

Professional Diploma in Digital Making

AD489PD

PROGRAMME SPECIFICATIONS

Programme title	Professional Diploma in Digital Making	School	School of Design
Resulting awards	Professional Diploma in Digital Making Professional Certificate in Digital Making (exit award only)	Head of School	Prof Alex Milton
Level	Level 9 on the National Framework of Qualifications	ECTS credits¹	20 credits
University award	Professional Diploma (Special Purpose) award Professional Certificate in Digital Making (exit award only)	Programme type	Postgraduate programme delivered flexibly
Programme Co-ordinator	Bernie McCoy	External Examiner	TBC
Programme team	School of Design staff team, including co-ordinators, administrators, lecturers and technical officers		

1. Programme Aims and Objectives: Purpose, Vision and Values

Background

NCAD is the lead partner in the Creative Futures Academy (CFA), a major new government funded initiative. In partnership with IADT, UCD and industry partners from across the creative sector, we are developing a range of courses that will empower creative practitioners from a range of disciplines, and at different stages of their learning, with the sustainable and adaptable skills and attributes that they will require to shape the future of Ireland's creative sector.

As part of a suite of programmes that make up the Creative Futures offer at NCAD, the Professional Diploma in Digital Making seeks to provide a scholarly framework for students who wish to study specific, connected aspects of creative disciplines and themes within a leading art and design college setting.

Purpose

The world needs empowered and enabled creative thinkers. From upskilling to cross-skilling to reskilling, finding creative solutions and making new networks, the Professional Diploma in Digital Making seeks to enable creative professionals to:

¹ European Credit Transfer and Accumulation System, where 60 ECTS credits equate to the workload of a full-time academic year (two trimesters)

- Create their own learning routes from our multi-layered range of pathways, working within, across and beyond established as well as emergent creative disciplines, themes and agendas.
- Enhance their expertise in an existing practice, to upskill, reskill or further focus their professional knowledge and direction.
- Immerse themselves in contemporary critical thinking, and to be part of the vanguard, shaping our new futures.
- Form a diverse and vibrant peer network of fellow Creative Futures Academy learners and connect to networks and communities of practice through sectoral and industry partnerships and collaborations.
- Shape their learning to suit their availability, needs and ambitions by aligning with a range of in-person, online and blended (a mix of online and in-person) learning options.

These disciplinary and trans-disciplinary specialist awards align with creative practice or career aspirations. The programme culminates in a capstone project (such as a self-directed project and/or thesis) in which students focus in to develop and reflect upon the programme learning which informs their creative or professional practice.

Aspects of the programme will be delivered in collaboration with partners from the creative sector such as semi state and state funded regulated centres with public access to support digital making hubs, fab labs and facilities, extending the reach of the offering opening learner accessibility nationally and internationally.

The Professional Diploma in Digital Making is a stand-alone award but has the potential to become a formational part of expanded postgraduate study. NCAD offers other programmes to MA and MFA level.

Programme Aims

This programme shapes learning that is rooted in harnessing the opportunity opened up by digital, technological and ecological fabrication across creative practice.

Contemporary methods of fabrication, such as 3D printing and laser cutting have changed not only how objects are produced, but have amplified what, and how, artefacts can be created or manufactured. With that, so too our perception, understanding and interaction with objects has moved toward questioning materials, necessity, traceability, impact, use/re-use and needs.

As modern fabrication technologies continue to advance, the worlds of making, design and manufacturing are changing and merging into something much more seamless. Through an approach that blurs traditional boundaries between art, design, engineering, fabrication and manufacturing, this pathway positions learners to grow a practical understanding of future-facing techniques that enable new, bespoke, on-demand, flexible and sustainable forms of making, production, manufacture and creation.

The programme prepares participants with the practical and theoretical means to develop contemporary creative practice and theory within a specialist award, while benefitting from a broader interdisciplinary creative discourse and community of practice.

The programme allows participants to develop their specialist practice, their professional, technical and organisational skills and their knowledge and application of critical contexts to:

- **EXPAND** creative thinking to support digital change of perspective across and beyond the contemporary fabrication and making landscape.
- **CONNECT** with ecological, social and cultural change to create impact.
- **BUILD** sustainable communities of creatives with interests that grow beyond discipline and regions.
- **INCUBATE** agile creative digital practitioners and organisations that can change the ecological, social, cultural and economic worlds.
- **ENGAGE** with emerging digital making fabrication and technology, tools and practices to create continual change in the creative sector.
- **ALIGN** learning and teaching to a change-led view of the world, society, economies and sectors in and beyond Ireland.

The programme aims to:

- Improve the exploration, curiosity, ambition, depth and breadth of participants creative practice in a systematic and insightful manner
- Continually meet the rapidly changing needs, expectations, aspirations and experiences of today's creative practitioners by improving their professional application as artists, designers, makers, curators or writers;
- Provide participants with appropriate skills and knowledge that can be applied to their professional development as creative practitioner;
- Provide participants with appropriate creative industry and cultural connections through external partnership projects and specialists facilities.

2. Programme Outcomes

On successful completion of the programme, students will be able to:

- Demonstrate knowledge and understanding of contemporary creative practice and mastery of key debates within their chosen specialism.
- Apply knowledge and understanding through written, spoken and visual communication enabling the application of theoretical knowledge of their creative specialism to new aspects of contemporary practice.
- Make judgements through traditional academic practice, display a mastery of a broad range of theoretical positions, their histories, strengths and weaknesses.
- Demonstrate an ability to work in both a self-directed manner and within a team approach in order to establish complex solutions for the imaginative delivery of creative practice today to various audiences.

- Demonstrate the successful acquisition of a range of independent learning competencies including a range of research based and professional skills which might assist the student in their transition to doctoral studies or the world of work.

3. Stage Outcomes

Stage 1: Professional Certificate in Digital Making

On successful completion of stage 1 of the programme, students will be able to:

- Develop an appropriate professional knowledge of the context, defining features and methods of digital fabrication within their creative specialism.

Exit award at end of stage 1

On successful completion of Stage 1 of the programme, students can exit the programme and apply for the award of Professional Certificate in Digital Making, a 5-credit, level 9 special purpose award.

4. Admission Requirements

To be accepted into the programme, applicants must have completed an honours level 8 undergraduate degree (achieving at least a 2:2) in a relevant and cognate discipline, or have an appropriate level of professional practice in the subject field or a related field.

Students can be accepted onto the programme without the academic entry requirements outlined above. In such cases, applicants will need to demonstrate equivalent and relevant experience and/or formal learning.

Students should apply to the programme with evidence of previous successful qualifications, statements of work-related achievement etc.

Students who have not been educated through English must show proof of achieving IELTS 6.5 (with a minimum of 6 in the writing section on the Academic Version) or an equivalent score in another accepted test.

5. Further Educational Opportunities

This programme provides a sound and strong basis for further education at postgraduate level, most directly in relation to advancing to a MA and developing contemporary creative practice and theory, contributing to wider fields of our expanding culture, society and economy.

Careers and skills

The programme is designed to meet the needs of the creative sector within and beyond Ireland. The programme seeks to ground a knowledge of the transversal and specialist skills to equip creative practitioners to work within existing career paths, while also imagine new career and creative pathways and learning.

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6. Teaching and Learning

Delivery

Delivered by academic staff and visiting faculty who are leading practitioners and researchers in their specialist fields, the Diploma is centred on contemporary creative practice and discourse.

This programme embraces a pedagogy rooted in self-directed and life-long learning, echoing the ethos that has fuelled the growth of fab labs globally and resonating with the spirit of "How to Make Almost Anything." Over the programme students will be guided through a blend of one-on-one and group crits, virtual lectures and discussions.

The programme seeks to instil an attitude of proactive engagement and curiosity, equipping participants with the mindset needed for innovative digital making. Through collaborative work within local Fab Labs, Digital Hubs participants will delve into research, discussion, and hands-on making, aiming to foster a holistic understanding of the key theories and approaches that emphasize the interconnectedness of technology, ecology, and society.

Learning, teaching and assessment techniques include:

- Structured online learning activities
- Seminars
- Tutorials
- Lectures
- Self and peer-assessment tasks
- Group work
- Independent study

7. Methods of Assessment

Aligned Assessment

Aligning the assessment to the learning outcomes - delivered through teaching and learning activities - students and staff can clearly identify what has been achieved as well as how and where improvement can be made.

Assessment Procedure

A transparent assessment procedure empowers the student to understand the assessment process and enables them to evaluate their own levels of achievement against explicit grades, goals and learning outcomes whilst appreciating how and where they might improve.

Individual components of the programme are assessed on a mark-allocation basis to provide students with clear feedback to promote self-evaluation and self-reflection in their own learning processes. Staff are experienced in delivering a range of assessment and evaluation in line with student construction of knowledge and demonstration of understanding.

The aim of the assessment procedure is to achieve the following objectives:

- **Measure:** Grade or recognise the level of the student's achievement in relation to the learning outcomes.
- **Communicate:** Assessments provide students with clear feedback to promote self-evaluation and self-reflection in their own learning processes.
- **Illustrate:** Learning outcomes and competencies that are required have been achieved, which allows for progression to the next level/course/step in the learning journey.

Assessment Methods

Formative Assessment: typically involves feedback (oral or written) to students on their progress, and does not usually involve a mark. It is used to provide constructive feedback to improve learning and understanding. Formative assessment does not form part of the student's final grade or mark.

Summative Assessment: these assessment results are aggregated and used to determine whether students have fulfilled the specified learning outcomes and have met the standard required to achieve a passing grade, and so can be granted the credits for successfully completing each module.

Learners will also undertake on-going self and peer evaluation, helping foster a culture reflective practice that empowers creative professionals on the programme.

Assessments are undertaken by a team of staff who are examining how students have met the learning outcomes. Assessment may occur or be required on or off campus or on line, and will be timetabled well in advance.

8. Programme Review and Evaluation

All programmes are subject to College-wide evaluation tools and events. Student evaluation and feedback takes place at completion of programme. Feedback results are sent to each School to respond to and report to Programmes Board on what changes or developments will be implemented in response to the evaluations.

External Examiners review and evaluate the assessment process. In addition, informal feedback is gathered from discussions with students, staff and management.

These evaluation events are important to current and future students, to ensure we can enhance the delivery of programmes at NCAD.

In addition, learners are invited to discuss their experience on the module with their lecturers at any point during the year.

This programme is delivered under the support of the Creative Futures Academy HCI pillar 1 funded project, which is subject to an annual evaluation. A major review of this programme will be carried out in 2026/27.

9. Modular Provision

Module	Credits	Core or Option	Trimester
Stage 1 – Professional Certificate in Digital Making			
PGCFAD1037 Creative Principles - Digital Making	5	Core	Any
Stage 2 – Professional Diploma in Digital Making			
PGCFAD1038 Creative Agendas 1 - Digital Making	5	Core	Any
PGCFAD1039 Creative Collaboration 1 - Digital Making	5	Core	Any
PGCFAD1040 Creative Capstone 1 - Digital Making	5	Core	Any

Stage 1 – Professional Certificate in Digital Making

PGCFAD1037 Creative Principles - Digital Making

This module introduces learners to fundamental principles, working methods, skills and theories that underpin digital making in art and design. This module focuses on the practical underpinnings, technological advances, innovations and concepts relating to Digital Making. It introduces learners to the fundamental principles and processes that underpin digital technologies, programming, and communication within art and design practices, enabling them to approach creative work by applying advanced digital-making techniques whilst understanding the digital theory and context.

Stage 2 – Professional Diploma in Digital Making

PGCFAD1038 Creative Agendas 1 - Digital Making

This module enables learners to undertake a transdisciplinary thematic project addressing a key issue of today, alongside peers from a diverse range of creative backgrounds.

The module seeks to interrogate the complex challenges and issues that are social, technical, environmental or political in nature. Drawing directly on issue-based directives and directions, a particular area is identified for participatory examination through creative interventions, leading to propositions and prototyping of alternative futures.

PGCFAD1039 Creative Collaboration 1 - Digital Making

This module introduces learners to methods, tools and techniques that will help them to navigate the challenges of an evolving creative landscape, identify and form approaches to connecting, co-creating and collaborating. Learners will undertake a topical, thematic project with colleagues and creative peers, developed through teamwork, negotiation and collaboration, which leads them to an understanding of how they might shape sustainable collaboration cultures.

Learners will engage virtually and in a Fab Lab setting of their choice to hone their digital-making skills through a lens of ecological consciousness and sustainability. The module aims to cultivate a nuanced understanding of technology's role in shaping collective futures, emphasizing interdependence of ecological and social systems through research, discussion, and hands-on making.

PGCFAD1040 Creative Capstone 1 - Digital Making

This capstone module enables learners to undertake a project that demonstrates their fundamental knowledge of specific creative practices and theories. Learners will reflect upon, document and disseminate their creative practice.

The module enables learners to apply the skills acquired throughout stage 1 and 2 of their programme pathway, and to exhibit their ability to synthesise and communicate their learning.

10. Programme Structure

Stage 1: Trimester 1 (Autumn, Spring or Summer): Professional Certificate in Digital Making		
PGCFAD1037 Creative Principles - Digital Making 5 Credits		
Stage 2: Trimester 2 (Autumn, Spring or Summer): Professional Diploma in Digital Making		
PGCFAD1038 Creative Agendas 1 - Digital Making 5 Credits	PGCFAD1039 Creative Collaboration 1 - Digital Making 5 Credits	PGCFAD1040 Creative Capstone 1 - Digital Making 5 Credits

11. Exit Points and Credit Requirements

On completion of Stage 1 (an accumulation of 5 credits in total) students can exit with a Professional Certificate in Digital Making, 5 credits, equivalent to about 100 hours of student effort.

Final Award Calculation

The grade for the final award of Graduate Diploma in Digital Making, 20 credits, will be calculated using the grades from the four 5-credit modules, about 400 hours of student effort.

Grading is in accordance with the [NCAD Grade Descriptors](#).

12. Resources

Staffing

Name	Title/Role
Teaching Staff	
Bernie McCoy	Programme Co-ordinator
Adam Gibney	Lecturer
Administrative Staff	
NCAD and CFA Administrative Staff	Programme Administration
Technical Support Staff	
School of Design Technical Officers	Technical Supports

Space

The programme will be based within existing College studios, workshops and other spaces.

Facilities

The programme will utilise new facilities such as the William Walsh NCAD and VLE provided through CFA funding. Access is subject to availability to external equivalent FabLab and Digital Hub facilities where appropriate, for on-location or work-based learning.

For further information on this programme contact Dr Joanna Crawley: crawleyj@staff.ncad.ie