

Bachelor of Science (Ordinary) Software Development with Cyber Security

Higher Certificate Software Development with Cyber Security
Development with Cyber
Security

1.0 INTRODUCTION

This report outlines, in summary form, the proceedings of the differential validation visit for the proposed:

- Bachelor of Science (Honours) in Software Development with Cyber Security;
- B.Sc. (Ordinary) Software Development with Cyber Security;
- Higher Certificate in Science in Software Development with Cyber Security.

and the findings and conclusions of the Panel held on 31st January 2025. The validation was undertaken in accordance with TUS Academic Regulations. A differential validation panel makes an independent impartial judgement on a programme proposal.

2.0 GENERAL INFORMATION

2.1 Higher Education Provider

Institute: Technological University of the Shannon
Faculty: Applied Science and Technology
Department: Department of Information Technology
Date of Visit: 31st January 2025

2.2 Programmes Evaluated

Programme	Bachelor of Science (Honours) in Software Development with Cyber Security
Award Title	Bachelor of Science (Honours
NFQ Level	Level 8
ECTS Credits	240
Delivery Mode	Full-time
Proposed Start Date	2025
Duration	4 years

Programme	Bachelor of Science in Software Development with Cyber Security
Award Title	Bachelor of Science
NFQ Level	Level 7
ECTS Credits	180 ECTS
Delivery Mode	Full-time
Proposed Start Date	2025
Duration	3 Years

Programme	Higher Certificate in Science in Software Development with Cyber Security
Award Title	Higher Certificate
NFQ Level	Level 6
ECTS Credits	120
Delivery Mode	Full-time
Proposed Start Date	2025
Duration	2 years

2.3 Differential Validation Panel of Expert Assessors

<u>Name</u>	<u>Affiliation</u>
Prof. Marie Parker-Jenkins (Chair)	Emeritus Professor of Education, UL.
Mr. Mark Frain,	Atlantic Technological University
Mr. Kevin Foley	European Union Agency for Cybersecurity
Mr. Vinicius Parzanin,	Student Representative
Dr. Brendan Murphy	Secretary to Panel
Claire Frawley	Quality Officer

2.4 University Staff

Maura Clancy, Tom Davis, Alieen Farrell-O'Hara, Jacqueline Humphries, Eugene Kenny, Natasha Kiely, Liam Noonan, Pamela O'Brien, Janice O'Connell

2.5 Documentation

1. Self-Evaluation Report
2. Proposed Programme Documents.

3.0 FINDINGS AND RECOMMENDATIONS OF EXTERNAL VALIDATION PANEL

3.1 Main Findings

The Panel of Assessors recommends approval of the proposed:

- Bachelor of Science (Honours) in Software Development with Cyber Security;
- Bachelor of Science in Software Development with Cyber Security;
- Higher Certificate in Science in Software Development with Cyber Security.

3.2 Conditions

No conditions apply.

3.3 Recommendations

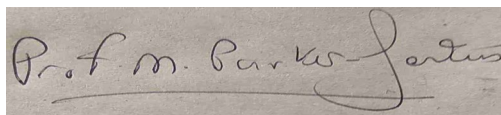
- 1) Maintain a long-term commitment by University Management to any additional resources required to support the programme. The panel notes this is essential given the dynamic and rapidly evolving context of the proposed programme. This includes practical resources (hardware/software/licences), staff CPD, and access to external expertise, *inter alia*.
- 2) Consider how further learning content on the theme of EU legislation and compliance could be emphasised throughout the programme, incorporating how changing statutory obligations, regulations and frameworks support employability/industry requirements.
- 3) Continue to use external expertise, guest lecturers and demonstrations to underpin academic content by showing real world applications, e.g. demonstrate niche areas of cybersecurity, reverse engineering, red teaming, *inter alia*.

3.4 Commendations and Observations

The panel commend:

- 1) the responsiveness of the Faculty, Department and Programme Team in adapting the programme in an agile manner, addressing industry needs for graduates with a knowledge and understanding of Cyber Security;

- 2) the research undertaken by the programme team to inform programme re-design. The student survey is particularly commended and shows clear links to programme rationale;
- 3) the strong philosophy underpinning the programme approach, the recognition of the people process and the focus on the development of high quality graduates;
- 4) the evident emphasis connecting knowledge, skills and competencies to the employability of the graduate and graduate attributes, including the use of 'employability seminars';
- 5) the comprehensive documentation including the very clear rationale for the programme changes, comparative mapping of programme changes and revised programme document.
- 6) the inclusion of innovative and diverse teaching and learning strategies such as the 'buddy peer programming approach', diversity and balance in assessment methodologies, and the continuous addressing of real-world problems and scenarios;
- 7) the inclusion of *Agile Development Methods* as a module, addressing the management of projects;
- 8) the revised approach to Work Placement including the extended period, position in Stage 3 and the alternative to Placement;
- 9) the Faculty and Department for the evident commitment to supporting the sustainability of satellite campuses in TUS.

A rectangular box containing a handwritten signature in cursive script, which reads "Prof. M. Parker-Jarvis".

Signature of Chairperson

Date: 03/03/25