

MSc/MA Art and Technology

With an emphasis on the latest technological advances - including computation, digital fabrication, robotics, and virtual reality - the MA/MSc in Art and Technology offers a space to engage critically with the political, social and cultural implications of technology.

Core to the programme is an experimental and exploratory approach that aims to speculate and engage with the limits of what is possible in technologically sophisticated art and media, from both an artistic and technical perspective.

Centering around the student's studio practice and portfolio development, the course places an emphasis on innovation and creative strategies. Students will develop their practice through creative research and an exchange of dialogue between peers, visiting artists and faculty.

As a student on this programme you will:

- Engage critically with the artistic, political, social and cultural implications of technology.
- Work with an international body of artists, researchers and students.
- Be engaged with key fields of arts practice rooted in technology including expanded cinema and film, sound art and composition, interactive art, virtual and immersive systems.
- Be introduced to innovative coding, fabrication, and physical computing skills, and emerging approaches to AI, 3D printing, sound design, software studies, simulation and interactivity.
- Gain a range of creative technological skills, and the opportunity to develop new approaches with your own practice.

For more detailed information please visit
<http://artandtechnology.ul.ie>

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MSc/MA Art and Technology

Autumn

Module	Description
Fundamentals of Audio Video & Programming	This module provides students with core skills in digital media programming, and audio and video recording and production essential to undertake the Masters Programme in Art and Technology.
Physical Computing	Students develop their knowledge of physical computing in the context of interactive art, performance and interaction design through a combination of laboratory based small group project work and lecture based learning and research.
Core and Art	The module explores code with the aim of using it as an expressive, analytical and critical medium. The emphasis is on the making of art that extends inquiry and exploration in media, culture and communication through the use of code. The practical elements of the module are grounded on a discursive analysis of the philosophical implications and historical nature of code and coding practices.
Realtime Audio and Video	This module explores the real-time systems of connectivity, media generation and composition and how the capacity to work and respond in the present impacts across disciplines and fields. It explores sound and image synthesis and composition through real-time generative procedures that include sound synthesis, live sound and image processing, and composition principles for live performance. These techniques are realised in the most recent, commonly-used software
Time Based Media	This module introduces the aesthetic approaches and technological practices for media art forms defined by structured time and duration. It explores the evolution and impact of new media mechanisms on traditional cultural forms and the possibilities enabled by digital tools and contemporary aesthetic positions.

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Spring

Module	Description
Art & Technology Studio 1	This module immerses students in interdisciplinary contexts, through engagement in creative group projects and enabling critical discourse. Invited guest artists, theorists and curators from multiple disciplinary trajectories provide support the students' studio development.
Art & Technology Studio 2	This module is designed to accommodate the development of specialist technical skills to support digital arts practice. Smaller classes and an emphasis on tutorials allow for in-depth interrogation of topics at an advanced level.
Research Methods for Art & Design	This module introduces students to the varied methodologies used in research in the arts and design. A central theme is the exploration of methods beyond the quantitative and qualitative distinction. Examples of projects that exemplify a practice as research and practice based research approach are explored.
Electives (choose 1)	
Visual Coding	To introduce students to the principles behind algorithmic visuals and the practice of creating visuals through programmed, procedural approaches
Event Driven Programming	This module will introduce students to event-driven programming where a strong emphasis will be placed on practical application in at least two high level development environments. In addition, students will be introduced to multiprocessor support for event-driven programs and shown how to improve event processing performance through parallel event transformation.
Advanced Video Production	This module will introduce students to event-driven programming where a strong emphasis will be placed on practical application in at least two high level development environments. In addition, students will be introduced to multiprocessor support for event-driven programs and shown how to improve event processing performance through parallel event transformation.
Multimedia Industry Perspectives	The purpose of the Multimedia Industry Perspectives module is to develop student understanding and knowledge about various digital media industry processes, and to encourage students to examine digital

	media as a number of varying career options. It will provide the opportunity to introduce a number of external experts from a variety of multimedia industry related areas within a flexible framework.
Game Design II: System Design	The aim of this module is to provide students with the appropriate methodology and knowledge to design and identify the various systems present in traditional digital and analog games. On successful completion of the module, the student will be able to analyse and prototype a game, identify and design its systems.

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Summer

Module	Description
Graduation Studio	This module provides the structure to support students in the completion of their final Masters Degree project. In this studio students synthesise the experiences and techniques they have developed in the preceding semesters in the completion of a major body of work. The submitted work should be of high quality suitable for professional presentation and portfolio.