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fellowships report 2021/25



“The Enterprise Academy provided expert training sessions and seminars, tools and resources, and facilitated the team with a deeper engagement during the discovery phase of the project. It allowed the fellows to sit in the problem space. It was really important because it enabled interactive ideation to occur.”

– Dr. Róisín Vize Convene / Enterprise Academy Fellow 2024

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About the Fellows Programme

Transforming University Enterprise engagement for a new co-learning skills and innovation ecosystem in Dublin

The Convene/Enterprise Academy Fellowship programme demonstrates that when academic staff are given the time, support and networks to engage deeply with enterprise, they can develop innovations that are both academically rigorous and practically impactful.

Designed to catalyse collaboration between academia and enterprise, the programme fostered meaningful collaboration by embedding academic fellows within industry-led projects focused on innovation and skills development. Over the course of its lifetime, to June 2025, the programme supported five cohorts of fellows, each undertaking full-time secondments over a semester. This structure enabled sustained engagement with enterprise partners and supported the development of co-created solutions.

Conceived as a unique and exciting opportunity for staff across TU Dublin's academic faculties, professional services, and research and innovation centres, the Fellowship programme supported those wishing to co-create skills and foster innovation with commercial and social enterprise. It provided the time and space for academic staff to step outside their traditional roles and become educational entrepreneurs – designing new programmes, piloting innovative models and fostering stronger connections between the university, society and enterprise. Critically, such ideas are supported by individual schools but also have the potential to be pan-University, reinforcing university-enterprise ecosystems.



Human Capital Initiative (HCI) Pillar 3 Funded

Fully funded by Convene through the HEA Human Capital Initiative (HCI) Pillar 3, Fellows were seconded from their regular roles on a part-time or full-time basis for up to five months. Fellows were offered space, time and resources to work directly with enterprise to deliver priority skills that drive workforce innovation in Ireland.

Fellows received support across the innovation lifecycle – from ideation and quality assurance, to funding, quality enhancement and mainstreaming. The programme acted as a bridge and an interpreter between enterprise and academia, helping both to navigate the complex skills and innovation landscape they share.

Incubating Solutions for Business Needs

Calls for the Fellowship programme sought out well-developed projects to gain momentum on the Convene objectives, KPIs and focal sectors. Applicants submitted an Expression of Interest Form, accompanied by their CV, supporting statement and their fellowship project proposal, along with a letter of support from their Head of School or Unit.

Structured as full-time, semester-long fellowships, each cohort worked intensively over a five-month period to co-create solutions with enterprise partners. The programme quickly gained traction, attracting interest across a wide range of sectors and disciplines.

Fellows were based in their host organisation and in the Enterprise Academy, as an “internal incubator” within TU Dublin helping fellows to:

- translate between enterprise needs and academic solutions,
- align projects to the university strategic plan,
- navigate systems,
- integrate our collective expertise and
- co-create solutions around priority enterprise needs.



The Fellowship Roadmap

The programme brought together 20 Fellows representing all five TU Dublin faculties, starting in September 2021 and concluding in June 2025. Their projects reflect a shared commitment to rethinking curricula, strengthening industry engagement and equipping learners with the skills, mindsets and values needed to thrive in a fast-changing and interconnected system.

Measurable outputs from the Fellowships include:

- Development of 18 Micro-credential courses and digital badges
- Engagement with approx. 1,000 students across undergraduate and postgraduate levels
- More than 20 research outputs including articles, reports and conference papers
- Enterprise engagement at both national and international levels, involving over 100 organisations

Additional metrics include:

- Estimated 400+ postgraduate and 500+ undergraduate students engaged
- 11 research contributions
- More than 100 enterprise engagements
- Notable collaborations with Eimersive, Dublin City University (DCU), University College Dublin (UCD), University of Leeds, Creative Ireland, the National Technological University Transformation for Recovery and Resilience (N-TUTORR), the Royal Institute of the Architects of Ireland (RIAI), the Society of Chartered Surveyors Ireland (SCSI), Irish Property Unit Trust (IPUT), and the Irish Architecture Foundation (IAF) and international partners such as Hainan University.

Fellows emphasised the transformative nature of the time spent on their projects, both personally and professionally. Enterprise partners widely expressed enthusiastic support for the initiatives, and Fellows reported a renewed enthusiasm for their roles in the context of the triple helix and appreciation for the support provided by the Convene HCI Pillar 3 funding.



Dr. Kevin O'Rourke with Spring 2024 fellows

Case Highlights

To illustrate the breadth and impact of the programme, selected fellowships are outlined below:

- **Andrea Curley** (School of Computer Science, Faculty of Computing, Digital & Data) created a module in Digital Ethics, integrating ethical frameworks across undergraduate computing programmes. Her fellowship produced seven international research papers and tools for detecting dark patterns online. These outputs informed curriculum development and contributed to the Ethics4EU project.
- **Ciara Walsh** (School of Food Science & Environmental Health, Faculty of Sciences & Health) led the development of stackable postgraduate programmes in Brewing & Distilling, including a Certificate and Diploma. Her work was featured in academic publications, podcasts, and HEA videos. She conducted market research and community engagement to identify learner needs, resulting in a programme that directly responds to industry demand.

- **Deirdre Kennedy** (School of Media, Faculty of Arts & Humanities) spearheaded socially engaged practice in media and digital arts, resulting in a validated MA programme with Erasmus+ potential. She developed guidelines for integrating socially engaged practice into curricula and led the formation of a vibrant Community of Practice for Undergraduate Practice-Based Research. Her work fostered partnerships with local and international institutions and contributed to national recognition through Campus Engage.



- **Sylvia Healy** (School of Chemical & Bio-Pharmaceutical Sciences, Faculty of Sciences and Health) launched TU Dublin's first National Framework of Qualifications (NFQ) Level 4 programme for individuals with intellectual disabilities, the Certificate in Independent Living Skills, also known as the Pathways Together programme. Her pioneering work secured €1.116 million in PATH 4 funding, fostered national collaboration through the INCLUDE-ID network, and led to international research proposals under Horizon Europe. This initiative significantly widened access to higher education and firmly positioned TU Dublin as a leader in inclusive education.
- **Seán McHugh** (School of Computer Science, Faculty of Computing, Digital & Data) created the On-Campus Internship model, offering first-of-a-kind experiential learning pathways. His work involved over 70 students, 35 enterprise interviews, and multiple industry events. The model was published in the ACM UKICER conference and is now embedded in TU Dublin's curriculum as an alternative to traditional work placements.

- **Claire Brougham** (School of Mechanical Engineering, Faculty of Engineering & Built Environment) developed CPD modules and a new BSc in Biomedical Design, engaging with 16 companies to assess graduate skills and attributes. Her work supported the NOBOCAP* project and informed TU Dublin's strategy for supporting the medical device industry talent pipeline. Operators (MOs) in the MedTech sector. The fellowship enabled validation of new modules and deepened enterprise collaboration. *NoBoCap, a European initiative funded under the EU4Health Programme, designed to strengthen capacity within Notified Bodies (NBs) and Market Operators (MOs) in the MedTech sector.

- **Emer Byrne** (School of Architecture, Faculty of Engineering & Built Environment) developed a micro-credential in Environmental Design and Retrofit Development in Practice. Emer's fellowship involved extensive stakeholder engagement with professional bodies, industry representatives, and public sector organisations. The module has been validated for delivery in 2026 and received enthusiastic support from industry, highlighting the need for bespoke educational solutions in the built environment sector.

- **Dan McCartney** (School of Biological Sciences, Faculty of Sciences and Health) developed micro-credentials in Human Nutrition and Dietetics aimed at clinicians, educators, and professionals in the food, pharmaceutical, sports, fitness and wellbeing sectors, as well as the general public. His fellowship focused on creating flexible, blended learning opportunities to transfer TU Dublin's domain expertise in nutrition at scale. Dan collaborated with organisations including the Irish Nutrition and Dietetic Institute (INDI), the Food Safety Authority of Ireland, and the Irish Heart Foundation's Nutrition Council. The initiative aligns with TU Dublin's mission to deliver public health and societal impact, addressing a gap in accessible nutrition education and training.



- **Linda Mc Weeney & Laura Corrigan** (School of Accounting & Finance, Faculty of Business) contributed to the development of a 10-credit module in Foundations in Sustainability Reporting, embedded within the Postgraduate Diploma in Professional Accounting. Approximately 80 students completed the module, which also included a Digital Badge. Their work supports TU Dublin's response to evolving EU sustainability directives and positions the university as a key player in sustainability education for the financial sector.
- **Alex Gibson** (School of Marketing, Faculty of Business) developed the Metaversity CPD Certificate and an immersive technology module for business, engaging with HTC, Colossyan, and Virti to pilot VR-based training and AI avatar content creation. His work led to a unified digital marketing degree and expanded research into AI-enhanced immersive learning. He presented at international conferences and built a national network through Eirmersive.

These examples highlight the transformative nature of the Fellowship programme, both personally and professionally for the Fellows, and institutionally for TU Dublin. They demonstrate how aligning education with sector-specific needs can drive innovation, inclusivity and responsiveness in higher education while extending the co-learning skills and innovation ecosystem in Dublin.

Looking ahead

As Ireland continues to navigate climate transition and digital transformation, the insights from these fellowships offer a roadmap for how universities can lead these changes. By working in partnership with enterprise and government, higher education can help build a more resilient, sustainable and equitable society.

The following section will detail all 20 Fellowships grouped by cohort, showcasing the diversity of projects and the collective impact of the Convene Enterprise Academy Fellowship programme. These initiatives are not isolated efforts but part of a broader movement to make higher education more responsive, inclusive and future-ready.

“The fellowship has been instrumental in strengthening our connection with industry, allowing us to develop tracks for student employability, including alternatives to traditional internships. We’ve seen how crucial it is for our graduates to have both industry-ready tech skills and professional soft skills, which we’ve fostered through engaging with industry partners like Applegreen, and incorporating project work and innovation challenges. This holistic approach truly differentiates our students and prepares them for career success.”

- Alex Gibson

“The Enterprise Academy provided invaluable support to the School of Mechanical Engineering, particularly in our efforts to address skills shortages within the medical device industry. This fellowship allowed us to bridge the gap between academic research and real-world application, ensuring our graduates are well-equipped to drive innovation in this critical sector.”

- Dr Claire Brougham

“The Enterprise Academy has had a transformative impact on our school, significantly elevating its profile by directly responding to industry needs. It provided a vital opportunity to formalise our engagement with professional bodies and enterprises, leading to the creation of innovative new learning materials and establishing clear, direct lines of communication. The fellowship has been instrumental in helping us navigate these developments, reinforcing the idea that our current level of activity simply wouldn't be possible without this essential support. The value of the internal network and the collaborative space it fosters is undeniable – it has enhanced our outputs and enabled us to move beyond siloed design approaches.”

- Linda Mc Weeney



Lorraine Carmody



Andrea Curley



Graham O'Neill



Mariia Perelygina



Deirdre Ryan



Sylvia Healy



Deirdre Kennedy



Seán McHugh



Ciara Walsh



Claire Brougham



John Jones



Katriona Flynn



Hugh McCabe



Róisín Vise



Alex Gibson



Linda Mc Weeney



Emer Byrne



Laura Corrigan



Nina Lyons



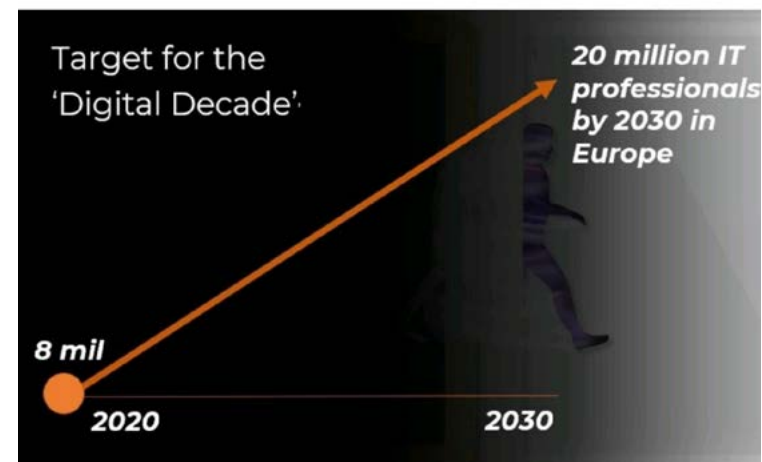
Dan McCartney

fellows autumn 2021

Lorraine Carmody

Career Development Programme For Students To Develop Transversal Skills

To design and deliver an enterprise-driven, student-centered process for onboarding, managing, and certifying digital skills within an Experiential Learning module.



STUDENT FEEDBACK

"This course has allowed me to live a life I always wanted, providing me with the tools to expand my knowledge and moulded me into a better professional."

"Before attending this course, I knew different gaps that were and some of them still being part of my daily life. Nevertheless, what I learned was how to approach them, how to take them, and transform them in different opportunities."

"I got a chance to work at one of the biggest companies in the world, learn from some very smart people and be given an opportunity for a full-time employment."

"My experience is priceless and just I can say enough time to my god given this chance to join to the AWS team."



Andrea Curley

Creating a Micro-credential in Digital Ethics

To create a flexible CPD/microcredential in Digital Ethics for computer science students and professionals.

KEY FINDINGS

- Embedding ethics into multiple modules rather than standalone ethics courses is the most effective way to teach ethics in technical disciplines.
- There is a need for flexible CPD/microcredentials in Digital Ethics to educate learners on ethical challenges in technology and to equip lecturers and professionals with the knowledge to incorporate ethics into their practice.
- Industry views and practices are crucial for understanding how to educate students on ethics in technology.

FELLOWSHIP EXECUTION

Andrea developed an optional module on the MSc Computer Science titled "Digital Ethics," which addresses several objectives and cohorts: educating learners on ethical challenges in rapidly developing technologies, providing lecturers with the knowledge and confidence to incorporate ethics into their modules, and equipping professionals in the ICT industry

with the knowledge to lead and disseminate ethics in technology. The module motivates learners to critically assess technologies from the perspective of major ethical frameworks. Andrea also updated several undergraduate modules with ethics amendments and supervised MSc dissertations and group projects on ethics in technology.

FELLOWSHIP OUTCOME

Andrea has worked on various publications, including thematic analysis and ethics frameworks. She has participated in the Ethics Working Group for Informatics Europe and attended workshops in Ireland and internationally. She supports the creation of a central repository for all ethics material and the establishment of a Digital Ethics Working Group at TU Dublin. Her module is designed to be

used as standalone workshops that can attract digital badges, enabling its use as CPD for industry. Andrea continues to embed more ethics components in undergraduate modules and has proposed building a pan-university community of practice.



KEY FINDINGS

- Flexible, agile teaching and learning methods are essential for supporting students in developing individual skills and competencies.
- Industry certifications and career development programmes can significantly impact students' personal lives and careers.
- The societal and economic impact of such programmes will occur in the longer term and will be difficult to define.

FELLOWSHIP EXECUTION

Lorraine researched existing frameworks and best practices in Work Placement/Experiential Learning cross TU Dublin internships. She developed a career development programme with an external consultant, piloted industry certifications, hosted industry talks and events, and designed a hybrid approach for delivering the AWS Cloud Practitioner Certificate. Lorraine also introduced the Student

Transformative Learning Record (STLR) into the module, allowing students to gain formal recognition for learning experiences inside and outside the classroom. The programme impacted students' personal lives and careers, with academic and educational benefits evident in the short term. The societal and economic impact will occur in the longer term and will be difficult to define.



Graham O'Neill

Responding to the Education Needs of the Bioeconomy

Engagement with people across academic and industry as part of the fellowship highlighted the need for bioeconomy education to reach beyond the sciences and encompass business, legal and finance professions as well as wider society, all vital to the success of the bioeconomy through the purchasing of biobased products.

Post Graduate Certificate in Sustainable Food Business Operations (Level 9)		TU5303
Module Title	Semester	ECTs
Sustainability Principles and Measurement	1	10
Sustainability for the Food Sector	1	5
Business Sustainability Consultancy Project	Year Long	10
The Bioeconomy	2	5

KEY FINDINGS

- Sustainability is a major agenda item for companies in the bioeconomy sector, but many are unsure how to embrace it.
- Bioeconomy education needs to focus on professional services and the general public to support the growth of the sector and drive demand for biobased products.
- Educational offerings need to be agile and responsive to the changing needs of the bioeconomy sector.

FELLOWSHIP EXECUTION

Graham engaged with companies in the Agri-food and Bioeconomy sector through one-to-one interviews with representatives from various roles, including corporate social responsibility, sustainability, innovation, and sales. He identified common themes and developed educational offerings, including an undergraduate module titled "The bioeconomy,

a model for sustainable food & drink production." The module provides students with an understanding of the bioeconomy, the relationship between agriculture and the environment, and techniques for sustainable food and drink production. TU Dublin also developed a "spin in" innovation lab for bioeconomy practitioners.

FELLOWSHIP OUTCOME

TU Dublin continues to seek input from enterprise partners to support the growth of the bioeconomy sector. The educational offerings are designed to be dynamic and responsive to the sector's needs, with ongoing development and refinement based on enterprise feedback.

The fellowship also led to the design of a Level 9 Post-Graduate Certificate in Sustainable Food Business Operations within the School of Food Science & Environmental Health, and the programme is currently the subject of a Springboard+ funding application.



Mariia Perelygina

Research Collaborations – Recovering Tourism

To explore the challenges facing Irish travel companies in post-COVID recovery and identify solutions.



KEY FINDINGS

- The COVID crisis brought unprecedented challenges to tourism but also created opportunities for sustainable practices and digital transformation.
- Financial, operational, reputational, policy, and communication challenges were significant for Irish travel enterprises.
- Government grants were well-received and crucial in addressing financial pressures.
- Collaboration between higher education and tourism enterprises can enhance skills, foster entrepreneurship, and promote tourism careers.

FELLOWSHIP EXECUTION

Mariia conducted interviews with industry practitioners from different sectors of tourism across Ireland to evaluate the state of the Irish travel industry. She developed a report on post-COVID recovery, identifying mutual interests between the School of Hospitality Management and Tourism and enterprise, discovering new placements for students within the industry, and revealing interest from travel enterprises for

future collaborations. The report highlighted financial, operational, reputational, policy, and communications obstacles faced by Irish travel enterprises due to the COVID crisis. It also addressed the positive evaluation of government grants by practitioners and the ongoing importance of sustainable tourism practices and digital transformation.

FELLOWSHIP OUTCOME

Tourism practitioners proposed various directions for collaboration with higher education institutes. Teaching initiatives include development of industry/sector-specific skills for students, enhancement of their commercial (entrepreneurial) attitudes, and promotion of careers in tourism. Research interests include technology solutions, market trends and insights, as well as fundamental research into topics such as sustainable tourism development in Ireland, development of standards for the tour guide sector, and specifics on the next generation of tourists. This

report offers recommendations for making the travel industry resilient, sustainable, and adaptable to overcome future challenges. Key advice included the development of triple-helix collaborations (platforms, forums and oversight committees for engagement between industry, academia and government); the provision of more market insights, research, real-time data and statistics for public access; to focus on sustainable development and solutions for overtourism; to promote careers in tourism and to rethink tourism education to align it to the modern requirements.

Deirdre Ryan

Cultural Intelligence for Enterprise and Academia

To mainstream Cultural Intelligence across enterprise and academia to meet the demands of the contemporary global workplace.



KEY FINDINGS

- **Cultural Intelligence (CQ)** is essential for working effectively in culturally diverse situations and is a core transversal skill required in the workplace.
- **Mainstreaming CQ** across enterprise and academia can help organizations become more culturally intelligent, benefiting various contexts such as EDI programmes, recruitment, leadership development, and team development.
- **Virtual Exchange (VE)** and **Virtual Reality (VR)** can enhance CQ initiatives by immersing students in cross-cultural experiences.

FELLOWSHIP EXECUTION

Deirdre developed a Cultural Immersion Framework, adapting a validated module from a Diploma in Transversal Skills module into a 5-credit micro-credential, Global Citizenship in the Workplace, applicable across various programmes. She collaborated with enterprise partners to design cross-cultural challenges for students, fostering active enterprise engagement in

CQ-focused learning. She also piloted the Virtual Exchange (VE) best practice framework TU Dublin Hainan University in China, co-designed lessons with two HNU lecturers, and created CQ taster workshops for staff, partners, and enterprises. Additionally, she conducted preliminary research with VR to enhance immersive CQ experiences.

FELLOWSHIP OUTCOME

Following completion of her fellowship, Deirdre received additional funding to facilitate a pan-university "Internationalisation at Home" Community of Practice. She used this platform to engage staff, students, and enterprise partners with global work and learning initiatives. She facilitates the Global Citizenship in the Workplace (level 8) module for Sustainable Innovators in

Enterprise (SIE), a pan-University programme, and supports the development of students' CQ across the University. In this way, she continues to highlight the value of CQ for enterprise and build enterprise partnerships in the context of CQ.

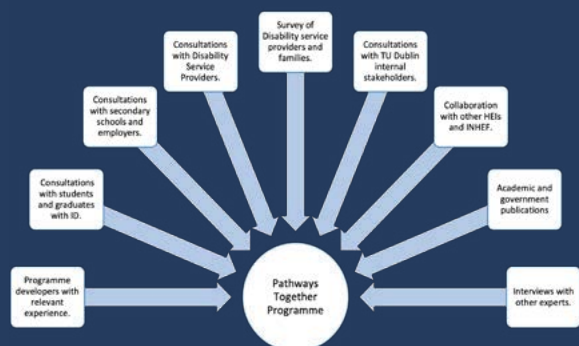
fellows spring 2022

Sylvia Healy

Lecturer
School of Chemical & Bio-Pharmaceutical Sciences

A Multi-Disciplinary Programme for People with Intellectual Disabilities

To increase the provision of inclusive and quality education opportunities for those with an intellectual disability as per the United Nations Sustainable Development Goal 4: to ensure inclusive and equitable quality education and promote lifelong learning opportunities for all.



FELLOWSHIP OUTCOME

- Following completion of the Fellowship, work continued on the programme development with a team of colleagues within Faculty.
- The programme was fully validated at NFQ Level 4 in November 2024 and is entitled the “Certificate in Independent Living Skills” or the “Pathways Together Programme”.
- It launched as a pilot in February 2025 with the enrolment of 14 students across the Blanchardstown and Tallaght campuses.
- Following a successful funding application, TU Dublin was awarded over €1 million from the Higher Education Authority in February 2024 under the Programme for Access to Higher Education (PATH 4, phase 2).
- A Community of Practice on inclusive education has been established within TU Dublin.
- Pathways Together programme team members continue to collaborate and conduct research with colleagues nationwide and internationally.

Deirdre Kennedy

Lecturer
School of Media

Increasing Student Engagement through Socially Engaged Practice in the Creative, Cultural and Social Enterprise Sectors

To build on the strong examples of practice-based projects Deirdre had already established in three key areas: the engaged curriculum; engaged research; and socially engaged practice.



KEY FINDINGS

- Socially engaged practice can significantly increase student engagement and contribute to the formation of a new educational model in the technological university sector.
- Collaboration with institutions like the Irish Museum of Modern Art and 3D Assist can provide valuable opportunities for undergraduate students to complete socially engaged project work.
- Establishing networks like the Future Makers Collective can support socially engaged creative practice and enhance engagement.

PROJECT EXECUTION

Deirdre worked on projects like “An Uncommon Practice” with the Irish Museum of Modern Art and the trans-disciplinary “Nuada Project” with engineering colleagues and 3D Assist. She embedded these collaborations in the university’s practice in a research-informed and reflective way, providing opportunities for undergraduate students to complete socially engaged project work. The fellowship also formalized the establishment of the Future Makers Collective, a networking group exploring socially engaged creative practice.



FELLOWSHIP OUTCOME

The fellowship provided time and resources for ongoing projects and a robust framework for future initiatives. It developed illustrative examples, a community of practice, evaluation criteria, and argued for parity of esteem for social engagement projects. The Future Makers Collective continues to back socially engaged creative practice, intensifying student engagement and helping shape a new educational model within the technological university sector. Overall, Deirdre’s work has underscored the educational value of socially engaged practice and its capacity to meaningfully link students, academia, and the wider community.

KEY FINDINGS

- Although improving, there remains a significant deficit in meaningful post-secondary educational opportunities for people with intellectual disabilities (ID).
- People with ID are under-represented in the workforce and are at greater risk of poverty than those without ID. Developing higher-level programmes for people with ID can provide pathways to employment and more independent living - benefitting graduates, their families, the community and enterprise.
- Widening diversity in the workplace can transform morale, attract and retain talent and positively impact the brand.

PROJECT EXECUTION

Sylvia engaged with stakeholders, established networks and initiated the programme development, which she co-designed with colleagues. The programme aims to produce skilled graduates by providing a suite of student-centred modules, focussing on personal development, independence, advocacy and a supported transition to meaningful employment. It also aims to benefit enterprise by supporting diversity and social responsibility.

Seán McHugh

Head of Digital Transformation
School of Enterprise Computing & Digital Transformation

The On-Campus Internship – An Innovative, Flexible, Inclusive Pathway to Traditional Work Placements

To create an innovative, flexible, inclusive alternative to traditional work placements for students.

Ciara Walsh

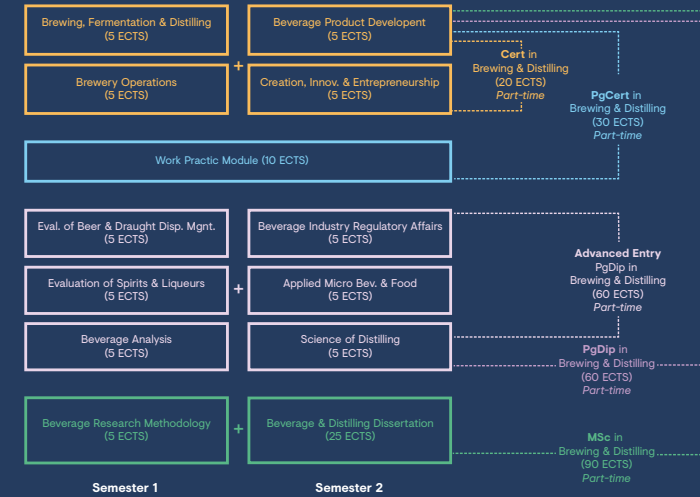
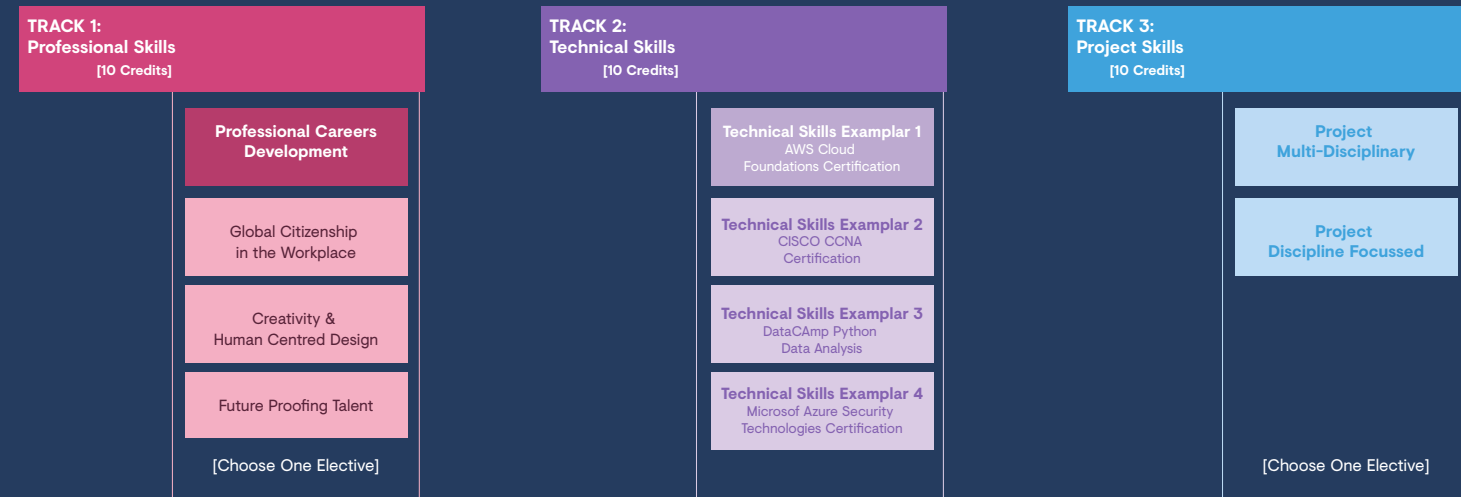
Senior Engagement Manager
Enterprise Academy

Stackable Postgraduate Programmes in Brewing and Distilling

To examine the need for accredited educational programmes for the Irish drinks sector, and once confirmed, design an industry informed suite of agile and stackable accredited pathways for part-time professional learners.

PROJECT EXECUTION

Ciara conducted a study of Ireland's drink sector to examine the demand for accredited postgraduate programmes. This included a discovery exercise (40 industry surveys & 28 stakeholder interviews) to clarify industry skill-set expectations, sector-specific challenges, knowledge gaps, and opportunities. This study noted a clear industry agreement in the need for taught postgraduate programmes from HEI's in this area. More specifically, all interviewees advocated for the development of the proposed programmes, with 60-63% of individuals surveyed believing there would be a demand for such qualifications from their staff, and 20% reporting a 'lack of suitable programmes' as an obstacle to upskilling. This was in agreement with a reported national skills deficit and a recognised need for more formal opportunities for learning in brewing and distilling from various sources: Foodwise Strategy 2025 (DAFM, 2015), Ireland's National Skills Strategy 2025 (INSS, 2019), and a drinks industry report from DII 2023. The fellowship resulted in the development of an informed framework for the future design of an agile and stackable suite of programmes (20, 30, 60, & 90 ECTS), with sector specific feedback and input.



KEY FINDINGS

- On-campus internships can be a flexible, inclusive alternative to traditional work placements, enhancing career readiness and employment success for students.
- Enterprise consultations are crucial for understanding industry needs and informing the development of internship programmes.
- Embedding enterprise challenges into on-campus programmes offers a low-cost test bed for innovation.

PROJECT EXECUTION

Seán conducted enterprise consultations through focus groups, interviews, and surveys to determine their needs. He piloted an on-campus internship and developed a model structured around three skills tracks. The model design was guided by Seán's extensive knowledge and expertise in internship programmes.

FELLOWSHIP OUTCOME

The on-campus internship aligns with Convene's Sustainable Innovators for Enterprise model, offering a test bed for innovation. Seán worked closely with the SIE team on the development of his fellowship project and shared learnings along the way. An article describing the Fellowship was published in the Proceedings of the 2022 Conference on United Kingdom & Ireland Computing Education Research.

FELLOWSHIP OUTCOME

- Broad Outcomes**
- Development of a mixed-method framework to investigate industry demand for accredited upskilling, and sector-specific learner discovery and co-development.
 - Developed Ireland's first accredited postgraduate pathways for the beverage sector, combining rigorous theory with hands-on practice and filling a gap left by all other Irish HEIs.
 - Cultivate strategic industry partnerships that drive employment and sector growth while reinforcing TU Dublin's position as the leading accredited education provider to Ireland's drinks industry.
- Specific Outcomes**
- A co-developed Pg Cert in Brewing and Distilling validated in June 2022, funded under Springboard (90% learner fee for 3 years), which first ran in September 2022.
 - A co-developed Pg Dip in Brewing and Distilling funded by HCI Pillar (90% learner fee for 2 years), which first ran in September 2023.
 - Peer-reviewed Paper: C. Walsh, G.K. Kinsella, & Dunne, J. (2023). Case-Study: An Industry-Academic Engagement Study of the Brewing & Distilling Sector in Ireland. Journal of Academic Practice. 11:1.
 - Events and Talks: A TU Dublin Brewing and Distilling Showcase, Presentations at Community of Practice and Future Talent Forums.

KEY FINDINGS

- A significant growth in the Irish drinks sector was noted. However, a lack of supporting accredited educational pathways to support upskilling for this sector was evident in Spring 2022.
- In-house training and online training were the only part-time upskilling opportunities available to employees in the beverage sector in Spring 2022.
- An exploratory discovery exercise validated the need for postgraduate programmes. It also captured data on the specific skillsets and competencies required, including information on preferred content and delivery modalities, and also opportunities and challenges for the sector.
- A plan to build a suite of agile, stackable pathways for professional learners to undertake accredited upskilling, informed by industry findings, was undertaken (as per above Figure).

Claire Brougham



Medical Device Sector: Talent Development for Healthcare Innovation

To examine the educational needs of the medical device industry in Ireland, specifically focusing on R&I functions, and to identify how TU Dublin can positively impact these needs.



fellows spring 2024

KEY FINDINGS

Educational Gaps:

There are significant gaps in the educational provision for the medical device industry, particularly in R&I functions.

Industry Needs:

The industry requires graduates with a deeper understanding of biological and disease contexts, regulatory frameworks, and value-driven innovation.

Level 8 and 9 Provision:

Current level 8 and 9 offerings are not adequately serving the industry. There is a need for a BSc in Biomedical Design and an MSc in Medical Device Design.

Collaboration and Funding:

Collaboration with industry and securing EU funding are crucial for developing and implementing new educational programmes.

Strategic Impact:

The proposed educational strategies have the potential to significantly impact the medical device industry by providing a pipeline of skilled graduates and enhancing TU Dublin's reputation and research capacity.

FELLOWSHIP PROCESS

Claire conducted primary and secondary research, including interviews with industry professionals and analysis of published reports. She identified major gaps in educational provision for the medical device industry, particularly in R&I roles. Claire proposed a strategy to address these gaps, including revising the level 8 Biomedical Engineering (BE) programme and transitioning it to a Bachelor of Science (BSc) to align with industry needs. She also developed a plan for a new level 9 programme in Medical Device Design, with stackable pathways for part-time learners and a traditional full-time option. Claire's strategy included seeking EU funding to create a joint MSc with European partners and applying for Erasmus Mundus funding to attract high-calibre students.

FELLOWSHIP OUTCOME

The fellowship led to the development of a comprehensive strategy to enhance educational provision for the medical device industry. The proposed changes aim to create a pipeline of level 8, 9, and 10 graduates equipped to meet industry demands. The strategy has low implementation risks and high potential benefits, including increased student numbers, enhanced research capacity, and stronger industry partnerships. Claire's work has positioned TU Dublin to become a leader in medical device education and innovation, with the potential to secure significant EU funding and establish a joint MSc programme with European partners.

Katriona Flynn



Exploring Irish Fashion Retailers' Navigation of the University-Enterprise Ecosystem

To explore how Irish fashion retailers navigate the university-enterprise ecosystem, with a particular focus on sustainability and ethical practices, and to develop educational initiatives that address skill gaps in these areas.



KEY FINDINGS

Career Development: There is a strong demand for clear career development paths and progression opportunities. Employees are motivated by training and upskilling opportunities, which are crucial for retaining talent.

Skill Gaps: Economic, political, and social uncertainties are impacting the industry. Continuous upskilling in areas such as leadership, management, and sustainability is essential to address these challenges.

Sustainability and Ethical Practices: There is a significant demand for upskilling in sustainability, with 73.3% of survey participants expressing interest in further training. Areas of interest include legislation, new technologies, and contextualising industry challenges.

Educational Initiatives: Accredited educational programs can bridge the gap between theoretical knowledge and practical application, ensuring that sustainability principles are embedded in daily operations. These programs can also enhance employees' career paths and support the industry's commitment to sustainability and ethical practices.

FELLOWSHIP PROCESS

Katriona employed a sequential mixed-methods design, starting with qualitative research through in-depth interviews with early-career fashion professionals. These interviews provided insights into workplace expectations, career development, skill gaps, and the place of sustainability in their roles. This was followed by a quantitative phase involving an online survey of 135 respondents globally, primarily from product and buying functions within fashion retailers. The survey aimed to validate the initial findings. Katriona used the Business Model Canvas and Value Proposition Canvas to map out the business environment and identify strategic interventions needed to bridge the gap between theoretical sustainability concepts and their practical application.

FELLOWSHIP OUTCOME

The fellowship led to the identification of significant skill gaps in the Irish fashion retail industry, particularly in sustainability and ethical practices. Katriona proposed the development of accredited educational initiatives to equip industry workers with the necessary skills to implement sustainable solutions and prepare for impending legislative changes. These initiatives would also enhance career development opportunities for employees, making the industry more attractive to current and prospective workers.

John Jones



Leveraging Mobile Laboratories to Facilitate University-Enterprise Collaboration

To evaluate the effectiveness and feasibility of using a Mobile Analytical Lab for educational and industrial applications, and to determine the potential market opportunities for such a unit.



KEY FINDINGS

Market Demand: There is a strong demand for mobile analytical labs in both academia and industry, particularly for part-time students and companies needing on-site analysis.

Cost-Effectiveness: Mobile labs can reduce travel costs and time for students and companies, making education and training more accessible and efficient.

Flexibility: Mobile labs offer flexible solutions for conducting experiments and analyses in various locations, enhancing the learning experience and providing real-time data collection.

Collaboration Opportunities: The mobile lab concept can strengthen collaborations between TU Dublin and industry partners, providing tailored solutions to meet specific needs.

Equipment Utilization: Many laboratory equipment items are underutilized; mobile labs can maximize the use of these resources and reduce the need for fixed lab spaces.

FELLOWSHIP PROCESS

John conducted a comprehensive feasibility study, including end-user analysis, cost breakdowns, and pilot studies. He used the Business Model Canvas to outline the value proposition, customers, resources, and capabilities of the Mobile Analytical Lab. Surveys were distributed to various groups within TU Dublin, including lecturers, researchers, part-time students, and technical staff, to gather data on the potential use and benefits of a mobile lab. Interviews with equipment suppliers and observations from industry seminars were also conducted. Pilot studies were carried out at specific sites, including a chemical company and a remote farm, to test the practical application of mobile lab equipment.

FELLOWSHIP OUTCOME

The fellowship led to the development of a detailed strategy for implementing a Mobile Analytical Lab. The strategy includes securing funding, purchasing equipment, and setting up a booking system for the lab. The mobile lab is expected to enhance the learning experience for students, provide flexible and cost-effective solutions for industry partners, and promote collaboration between academia and industry. The project also highlighted the potential for significant cost savings and revenue generation for the university.

Hugh McCabe

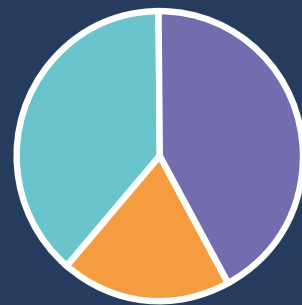


3D and Immersive Tech: Opportunities for Training Provision

To identify industry sectors with a need for training in 3D and immersive technology and to develop educational offerings to meet these needs.

Do you see potential for the use of immersive tech either now or in the future and either in the context of your current role or the broader context of the team you work with, within the design sector?

Yes	22
No	10
Maybe	20



KEY FINDINGS

Design Sector:

There is a strong demand for 3D and immersive technology training among professional designers, particularly for creating prototypes and mockups, and designing interfaces for new media forms like AR and VR.

Education and Training Sector:

While 3D and immersive technology have potential in specific training scenarios, significant barriers exist to widespread adoption, making it a niche area for now.

Built Environment Sector:

The adoption of 3D and immersive technology is accelerating, driven by trends like Modern Methods of Construction (MMC) and BIM regulations, indicating significant potential for training provision in this sector.

Training Modalities:

There is no one-size-fits-all solution for training delivery; both online and in-person formats have their advantages, and flexibility is key to meeting diverse needs.

FELLOWSHIP PROCESS

Hugh conducted extensive research, including interviews, surveys, and desk research, to identify potential customer segments for 3D and immersive technology training. He focused on three main areas: Design, Education and Training, and Built Environment. Significant research was carried out on the Design sector, revealing a clear market for industry training in 3D and immersive technology for professional designers. Hugh designed and submitted an undergraduate module on 3D and Immersive Technologies for validation, which can serve as a basis for future industry-facing offerings. The module covers core 3D concepts and techniques, as well as application areas such as augmented reality, virtual reality, and design prototyping.

FELLOWSHIP OUTCOME

The fellowship led to the development of a comprehensive strategy for delivering 3D and immersive technology training to various industry sectors. The new undergraduate module is expected to be validated and will provide a foundation for creating micro-credentials and other industry-oriented training programmes. Hugh's work has positioned TU Dublin to offer timely and needed learning opportunities in 3D and immersive technology, enhancing the university's reputation and expanding its educational offerings.

Róisín Vize



Sustainability Education: A Marketing Discipline Perspective

To explore ways to embed sustainability education into the curriculum for TU Dublin students across disciplines and offer enterprise training for upskilling employees, with a focus on the marketing discipline.



KEY FINDINGS

Green Transition Costs: Transitioning to sustainable business practices is perceived as costly in terms of time, human resources, and finances. Businesses are still recovering from the pandemic and facing rising costs.

Sustainability Language Bewilderment: There is a lack of understanding of sustainability terms and concepts, leading to uncertainty and fear of greenwashing. Clear communication and education are needed to bridge this gap.

Digital Carbon Footprint: The ICT industry has a significant carbon footprint, and there is a lack of awareness about the environmental impact of digital technology. Sustainable digital practices need to be integrated into marketing strategies.

Educational Initiatives: There is a growing interest in sustainability education, particularly in the micro-credential sector. Accredited programs can address knowledge deficiencies and support the transition to sustainable business practices.

FELLOWSHIP PROCESS

Róisín conducted secondary research on the challenges managers face when transitioning from linear to circular business practices, identifying a significant lack of awareness about the high carbon footprint of digital technology. Primary data from interviews with web solution providers, consultancy firms, and training specialists highlighted barriers to implementing sustainable marketing practices and knowledge gaps in digital marketing. Róisín developed a Level 9 elective on Sustainable Marketing Management, collaborated with Hubro to create a sustainability marketing simulation, secured funding to pilot the project, and completed a certified course in Education for Sustainability.

FELLOWSHIP OUTCOME

The fellowship led to the development of educational initiatives to address knowledge gaps in sustainable marketing. The level 9 module on Sustainable Marketing Management will be delivered to MSc students at TU Dublin and can be adapted for micro-credentials and masterclasses. The simulation module will be piloted with students in TU Dublin and NTNU in Norway. These initiatives aim to build a more informed and resilient society and economy by equipping students and professionals with the skills to implement sustainable marketing practices.

Alex Gibson

Transversal Skills Metaversity : a 5 ECTS credit CPD Certificate

The Fellowship set out to identify demand for, and propose, an accredited Level 6 CPD Certificate – Transversal Skills Metaversity, enabling learners to create Metaverse-led initiatives that enhance transversal skills in their organizations.

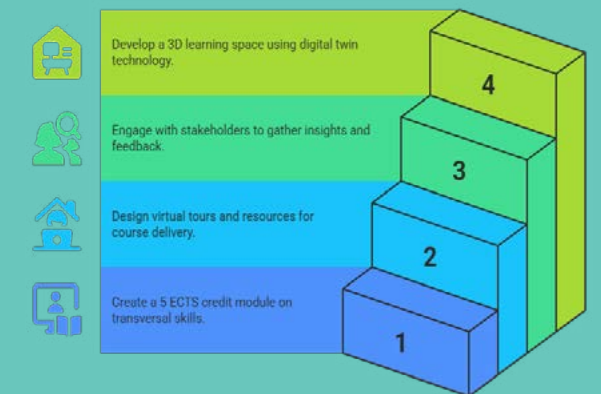


KEY DELIVERABLES

- Development of a 5 ECTS credit CPD Module titled “Transversal Skills Metaversity,” aimed at equipping staff and trainers with the confidence to develop transversal skills in learners. The research has shown that current courses in immersive tech could be delivered under micro-cred process to meet current demand
- Creation of virtual content to be used in course validations and ongoing delivery of programmes - e.g. virtual tours of Digital facilities at Blanchardstown and Tallaght campuses
- Extensive stakeholder research, including consultations with Learning & Development teams, and hardware & software providers (e.g Meta, Bodyswaps)
- Build a prototype 3D learning space - agreement with HTC Viveverse in digital twin creation of a campus building.

KEY STEPS TO ACHIEVING DELIVERABLES

- Conduct extensive stakeholder research, including consultations with hardware providers (e.g., Meta Bodyswap, PICO) and industry partners
- Signed MOA with key providers such as Cinema 8 (interactive VR) and Colyssian (Agentic AI avatars)
- Visits to key Universities with strong presence in VR (Leeds University, DCU, UCD)
- Partnership with UCD Innovation Academy
- Builds on existing relationships with UCD Innovation Academy, enhancing collaboration



MAINSTREAMING IN SCHOOL

Contribute to creation of awareness of Immersive Tech and AI tools to aid pedagogy - particularly in context of programmatic and School Reviews

CONTRIBUTION TO ENTERPRISE ACADEMY OBJECTIVES

Supports cross-university creation and delivery of innovative courses relevant to enterprise, specifically in transversal skills development

ALIGNMENT WITH ENTERPRISE ACADEMY INITIATIVES

Complements the Academy's frameworks for mentoring, transversal skills, work-based learning, and micro-credentials

ENTERPRISE SECTOR INVOLVEMENT

Transversal skills are broadly applicable across various sectors, making the project relevant to multiple disciplines

fellows
autumn
2024

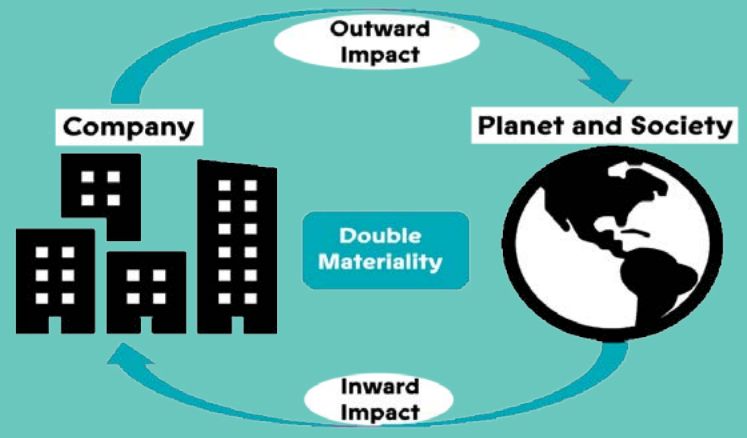


Linda Mc Weeney

Postgraduate Certificate in Sustainability Reporting & Assurance

High-quality sustainability reporting has come to the fore with the emergence of the European Corporate Sustainability Reporting Directive (CSRD) and European Sustainability Reporting Standards (ESRS). I set out to create a programme that will prepare participants to comply with this and other pertinent international guidelines and standards.

The developed programme is designed to provide flexible learning pathways, enhancing graduate employability and aligning with industry demands. The programme will also leverage partnerships with industry experts and professional bodies to ensure relevance and quality, while also focusing on technology integration in education.



fellows spring 2025

FELLOWSHIP PROCESS

A systematic, multi-faceted research approach was employed to ensure the development of a high-quality, industry-aligned Postgraduate Certificate in Sustainability Reporting and Assurance. The research methodology integrates qualitative and quantitative data collection techniques, drawing on industry engagement, policy analysis and best practices in curriculum design.

FELLOWSHIP OUTCOME

This initiative represents a significant step towards bridging the gap between accounting, sustainability, and regulatory compliance. By preparing professionals to meet evolving challenges in sustainability reporting, the programme can play a pivotal role in shaping the future of the accounting profession, fostering accountability, transparency, and innovation in corporate sustainability practices.

Lecturer
School of
Surveying &
Construction
Innovation

Emer Byrne

Lecturer
School of
Accounting,
Economics
& Finance

Laura Corrigan



Sustainability in Action: Collaborative Modules for the Built Environment

During her fellowship, Emer has set out to create a series of collaborative modules and short courses using a cross-disciplinary approach to address sustainability issues in the built environment.

This initiative targets both students and professional learners in the construction and built environment sector. The primary objective is to develop collaborative learning modules that prioritise multi-disciplinary approaches, essential for tackling the complex challenges of sustainability in the sector.

Emer is committed to driving a radical shift in educational methodology to support the sector in achieving the 2030 and 2050 climate action goals.



Emer is a Spring 2025 Fellow at TU Dublin's Enterprise Academy, where she is currently researching skills needs and gaps in the Architecture, Engineering, and Construction (AEC) sector.

A Chartered Surveyor with over 30 years of experience in construction, real estate, and sustainability, Emer is a Lecturer in the School of Surveying and Construction Innovation at TU Dublin. She also serves as the School's Partnership & Engagement Co-ordinator, fostering collaboration between academia and industry.

Emer is a passionate advocate for embedding sustainability and innovation into education and professional practice. She chairs the Sustainability Group within the Society of Chartered Surveyors Ireland (SCSI) and actively contributes to national initiatives through her involvement with organisations such as the SCSI and the Irish Green Building Council (IGBC).



Empowering Financial Businesses to integrate Climate and Nature into their Financial Decision-Making

The key deliverable of this fellowship was to explore the integration of digital tools—Synthesia and Articulate—into the design and delivery of two modules within the Postgraduate Certificate in Sustainability Reporting and Assurance.

The project aimed to enhance blended learning, support scalable content creation, and deliver engaging, accessible experiences. Course materials were developed using best practices in interactive design, structured delivery, and assessment innovation.

This approach supports the School of Accounting, Economics and Finance's goal of leading in sustainability education and strengthens institutional capacity in digital pedagogy and ESG-focused, professionally relevant learning. It also provides a scalable model for future module development and delivery.

Laura is a Spring 2025 Fellow at TU Dublin's Enterprise Academy, where she is currently designing and developing the academic content for this new programme.

Laura is a full-time lecturer in the School of Accounting, Economics and Finance since 2018, and also teaches across different schools, focusing on the delivery of financial and management accounting along with Audit and Assurance modules. She is a qualified financial adviser (The Institute of Bankers Ireland) and qualified accountant (ACCA)



Nina Lyons

Lecturer
School of Media



An Approach To Tailoring Content Design Provision

The aim of this fellowship is to identify the needs of industry in the emerging role of Content Designer with the aim to put in place a plan that would aid industry to address these needs and provide training for their employees that would give them a fundamental grounding in the related fields of content design while in an environment that promotes best practices in content creation.

This fellowship involves an investigation and identification of the different aspects of the role and how different industries desire specific skills and look to formulate a provision of training that builds on the individuals current skillset in areas of research, analysis and synthesis of findings, conceptualisation, idea generation, layout and visual presentation skills.

Nina is a Spring 2025 Fellow at TU Dublin's Enterprise Academy, where she is currently researching the skills gap around the emerging role of Content Designer and developing a micro-credential to allow individuals to upskill and move into the role.

Nina is a full-time lecturer in the School of Media, on the CDM programme. A graphic designer and front-end developer by trade, Nina has worked in industry with a range of clients from start-ups and SMEs to government bodies and global brands.

She started to move toward research and education in 2018 when awarded a research scholarship to investigate how to leverage Augmented Reality to improve the experience of visitors to outdoor cultural heritage sites. This is now the subject of her PhD study.



Dan McCartney

Lecturer
School of
Biological Health &
Sports Sciences



The Development of Micro-Credentials in Human Nutrition & Dietetics

This fellowship aims to develop fully-featured, flexible, blended learning micro-credentials in human nutrition and dietetics.

By developing these accessible educational opportunities for a broad diversity of healthcare professionals, TU Dublin will harness its substantial domain expertise in the area, transferring this knowledge at scale to build networks and produce a public health and societal dividend which aligns perfectly with TU Dublin's core mission statements.

Dan is a Spring 2025 Fellow at TU Dublin's Enterprise Academy, where he is currently developing a micro-credential in human nutrition and dietetics.

Dan is a dietitian by profession, with postgraduate training in molecular medicine and public health nutrition. He's been Director of the Human Nutrition & Dietetics Programme at TU Dublin and Trinity College Dublin since 2015.

He is also a former columnist with The Irish Examiner and a former Public Relations Officer with the Irish Nutrition and Dietetic Institute, the professional body for dietitians in Ireland.



Fellowship Enterprise Collaborators / Companies

- Allied Irish Bank
- Anthesis Group
- Augmented Reality Enterprise Alliance
- Amazon Web Services (AWS)
- Applegreen
- Bank of America
- Bannon
- The Bar of Ireland
- Beotanics
- Bord Iascaigh Mhara (BIM)
- Bodyswaps
- Blue Planet Consulting
- Build Digital / ICMS3
- Carberry
- CBRE Ireland
- Chartered Accountants Ireland
- Chez Emily
- Clear Stream Solutions
- Colgate Palmolive
- Davy
- DELL
- Deloitte
- Department of Agriculture, Food and the Marine
- Department of Social Protection
- Drinks Industry Group of Ireland
- Digital Marketing Institute
- Distilled
- Dublin City Council
- Dublin Regional Skills Forum
- Dunnes Stores
- Eco Quest
- EIRMERSIVE
- EisnerAmper Ireland
- Enterprise Ireland
- The Environmental Edge
- Ergo
- Ernst & Young
- Fidelity Investments
- Goodbody
- Green Institute
- Greystar
- Health and Social Care Professions Alliance (HSCPA)
- Hibernia
- HSE
- HTC
- Hubro Simulations
- IBEC
- IBM
- Immersive Tech Skillnet
- Intel
- Irish Exporters Association
- Irish General Practice Nurses Education Association (IGPNEA)
- Irish Green Building Council
- Irish Institute of Pharmacists
- Irish Nutrition and Dietetic Institute (INDI)
- IPUT
- Irish Society for Chartered

- Physiotherapists (ISCP)
- ISACA
- Law Library
- Logicalis
- Meta
- Musgrave Group
- Noho
- Nostra
- Nursing and Midwifery Board of Ireland (NMBI)
- NutraMara
- Oceanpath
- Office of Public Works (OPW)
- Ornu
- Pepsi
- PICO
- Presidio
- Primark
- Publicis
- Price Waterhouse Cooper (PWC)
- Red Rua Arts Centre
- SAP
- SGS consulting
- Society of Chartered Surveyors Ireland (SCSI)
- Sustainability Works
- Sysnet Global Solutions
- Tallaght Community Arts
- Tallaght University Hospital
- TMF Group
- Typetec
- Victory VR
- VRAI
- Workday
- Workhuman
- 3D Design Bureau

“Looking back, this past semester has been one of the most enriching and formative professional experiences I’ve had since joining TU Dublin in 2019. The fellowship deepened my understanding of the university as an ecosystem and helped me see my role within it with greater clarity and confidence.”

- **Nina Lyons**



fellows report 2025

Prepared by the Enterprise Academy at TU Dublin
October 2025