



TUS

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

Ollscoil Teicneolaíochta na Sionainne:
Lár Tíre Iarthar Láir

www.tus.ie

Scoil Ealaíne agus Deartha Luimnigh
Limerick School of Art and Design

Report of Peer Review Panel

Programmatic Review of the Limerick School of Art and Design

1. INTRODUCTION

This report outlines, in summary form, the proceedings of the External Panel visit to TUS for the Programmatic Review of the Limerick School of Art and Design, and the findings and conclusions of the External Panel. The Programmatic Review visit was undertaken in accordance with Section 3 of the LIT document 'Academic Council Regulations and Procedures for Taught Programmes (ACRP): Academic Year 2021/2022'. The ACRP is published on the TUS website. An external Panel makes an impartial judgement on the Critical Self Study and programme changes proposed within the Programmatic Review.

2. GENERAL INFORMATION

2.1 Higher Education Provider

Institute: TUS: Midlands Midwest
Faculty/School: Limerick School of Art and Design
Department: Department of Fine Art and Education, Department of Design,
Department of Digital Arts and Media
Date of Visit: 17th May 2022

2.2 Programmes Evaluated

Department of Fine Art and Education,
Department of Design,
Department of Digital Arts and Media

2.3 External Programmatic Review Panel of Expert Assessors

Prof. Marie Parker Jenkins -Emeritus of Education University of Limerick (Chairperson)
Ms Stacey Grant – University of South Wales
Professor Rachel Troye - Head of the Institute of Design at AHO (The Oslo School of Architecture and Design
Mr. Morgan O'Brien - Head of Animation, Telegael
Dr Lucy O'Donnell - Senior Lecturer, York St John University
Dr Fiona Crowe - Head of Education St. Angela's, NUI Galway
Mr Philip Delamere – Arts Office Leitrim County Council
Dr Allyson Keehan - Post-doc Glasgow School of Art
Mr. Pete Moles - Independent Producer; Director, Emerging Film-makers Limerick; National Network Coordinator with Young Irish Filmmakers
Ms. Fiona Curran - Art Team Manager, Storytoys
Ms Kim Pace – Multi-media Artist, UK
Mr. Attila Farkas - Principal UX Design Lead, Red Hat
Mr. Patrick Campbell - Lecturer, Department of Design and Creative Media, Atlantic Technological University – Donegal Letterkenny Campus
Mr. João Pedro Faustino dos Santos - Dean, Caldas da Rainha School of Arts and Design, Politécnico de Leiria

2.4 Institute Staff

Dr Terry Twomey, Vice President Academic Affairs & Registrar
Mr Mike Fitzpatrick, Dean of Limerick School of Art and Design
Dr Susan Halvey, Head of Department of Fine Art and Education
Dr Adam DeEyto, Head of Department of Design
Mr James Greenslade, Head of Department of Digital Arts and Media

Department of the Built Environment – Lecturing Staff

2.5 Selected Stakeholders

2.5.1 Employers/Industry & Alumni Representatives

Department of Fine Art & Education:

Sinead McKillian	Painting
Finn Nichol	Sculpture & Combined Media
Cori O'Callaghan	Print Contemporary Practice
Brendan Eagan	Photography Contemporary Practice
PJ O'Connell	PME
Julie Griffiths	MA SPACE

Department of Design:

Roisin Buckley	Graphics
Brid Leahy	Fashion
Sean Parnell	Animation
Fiona Brogan	FTCP
Ann McBride	FTCP

Department of Digital Arts & Media:

Saoirse Stephens	Digital Animation Production
Dylan Flynn	Music Production and Technology
Melissa Collins	Creative Broadcast and Film Production
Christina O Shea	Creative Broadcast and Film Production
Clifford J Parrot	Creative Broadcast and Film Production
Colin Faraday	TUS

2.5.2 Current Students:

Fine Art & Education:

Painting: Sama Nezamabad

Sculpture & Combined Media: Katie Kelleher
Print Contemporary Practice: Dylan Ryan
Photography Contemporary Practice: Aisling O'Brien
PME: Allison Moorhead

Department of Design:

Graphics: Michelle Urban
Ceramics: Hannah O'Connell
Fashion: Shane Nolan
Animation: Karen Enokibarra
FTCP: Elen Edwards
Year 2: AJ Shipley
MA IDP: Emmanuel Kelechi Chinedu

Department of Digital Arts & Media

Digital Animation Production: Catherine Mulligan
Music Production and Technology: Katiane Ramos Kiyota
Creative Broadcast and Film Production: Alyssa Fleming
Creative Broadcast and Film Production: Katie Hughes

2.6 Documentation

- 2.6.1 Limerick School of Art and Design, Programmatic Review document
- 2.6.2 Department of Design
- 2.6.3 Department of Digital Arts and Media
- 2.6.4 Department of Fine Art and Education
- 2.6.5 Guide to Programme Documents
- 2.6.6 Special Regulations – Department of Design
- 2.6.7 Department of Fine Art & Education Programmes:

Core Year 1 Art and Design Critical and Contextual Studies (CCS)

Bachelor of Arts (Honours) in Fine Art: Painting
Bachelor of Arts (Ordinary) in Fine Art: (Painting)
Higher Certificate in Arts in Fine Art: (Painting)

Bachelor of Arts (Honours) in Photography & Moving Image
Bachelor of Arts (Ordinary) in Photography and Moving Image
Higher Certificate in Arts in Fine Art: Photography and Moving Image
*Formerly Known as BA (Honours) in Fine Art (Photography, Film, Video)

Bachelor of Arts (Honours) in Fine Art: Print Contemporary Practice)

Bachelor of Arts (Ordinary) in Fine Art: (Print Contemporary Practice)
Higher Certificate in Arts in Fine Art: (Print Contemporary Practice)
Bachelor of Arts (Honours) in Fine Art (Sculpture & Combined Media)
Bachelor of Arts (Ordinary) in Fine Art: (Sculpture & Combined Media)
Higher Certificate in Arts in Fine Art: (Sculpture & Combined Media)

Master of Fine Arts: Social Practice and the Creative Environment MA SPaCE
Professional Master of Education in Art and Design with Digital Media

Department of Design Programmes:

Bachelor of Arts (Honours) in Animation & Motion Design
Bachelor of Arts in Animation & Motion Design
Higher Certificate in Arts in Animation & Motion Design

Bachelor of Arts (Honours) in Ceramics (Expanding Practice)
Bachelor of Arts (Ordinary) in Ceramics (Expanding Practice)
Higher Certificate in Arts in Ceramics (Expanding Practice)

Bachelor of Arts (Honours) in Fashion Design in (Collection Design) / (Applied Textiles) / (Technology) or (Sustainability)
Bachelor of Arts (Ordinary) in Fashion Design in (Collection Design) / (Applied Textiles) / (Technology) or (Sustainability)
Higher Certificate in Arts in Fashion Design in (Collection Design) / (Applied Textiles) / (Technology) or (Sustainability)

Bachelor of Arts (Honours) in Fashion Textile for Product and Costume
Bachelor of Arts in Fashion Textile for Product and Costume
Higher Certificate in Arts in Fashion Textile for Product and Costume

Bachelor of Arts (Honours) in Graphic Design Communication
Bachelor of Arts (Ordinary) in Graphic Design Communication
Higher Certificate in Graphic Design Communication

Critical and Contextual Studies (CCS) Year 1 Art & Design Programme

Master of Arts in Interdisciplinary Design

Bachelor of Arts (Honours) in First year Art & Design

Department of Digital Arts & Media Programmes:

Bachelor of Science (Honours) in Digital Animation
Bachelor of Science in Digital Animation
Higher Certificate in Science in Digital Animation

Bachelor of Science (Honours) in Creative Broadcast and Film Production
Bachelor of Science (Honours) in Creative Broadcast and Film Production (Add-On)
Bachelor of Science in Creative Broadcast and Film Production

Higher Certificate in Science in Creative Broadcast & Film Production

Bachelor of Science (Honours) in Creative Media & User Experience Design Bachelor of
Science in Creative Media & User Experience Design

Higher Certificate in Science in Creative Media & User Experience Design

Bachelor of Science (Honours) in Game Art & Design

Bachelor of Science in Art in Game Art and Design

Bachelor of Science (Honours) in Music production and Technology

Bachelor of Science (Honours) in Music production and Technology (Add-On)

Bachelor of Science in Music Production and Technology

3.0 FINDINGS AND RECOMMENDATIONS OF EXTERNAL PROGRAMMATIC REVIEW PANEL

3.1 Main Findings

The External Validation Panel of Assessors recommends reapproval of the following programmes and associated amendments in the Limerick School of Art and Design,

Department of Fine Art & Education Programmes:

Core Year 1 Art and Design Critical and Contextual Studies (CCS)

Bachelor of Arts (Honours) in Fine Art: Painting
Bachelor of Arts (Ordinary) in Fine Art: (Painting)
Higher Certificate in Arts in Fine Art: (Painting)

Bachelor of Arts (Honours) in Photography & Moving Image
Bachelor of Arts (Ordinary) in Photography and Moving Image
Higher Certificate in Arts in Fine Art: Photography and Moving Image
*Formerly Known as BA (Honours) in Fine Art (Photography, Film, Video)

Bachelor of Arts (Honours) in Fine Art: Print Contemporary Practice)
Bachelor of Arts (Ordinary) in Fine Art: (Print Contemporary Practice)
Higher Certificate in Arts in Fine Art: (Print Contemporary Practice)

Bachelor of Arts (Honours) in Fine Art (Sculpture & Combined Media)
Bachelor of Arts (Ordinary) in Fine Art: (Sculpture & Combined Media)
Higher Certificate in Arts in Fine Art: (Sculpture & Combined Media)

Master of Fine Arts: Social Practice and the Creative Environment MA SPaCE
Professional Master of Education in Art and Design with Digital Media

Department of Design Programmes:

Bachelor of Arts (Honours) in Animation & Motion Design
Bachelor of Arts in Animation & Motion Design
Higher Certificate in Arts in Animation & Motion Design

Bachelor of Arts (Honours) in Ceramics (Expanding Practice)
Bachelor of Arts (Ordinary) in Ceramics (Expanding Practice)
Higher Certificate in Arts in Ceramics (Expanding Practice)

Bachelor of Arts (Honours) in Fashion Design in (Collection Design) / (Applied Textiles) / (Technology) or (Sustainability)
Bachelor of Arts (Ordinary) in Fashion Design in (Collection Design) / (Applied Textiles) / (Technology) or (Sustainability)
Higher Certificate in Arts in Fashion Design in (Collection Design) / (Applied Textiles) / (Technology) or (Sustainability)

Bachelor of Arts (Honours) in Fashion Textile for Product and Costume

Bachelor of Arts in Fashion Textile for Product and Costume
Higher Certificate in Arts in Fashion Textile for Product and Costume

Bachelor of Arts (Honours) in Graphic Design Communication
Bachelor of Arts (Ordinary) in Graphic Design Communication
Higher Certificate in Graphic Design Communication

Critical and Contextual Studies (CCS) Year 1 Art & Design Programme

Master of Arts in Interdisciplinary Design

Bachelor of Arts (Honours) in First year Art & Design

Department of Digital Arts & Media Programmes:

Bachelor of Science (Honours) in Digital Animation
Bachelor of Science in Digital Animation
Higher Certificate in Science in Digital Animation

Bachelor of Science (Honours) in Creative Broadcast and Film Production
Bachelor of Science (Honours) in Creative Broadcast and Film Production (Add-On)
Bachelor of Science in Creative Broadcast and Film Production
Higher Certificate in Science in Creative Broadcast & Film Production

Bachelor of Science (Honours) in Creative Media & User Experience Design Bachelor of
Science in Creative Media & User Experience Design
Higher Certificate in Science in Creative Media & User Experience Design

Bachelor of Science (Honours) in Game Art & Design
Bachelor of Science in Art in Game Art and Design

Bachelor of Science (Honours) in Music production and Technology
Bachelor of Science (Honours) in Music production and Technology (Add-On)
Bachelor of Science in Music Production and Technology
subject to the following conditions and recommendations.

3.2 CONDITIONS

3.2.1 No conditions identified.

3.3 RECOMMENDATIONS

General

3.3.1 Provide significantly more time for the Programmatic Review process. The panel strongly felt that much more time was needed with the programme team to discuss the individual

programmes. The time allotted was insufficient in terms of due diligence. Provide more time for the panel to discuss findings after the alumni and industry session, especially if conducting the review online

- 3.3.2 Give further consideration to the breadth and volume of documentation presented. The panel noted that it was difficult to navigate within the volume of files provided.
- 3.3.3 Provide instructions, guidelines or summaries to the panel beforehand for working with the documents and consider developing a set of review criteria.
- 3.3.4 Consider bringing students, Alumni and Employers into relevant breakout rooms specific to the programmes rather than a wider general session.
- 3.3.5 Bring previous Programmatic review documentation to the forefront of the documentation for the panel to review.
- 3.3.6 Provide a clear capital investment strategy and programme for the Limerick School of Art and Design.
- 3.3.7 Ensure that there is continued investment in equipment, particularly hardware and other resources for the programmes. There should be a continuous rolling investment in core learning resources.
- 3.3.8 Increase the capacity of network and computer power so that transfer of data across campuses can take place.
- 3.3.9 Produce an overarching strategy for Interdisciplinarity.
- 3.3.10 Ensure that the Departments of Fine Art and Design have increased connection to and within the Department of Digital Arts & Media. The strategy for this new LSAD and how it defines itself needs to be explored, agreed and asserted further. Ensure collaboration and prevent silo situations which could leave programmes underserved.
- 3.3.11 Develop a strategy for further collaboration and interdisciplinarity for students post Stage 1 that considers existing course requirements and additional needs that may arise, such as space and technical support. Ensure focus is maintained post year 1 on the fundamentals of drawing (where appropriate), and creative expression: it is important to continue to build and encourage creative confidence. Incorporate cross-platform projects, group exhibitions, quarterly art anthologies with students work etc, and identify a fair way to grade collaborations. Showcase Limerick as a Creative hub.
- 3.3.12 Support broader awareness of the breadth of progression pathways for all courses, basing this on emerging national and international trends, as well as the career path experience of graduates.
- 3.3.13 Make clear the relevance of Stage1 to the broader programmes.
- 3.3.14 Consider the provision of an alternative pathway for students who previously attended a PLC Portfolio Preparation course as the core year could prove repetitive.

- 3.3.15 Support ongoing CPD (accredited and unaccredited) and research opportunities for staff; including partnership opportunities in networks such as RUN-EU.
- 3.3.16 Enhance opportunities to embed research skills for students across the programme and strengthen research progression pathways for post graduate study opportunities.
- 3.3.17 Improve feedback mechanisms and communications for students and staff – examine how this communication can be improved on.
- 3.3.18 Check for unnecessary duplication across module documentation.
- 3.3.19 Consider using more workshops, guest lecturers, Industry experts and study trips.
- 3.3.20 Develop increased and improved links with alumni.
- 3.3.21 Ensure programme briefs are current, clear, fresh, timely and relevant.
- 3.3.22 Ensure a balance between Creativity/Technological skills across all disciplines
- 3.3.23 Consider a course structure that is more easily, quickly adaptable and responsive to industry, the student and tutor feedback.
- 3.3.24 Provide workspace for students taking part in remote placement opportunities or participating in onsite Work Placement. All students need access to the hardware/software/equipment necessary for their placement. High-speed broadband is essential, a must.

Programme Suite: Fine Art - Breakout Room 1(Chairperson Dr Lucy O'Donnell)

- 1 Re-examine some of the learning outcomes for the common core modules in Year 1 in terms of the number of verbs used.
- 2 Draw on the expertise of the MA SPaCE, in terms of collaboration and community engagement, to feed into the Placement experience.
- 3 Ensure an expanded conception of the notion of Placement which considers various places relevant to students' practice and not just to industry. Experience of MA SPaCE, PME and others may be valuable.

Professional Master in Education Art and Design with Digital Media:

- 1 Include in the Special Regulations for the School of Art and Design, that *Placement* can only be repeated once during the programme.
- 2 Ensure that the titles of programmes are consistent throughout the programme documentation.
- 3 Make more explicit in the module and course documents references to; General Pedagogies “GPK” and Micro Teaching.
- 4 Distinguish Language of “Curriculum” in reference to the *Curriculum and Practice* module

- 5 Update the references in the *Curriculum and Practice 2* module, and review age date of references throughout.
- 6 Ensure in the *Lesson Planning* module, (in particular book of modules) that there is reference to Blooms Taxonomy.
- 7 Link ethics to the *Professional Codes of Practice*.
- 8 Undertake more market research, as appropriate, to support professional accreditation process with the Teaching Council

Programme Suite: Design - Breakout Room 2 (Chairperson Ms Stacey Grant)

- 1 Examine the expanding role of design and the potential that lies here for LSAD and for student employment and engagement in public sector, policy design and other roles. LSAD is encouraged to be even more proactive and to push the boundaries of the disciplines and industry, perhaps by exploring speculative design and design futures, as well as service, social and systemic design. More explicit focus on sustainability in the broadest sense, including social sustainability and ethical practices would be beneficial and is encouraged.
- 2 Explore opportunities for collaboration and cross disciplinarity, for example, Graphic Communications and Digital Arts (UX/Data Visualisation), fashion and animation eg: Clo 3D, Broadcast and Digital Production, Photography, which has broadened to include how it might be applied in Design as well as Fine Art, but does not consider Digital Arts and Media, which may have potential and cross-over.
- 3 Encourage more emphasis on engaging with competition briefs, personal branding, professional strategies to create more of a well-rounded graduate. Reduction of garments in Year 3.
- 4 Consider how best to communicate range of potential career outcomes for courses such as Ceramic Design (Expanded Practice) with a wide scope and offer.
- 5 Consider putting LSAD Design seminars and workshops online and out into the wider world to share knowledge and also to further brand LSAD.
- 6 Provide opportunities, space and time to enable staff to increase research activity that in turn feeds into teaching & learning.
- 8 Capitalise on opportunities for interdisciplinary practice at degree level as a structured process.
- 9 Ensure that there are equal opportunities for all students to work remotely in studios with access to appropriate equipment and adequate workspaces. Resourcing around the equipment that is needed to deliver this module is integral to the revalidation of the programmes, for example, Wacom Cintiq's and a subscription to Adobe Creative Cloud is imperative for the modern artist.

- 10 Consider a strategy for developing curricula in terms of formal and informal situations and look at how becoming a technological university could impact on that going forward.
- 11 Focus on drawing skills, and the motivation to create for the Animation programme: providing polished and innovative portfolios are vital when competing with European applicants with a similar level of training.
- 12 Consider switching focus to on small, highly polished projects rather large projects for 2nd year Animation studies students, this switch may be worth trialing and could be more valuable for student portfolios.

Programme Suite: Digital Arts and Media - Breakout Room 3 (Ms Fiona Curran)

B.Sc. (Hons) Music Production and Technology:

- 1 Introduce dedicated spaces for practice and project development

B.Sc. (Hons) Creative Broadcast and Film Production:

- 1 Increase resources to match the outline of the programme, for example, dedicated and accessible spaces, up to date hardware and software that is capable of answering the demands of audio-visual production and learning; wider access to studios, labs and equipment sets. There is a need for more editing space, as well as editing suites with computers that are fit for purpose. With the technological advancements in film and broadcast media, investment in equipment is essential, especially as the course is presented as a 'practical' one that equips students with the experiences to work in the industry.
- 2 Ensure that 'fundamentals modules' appears earlier in the programme (see page 91 of document).
- 3 Increase the collaboration and integration between students and programmes and ensure that students are not overburdened with the workload across modules.
- 4 Ensure collaboration of Programme Board with the various Screen Guilds of Ireland for the benefit of the students.
- 5 Examine duplication of the Ethics modules e.g., in the level 7 course, *Ethics and Interpersonal Communication* is similar to, *Ethics and Creative Digital Communications*. In the level 8 course, *Regulation of Audiovisual Content* is very similar to *Copyright, Defamation and Industry Contracts*.
- 6 Include psychoanalysis (it is included in *Screen Lighting & Cinematography*) and Avant Garde cinema in *Film Studies* and consider a second module in first year. Consider an 'Advanced Film Studies' course in second year.
- 7 Expand different areas of work placement to include all areas of film eg: page 54 of document.

- 8 Consider giving the names of some modules extra value/unique selling point. E.g., could Editing be given an extra and distinctive added value by including music video?
- 9 Consider increasing the 'production' aspect in the programme in relation to skills of production management, timetabling, project development, Assistant Directing and other skills associated with the production department, as distinct from skills developed by a director as creative lead on a project.
- 10 Expand different areas of work placement to include all areas of film eg: Exhibition, Distribution, Film Education, Finance etc (see page 54 of the documentation).
- 11 Encourage students to critically engage with a diverse set of screen works in and out of existing programmes. Extracurricular spaces for engaging with the appreciation and creation of film was identified as something to encourage.
- 12 Ensure students are given space and encouraged to foster their own autonomy. Extracurricular activities were seen as beneficial to students.
- 13 Ensure that there is recognition and accommodation for different skill levels for new students, supporting experienced and totally inexperienced students alike.

B.Sc. (Hons) Digital Animation/B.Sc. (Hons) Game Art and Design/B.Sc. (Hons) Creative Media and UX Design

- 1 Ensure there is adequate space for studio and/or lab works, that hardware and software is up to date and that connectivity between campuses is improved.
- 3 Encourage the implementation of shared briefings between modules across different programmes.
- 4 Develop the student portfolio at an earlier point in the programme. (CMD)
- 5 Allow students to select their placement to include the studio/workplace option.
- 6 Consider increasing Erasmus for International students.
- 7 Obtain and examine student's feedback regarding their placements.
- 8 Use online resources as a method of generating and increasing online exposure of the students' work to the public.
- 9 Work with authorities in Clonmel to in order to improve access, facilities and resources for students who live in or are new the area, including transportation and accommodation.

Digital Animation, Game Art & Design & Creative Media

- 1 Make the *Editing* module in Creative broadcast a more unique selling point, as students can easily do an editing course online.
- 2 Gather and examine student feedback from their placements

3.4 Commendations and Observations

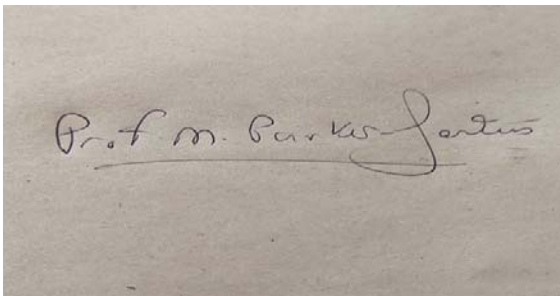
- 3.4.1 The Panel commends the programme teams on the quality of the programme documentation which has been developed to a high standard.
- 3.4.2 The Panel commends the programme teams on their commitment to their students which was commented on frequently.
- 3.4.3 The School's reputation for openness to new ideas and approaches to doing things, such as engagement with external stakeholders and LSAD's participation in RUN-EU is commended.
- 3.4.4 The Panel commends the programme teams for their open and enthusiastic participation in the breakout sessions.
- 3.4.5 The panel commends the Professional Master in Education Art and Design with Digital Media, as it is very laudably grounded in Communities of Practice.
- 3.4.6 The panel commends the Professional Master in Education Art and Design with Digital Media for its Learning Outcomes which are very well-articulated and differentiated for the different stages of the programme.
- 3.4.7 The panel commends the Professional Master in Education Art and Design with Digital Media for its excellent modules on Educational Technology, Schools, Curriculum and Professional Agency and Professional Practice.
- 3.4.8 The panel commends the Professional Master in Education Art and Design with Digital Media for some very innovative and future focussed modules, for example, the focus on short courses.
- 3.4.9 Assessment for Learning AFL is to be commended on the *Critical and Contextual Studies (CCS)* programme.
- 3.4.10 The panel commends the Creative Broadcast and Film Production team on the creation of Film CEL as an inclusive platform for students and community, as an example of social responsibility from LSAD, and as an imaginative and practical way of coping with the demands of acquiring placements.
- 3.4.11 The potential of the Creative Broadcast and Film Production programme to prepare graduates for current industry needs and future trends is commended.
- 3.4.12 The panel commends the additions made to the Creative Broadcast and Film Production programme, particularly to film studies, screen writing, Script to Screen and ethics.
The panel compliments the number of electives as this will create more opportunity for students.
- 3.4.13 The panel commends the idea of working with communities and societies which is currently being done through initiatives in LSAD, along with the clarity and quality of the documents, and its thorough analysis leading to the proposed changes.

- 3.4.14 The panel commends the 'Word On The Street' idea, thus allowing students to take ownership of their own learning and simulating a real world experience, in-house.
- 3.4.15 The panel appreciates that the programmatic review and associated meetings were conducted during the Covid-19 pandemic and commends the efforts of the Department for completing it in this context.
- 3.4.16 The panel commends the relationships between students and tutors, this was identified as one of the strengths of the School.

Observation:

Give further consideration to agenda flexibility. In this review, it was noted that both the Student and Industry and Alumni sessions, if conducted earlier, could have better informed the panel for meeting the Programme teams and leaders.

Signature of Chairperson: Prof Marie Parker-Jenkins

A photograph of a handwritten signature in cursive script on a light-colored, textured paper. The signature reads "Prof. M. Parker-Jenkins".

Date: August 8, 2022