

MA/MFA Computational Arts

Programme specification

1. Programme details

Item	Information
a) Programme name (incl. pathways):	MFA Computational Arts MA Computational Arts – Design & Creative Technology Pathway MA Computational Arts – Arts & Practice Based Research Pathway
b) Programme code(s)	730215D (730225E/730328B/730341B)
c) Programme credit value(s)	360 MFA, 180 MA CATS 180 MFA, 90 MA ECTS
d) Programme author(s)	Rachel Falconer & Rebecca Aston
e) Entry requirements	<p>We welcome applications from anyone drawn to a rigorous, practice-led programme that cultivates an active, critical, and historically informed approach to creative practice, design, technology and computer science. Whether applying for the one-year MA or the two-year MFA, we are looking for candidates who are curious, ambitious, and ready to push their practice into new territory.</p> <p>No prior coding experience is required. The programme accommodates a wide spectrum of technical backgrounds, with classes offered at all levels to ensure everyone can develop at pace. We welcome applications from candidates with a wide range of educational and professional backgrounds. While many applicants hold an undergraduate degree in a creative or technical discipline – such as art, design, music, architecture, computer science, psychology or cultural studies – we equally value substantial professional or life experience as a pathway onto the programme.</p> <p>If the applicant’s first language is not English they should normally have an IELTS minimum score of 6.5, with a 6.5 in writing and no element lower than 6.0.</p>
f) Academic year effective from	2026-27

2. Programme Aims & Overview

Aims

- Develop practical skills in creative coding, physical computing, and computational arts within a practice-led framework.
- Encourage students from diverse backgrounds to become inventive, multidisciplinary, and ambitious practitioners, using code as both a creative and critical medium.
- Equip students with the ability to design generative and interactive systems, build physical and networked objects, and develop hybrid practices across art, design, technology, and culture.
- Provide technical fluency alongside critical, theoretical, and historical frameworks that enable students to create new forms of practice at the intersection of computation and culture.
- Foster interdisciplinary agility, enabling graduates to work across art, design, technology, research, and the wider creative industries.
- Cultivate critical awareness of technology as embedded within social, cultural, political, and environmental contexts, encouraging ethical and responsible creative practice.
- Enable students to understand not only how technologies function, but who they serve and how they impact human and more-than-human systems.
- Support the development of professional and transferable skills, including innovation, user experience design, audience engagement, time management, professional presentation, and project evaluation.
- Prepare students to become critically informed, technically skilled, and socially engaged interdisciplinary creative practitioners.

Overview

The Computational Arts MA/MFA at Goldsmiths is a practice-lead programme for artists, designers and creative technologists to develop practical skills in the fields of creative coding, physical computing and computational arts.

Students from all backgrounds are encouraged to be inventive, multidisciplinary and ambitious – writing code as a creative and critical practice, designing generative and interactive systems, building physical and networked objects, and developing hybrid practices across art, design, technology and culture. The computational arts field has transformed rapidly in recent years and our students are at the forefront of this cultural change, engaging with code, systems and emerging technologies as living materials for a creative practice that is critical, speculative, and deeply contemporary.

The programme is itself a multi-disciplinary research and postgraduate centre within the School of Computing. The programme brings together ideas and paradigms from computer science, art, design, and critical theory, giving the student technical fluency, critical frameworks, and historical grounding to develop new forms of practice at the edges of computation and culture. As a graduate, you will be equipped to move easily between disciplines – bridging art, design, technology, research and the broader creative industries.

At Goldsmiths we acknowledge that technology is never neutral- it is always embedded in human and more than human relationships, power structures and lived experience. The programme ensures you develop the critical awareness to engage not just with how technologies work, but who they work for, and who and what they affect. We believe it is vital to understand why we are using technology and the role it plays in the work we are creating. It is also important from an ethical point of view to understand the human and environmental

impacts of the technology we create so that the student can make sure their choices are considered and responsible. From the start of the first year in Computational Arts the student will be encouraged to think about the way they use technology and the data that underpins their practice. Throughout the degree the student will develop project work in which they will be asked to think about their use of technology and about the social, environmental and professional impacts of the work they are developing. The projects also afford an opportunity to apply skills in practice and develop the real-world skills that employers are looking for, beyond technical skills: developing innovative ideas, understanding the user experience or audience engagement, time management, presenting work to a professional standard and evaluating projects. By the end of the programme, the extensive technical knowledge and critical awareness the student has developed will position them as an inter-disciplinary creative practitioner.

The MA Computational Arts is a one-year programme offered across two pathways - Design and Creative Technology, and Arts and Practice Based Research – while the MFA Computational Arts is a two-year programme. Across the first two terms, MA and MFA students share a common foundation, moving through lectures, intensive practical workshops, and individual and group projects to build core programming skills and technical fluency. Through topics such as generative art, computer vision, artificial intelligence, and physical computing, students will develop highly specialised skills in creative computing within a collaborative and critically rigorous environment. Working across interactive systems, computational objects, connected devices, and designed experiences, they will learn to integrate these technologies into their creative practice in ways that are both technically sophisticated and critically informed.

Computational practice is not confined to screens. Supported by specialist technicians in state-of-the-art facilities, the student will work across a diverse range of media and fabrication technologies – from 3D printing and laser cutting to CNC milling and beyond – with code as the connective common thread running through everything they develop.

Alongside developing creative practice, the student will engage in seminars exploring contemporary debates across culture, art, design, science and technology. In the summer term, these seminars continue alongside crits and workshops, building the critical and contextual frameworks needed to develop ambitious work – culminating in an end-of-year showcase alongside written work that positions their practice within current theoretical and cultural debate.

The MA is a complete and rigorous programme of study, with graduates leaving at the end of year one fully qualified – having followed one of two specialist pathways: Design and Creative Technology, or Arts and Practice Based Research. The MFA extends this into the second year through increasingly independent practice – shaped by individual and group tutorials, Work In Progress shows, focused projects, and a final exhibition. Students are also encouraged to audit modules across the college, drawing on the full breadth of Goldsmiths' exceptional intellectual and creative community to inform creative practice.

3. External reference

Item	Information
a) FHEQ Level of Award:	7
b) UCAS Code(s):	N/A
c) HECoS Code(s):	(100366) Computer Science (101361) Creative arts and design
d) QAA Benchmark group:	Computing

4. Awards

Item	Information
a) Awarding institution:	University of London (Interim Exit Awards made by Goldsmiths' University)
b) Teaching institution:	Goldsmiths, University of London
c) Home School:	Computing If other, name here: N/A
d) School(s) also involved in teaching of the programme:	1. None 2. None 3. None If other, name here: N/A
e) Entry awards:	<input type="checkbox"/> DipHE <input type="checkbox"/> PGCert <input type="checkbox"/> PGDip <input checked="" type="checkbox"/> MA <input checked="" type="checkbox"/> MFA
f) Interim exit awards:	<input type="checkbox"/> DipHE <input checked="" type="checkbox"/> PGCert <input checked="" type="checkbox"/> PGDip <input checked="" type="checkbox"/> MA
g) Final awards:	PGCert Computational Arts – Design & Creative Technology Pathway PGDip Computational Arts – Design & Creative Technology Pathway MA Computational Arts – Design & Creative Technology Pathway PGCert Computational Arts – Arts & Practice Based Research Pathway PGDip Computational Arts – Arts & Practice Based Research Pathway MA Computational Arts – Arts & Practice Based Research Pathway MFA Computational Arts

5. Delivery

Item	Information
a) Language of study:	English
b) Valid intake points in year:	<input type="checkbox"/> January <input checked="" type="checkbox"/> Sept/Oct <input type="checkbox"/> Other If other, specify: N/A
c) Mode of study:	On Campus Indicate the overall balance of teaching modes in the rows below. Row d) shows total hours of directed learning, with e) and f) showing how this is broken down in in-person vs. online learning, in hours and percentages.

Item	Information	
d) Total hours directed learning for 2 year MFA	389	
e) In-person hours	389	100%
f) Online hours	0	0%
g) Pace of study:	<input checked="" type="checkbox"/> Full time <input checked="" type="checkbox"/> Part time	
h) Duration of programme	Full time: (MA) 1 year, (MFA) 2 <input checked="" type="checkbox"/> years <input type="checkbox"/> months Part time: (MA) 2 years, (MFA) 4 <input checked="" type="checkbox"/> years <input type="checkbox"/> months	
i) External accreditation:	N/A	
j) Apprenticeship Standard:	N/A	

6. Programme Learning Outcomes

Also, see the [curriculum map](#) at the end of document.

For UG exit awards, Learning Outcomes must be achieved in the level indicated below:

- CertHE = Level 4
- DipHE = Level 5

Learning outcomes are grouped in categories of:

- **Declarative learning** - knowledge, thinking & facts (D1-4)
- **Functional learning** - application of knowledge, thinking & facts (F1-4)
- **Professional and transferable skills and behaviours** (P1-4)

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

	Learning Outcome	Level	Graduate Attribute
D1	Demonstrate foundational knowledge in computational arts practices, including computational thinking, programming and algorithmic concepts, systems thinking and critical approaches to contemporary media, and creative technology.	7	Diversity of perspective
D2	Analyse and evaluate a wide range of computational methodologies, emerging technologies, infrastructures, artificial intelligence or data systems in relation to creative practice, cultural production, and ethical, social, and environmental contexts.	7	Diversity of perspective
D3	Synthesise computational, technical, and critical research methods in the conception and articulation of an	7	Collaboration

	Learning Outcome	Level	Graduate Attribute
	independent computational arts project intended for public engagement.		
D4	Critically formulate and defend an original artistic position within contemporary fine art discourse through advanced theoretical reflection, contextual research, and sustained critical analysis.	7	Political in the personal
F1	Apply foundational programming principles, computational methodologies, and digital or physical production techniques to the creation of critically aware creative computing projects.	7	Responsible agency
F2	Design, develop, and refine complex computational systems and creative projects through engagement with specialist areas of practice that combine technical approaches such as data-driven or algorithmic processes with artistic, performative, spatial, or interaction-led methodologies.	7	Responsible agency
F3	Integrate computational experimentation, technical implementation, audience engagement, and critical inquiry in the production and public presentation of a substantial computational arts project.	7	Collaboration
F4	Realise a coherent and critically resolved body of original fine art practice demonstrating advanced artistic, spatial, material, and curatorial awareness.	7	Responsible agency
P1	Communicate creative, computational, and research-based ideas effectively to a range of audiences through visual, verbal, written, and practice-based forms across interdisciplinary contexts.	7	Diversity of perspective
P2	Demonstrate reflective practice, independent learning, collaboration, and problem-solving skills within varied and evolving creative and technological project environments.	7	Responsible agency
P3	Plan, manage, document, and disseminate computational arts projects using professional methods appropriate to public presentation and audience engagement.	7	Collaboration
P4	Exercise professional autonomy and creative leadership as an artist-researcher through sustained studio practice, exhibition-making, critical dialogue, and engagement with contemporary fine art contexts.	7	Collaboration

7. Programme Structure

For Undergraduate programmes (UG), each level must amount to at least **120 CATS** (60 ECTS).

Postgraduate (PGT) programmes must amount to at least 180 CATS (90ECTS), with exception to interim exit awards.

Programmes are staged in **Phases**, where each Phase relates to an exit award.

Compulsory modules must be taken by all students.

Option modules – you must choose one or more of the options available to this programme at this level and point. The option modules available from this list may vary from year to year, depending on student numbers and staff availability. Selection takes place during your studies, not before.

Programme structure notes (where relevant):

MA Students will choose either the Design and Creative Technology pathway or the Practice Based Research pathway to follow.

MFA Year 1 students will all follow the MA Arts and Practice Based Research pathway modules in Phase 1-3 (Year 1 FT or Years 1 and 2 PT) of the programme.

There are no pathways in MFA Phase 4 (Year 2 FT or Years 3 and 4 PT) of the programme.

Option modules:

You take 60 credits of option modules in phase 2 and only MFA take 30 credits of option modules in year 2 phase 4.

- **Pathway 1:** Design & Creative Technology (DCT)
- **Pathway 2:** Arts & Practice Based Research, inclusive of MFA phase 1-3 students (APBR)
- **Pathway 3:** MFA phase 4, additional 2nd year of FT study (MFA Y2)

Phase 1 - FT Y1, PT Y1 (PGCert)

No option modules are offered to part-time students in their first year of study.

Module Name	Code	Credit	Level	Type	Term	Year PT	Pathway
Critical Practices in Creative Technology	TBC	30	7	Compulsory	1-2	Y1	DCT
Workshops in Creative Coding	IS71014	30	7	Compulsory	1-2	Y1	DCT
Computational Arts-based Research and Theory	IS71076	30	7	Compulsory	1-2	Y1	APBR

Module Name	Code	Credit	Level	Type	Term	Year PT	Pathway
Coding for Arts Practice	TBC	30	7	Compulsory	1-2	Y1	APBR

Phase 2 – FT Y1, PT Y2 (PGDip)

Compulsory modules listed in Phase 1 for FT Y1 as they span both terms 1 and 2. See table above.

Module Name	Code	Credit	Level	Type	Term	Year PT	Pathway
Option module	Various	15	7	Option - Shared	2	Y2	DCT, APBR
Option module	Various	15	7	Option - Shared	2	Y2	DCT, APBR
Option module	Various	15	7	Option - Shared	2	Y2	DCT, APBR
Option module	Various	15	7	Option - Shared	2	Y2	DCT, APBR

Term 1 – You may select two of the following option modules

Module Name	Code	Credit	Level	Type	Term	Year PT	Pathway
Generative Drawing	IS71084	15	7	Option - Shared	1	Y2	DCT, APBR, MFAY2
History of Computer Games, Art & Animation	IS74024	15	7	Option - Shared	1	Y2	DCT, APBR, MFAY2
Physical Computing 1	IS71102	15	7	Option - Shared	1	Y2	DCT, APBR, MFAY2

Hacking Your Creative Practice	IS71115	15	7	Option - Shared	1	Y2	DCT, APBR, MFAY2
Special Topics in Programming for Performance and Installation	IS71086	15	7	Option - Shared	1	Y2	DCT, APBR, MFAY2
Designing Interactions	TBC	15	7	Option - Shared	1	Y2	DCT, APBR, MFAY2
Poetic Machines	TBC	15	7	Option - Shared	1	Y2	DCT, APBR, MFAY2
Game Development 1	IS71112	15	7	Option - Shared	1	Y2	DCT, APBR, MFAY2
XR Development	TBC	15	7	Option - Shared	1	Y2	DCT, APBR, MFAY2

Term 2 - You may select two of the following option modules

Module Name	Code	Credit	Level	Type	Term	Year PT	Pathway
Experimental Computational Art	IS71139	15	7	Option - Shared	2	Y2	DCT, APBR, MFAY2
Physical Computing 2	IS71103	15	7	Option - Shared	2	Y2	DCT, APBR, MFAY2
Computational Form and Process	IS71085	15	7	Option - Shared	2	Y2	DCT, APBR, MFAY2
Advanced Audiovisual Processing	IS74017	15	7	Option - Shared	2	Y2	DCT, APBR, MFAY2
Data and Machine Learning for Artistic Practice	IS71074	15	7	Option - Shared	2	Y2	DCT, APBR, MFAY2
Extended Reality for Creative Practice	IS71105	15	7	Option - Shared	2	Y2	DCT, APBR, MFAY2
Audio Experience for Games	IS71122	15	7	Option - Shared	2	Y2	DCT, APBR, MFAY2
Escape Room Design and Immersive Theatre	IS71096	15	7	Option - Shared	2	Y2	DCT, APBR, MFAY2

Motion capture techniques and digital embodiment	IS71114	15	7	Option - Shared	2	Y2	DCT, APBR, MFAY2
Critical AI	IS71132	15	7	Option - Shared	2	Y2	DCT, APBR, MFAY2
Applied AI for Industry	IS71138	15	7	Option - Shared	2	Y2	DCT, APBR, MFAY2
Game Development 2	IS71113	15	7	Option - Shared	2	Y2	DCT, APBR, MFAY2
Networked Experiences	TBC	15	7	Option - Shared	2	Y2	DCT, APBR, MFAY2
Slow Computing	TBC	15	7	Option - Shared	2	Y2	DCT, APBR, MFAY2

Phase 3 - FT Y1, PT Y2 (MA)

Module Name	Module Code	Credit	Level	Module Type	Term	Year PT	Pathway
Final Project in Computational Arts	IS71020	60	7	Compulsory	3	Y2	DCT
Exhibition Project Computational Arts	TBC	60	7	Compulsory	3	Y2	APBR

Phase 4 – FT Y2, PT Y3 & Y4, (MFA)

Module Name	Module Code	Credit	Level	Module Type	Term	Year PT	Pathway
Studio Practice	IS72010	75	7	Compulsory	1-2-3	Y4	MFA Y2
Computational Arts Critical Studies	IS72011	60	7	Compulsory	1-2	Y3	MFA Y2

Curating Computational Art and Professional Development	IS71141	15	7	Compulsory	2-3	Y4	MFA Y2
Option module	Various	15	7	Option - Shared	1	Y3	MFA Y2
Option module	Various	15	7	Option - Shared	2	Y4	MFA Y2

Phase 4 - Option modules

Option modules in the MFA year can be chosen from both Phase 2 lists. Option modules should be made available to all MFA Phase 4 part-time Y3 and Y4 students.

8. Learning, Teaching & Assessment

Learning & Teaching methods

Teaching will be via a range of formats to be as relevant as possible to the topic and learning outcomes. This may be through workshops, practical labs, lectures and seminars. It may have a mix of in-person and online activities, designed to give you the best learning experience and to make the most out of your learning experience. You are expected to attend all of your timetabled learning activities.

Specifically, this programme will be taught in the following ways:

Year 1

MA Computational Arts students select one of two pathways that determine which year one core modules students take, MFA follow the Arts and Practice-Based Research pathway. All students select additional option modules, the same selection of modules are available to all Computational Arts students.

MFA Computational Arts Year 1 & MA Computational Arts: Arts and Practice-Based Research Pathway

The Arts and Practice-Based Research Pathway is tailored for arts practitioners who wish to explore computation through a critical, conceptual, and practice-based lens. Engagement with code, computation, and emerging technologies will be centred around individual practice and contextualised within wider societal and contemporary art discourse. The pathway develops an in-depth examination of the concepts that underpin computational art and research, exploring the aesthetic, epistemological, and political questions encountered at the intersection of computation, artistic practice, experimentation, and research. Asking questions such as: How can computation be considered an artistic ‘medium’ - a poetic material in its own right? What constitutes ‘practice’ in the contemporary techno-epistemological environment? This pathway supports both individual and collaborative practice-based arts research, and encourages experimental, cross-disciplinary work that seeks to expand the boundaries of what art can be in a computational context, querying the authority of existing conceptual frameworks.

MA Computational Arts: Design & Creative Technology Pathway

The Design and Creative Technology Pathway explores the dynamic interplay between art and design, computation, and critical thinking to equip students for leading roles in the Creative Industries, including games, immersive media, experience design, and digital advertising. It supports the development of technically skilled, ethically aware, and conceptually grounded designers and creative technologists. Rooted in a research-led, practice-based environment, the student will deploy a range of prototyping methodologies across art and design research-practice to produce innovative responses to contemporary challenges. Students will be encouraged to think through questions around how speculative and critical design approaches might help us reimagine our relationships with technology and the ethical implications of working with data, algorithms, and automation in creative contexts. Practitioners will respond to real and speculative briefs through collaborative and individual projects, working from ideation to implementation, and developing the ability to evaluate and communicate their outcomes across professional and academic settings. The pathway supports a reflective and critical research practice that prepares graduates to lead and innovate in the rapidly evolving field of creative technology—with the awareness that creative computation is never neutral, and technology is a complex system of critical influence.

What you will learn:

The first year consists of taught courses each of which has an end of term project and a range of activities to support your learning. The purpose of year one is to hone technical skills using state-of-the-art techniques and tools and to begin the directed study of critical issues that impact creative practice, computational systems, and the correlation between the two.

You will have lectures, labs and seminars with a series of tutors for three or four days a week depending on your timetable. You will work with open-source programming environments such as p5.js, Processing and Arduino. You will learn how to program in languages such as Python, Javascript, C++ or C#. You will have the opportunity to work with creative computing software like Touch Designer, MaxMSP or Game Engines, where you can learn visual or node-based programming. You will also learn basic physics and electronics in order to design and build interactive physical devices.

As part of the compulsory modules, you will be introduced to programming and creative computation; you study generative art, sound synthesis and you develop your own software to manipulate images and video. You will also be introduced to more advanced topics in computational art such as systems complexity, computer vision, communication protocols for making networked experiences, Artificial Intelligence (AI) and other advanced topics to broaden your expertise and skillset. You will be introduced to working with physical hardware and sensors to make interactive work. We encourage students to produce works across a diverse range of media. Supported by studio technicians in state-of-the-art facilities, our students also produce physical objects using tools such as 3D printers, laser cutters, CNC mills and other fabrication technologies.

While sharpening your technical skills you will take part in a series of computational arts research and theory seminars followed by tutorial sessions on theoretical, computational, and cultural concepts. Seminar topics include: Critical Theory, Feminist Technoscience, Science and Technology Studies, Data Practices, Computational Aesthetics, Ubiquity, Materiality, Speculation, Science Fiction, Post-colonial Computing.

You will also be able to pick from a selection of option modules that provide a range of specialist knowledge and methods in computational art. Examples might include, but are not limited to, modules such as:

- Generative Drawing
- Computational Form and Process – 3D graphics
- Physical Computing – including sculptural and digital fabrication
- Data and Machine Learning for Artistic Practice – topics such as Generative AI
- Critical AI
- Poetic Machines – Natural Language Processing and writing practices
- Special Topics in Programming for Performance and Installation – audio-visual work
- Advanced Audio-visual Processing
- Slow Computing – reimagining what computing could be, such as small compute, degrowth-, feminist- and perma-computing
- Extended Reality for Creative Practice
- Game Development – using Game Engines
- Motion Capture and Digital Embodiment
- Escape Rooms and Immersive Theatre

On days when you are not taught, you are encouraged to develop your creative practice and use other technical resources, both independently or collaboratively on group work.

During the summer you will participate in MA/MFA only seminars, critique sessions, and masterclasses, providing you with support and ensuring that by the end of the programme you will have developed high-quality creative work (as part of your final showcase). We regularly invite world-class artists, creative technologists and curators to explain their work and engage in critical dialogue with the students. This allows students to develop a wider understanding of contemporary arts and creative technology fields and how their work sits within these professional contexts. Finally, social events, like trips to galleries, local cultural spaces and participation in hackathons offer the opportunity to students to further debate contemporary issues in computational arts and train themselves technically.

Graduating at the end of year 1 secures you an MA Computational Arts.

MFA Year 2

The work is done in small seminars and studio-based teaching—but you will be encouraged to take much more responsibility for your own work. By the end of the first year, you will have developed a plan for your main second year exhibition project and you will get appropriate level of supervision.

Your final MFA exhibition will be informed by some of the theoretical considerations discussed in seminars and studio-practice sessions. You will engage with curation and professional development for practicing artists. You will also write an essay that engages in the cultural and historical context of your work.

In addition to core modules, year two students can take two more option modules and are encouraged to audit any class offered by the department or Goldsmiths in general.

Assessment modes and approaches

You will be assessed in a range of ways throughout your course. These will be both Formative (for feedback and development), and Summative (required to pass and progress to the next level). Summative assessments are compulsory.

Feedback is a crucial part of your learning and development in this programme. You will receive feedback both on your Formative (work in progress) tasks/assessments, and your Summative (graded) assessments. This feedback will help the assessment to be a part of your learning, not just a test. It may be verbal, written or video based. Please engage with this feedback to improve your future work.

Specifically, this programme will be assessed in the following ways:

See above.

Assessment diet (number of assessments for compulsory modules)

The Assessment diet below is for the full two years of study on the MFA. On the one year MA compulsory modules you have a total of 5 assessments: 2 Courseworks, and 3 Live assessments, 4 of which are individual assessments and 1 a group assessment.

Mode	Level 3	Level 4	Level 5	Level 6	Level 7	Total
Coursework	N/A	N/A	N/A	N/A	2	2
Exam	N/A	N/A	N/A	N/A	0	0
Live	N/A	N/A	N/A	N/A	6	6
Portfolio (multi-modal)	N/A	N/A	N/A	N/A	1	1
Practical / multimedia	N/A	N/A	N/A	N/A	1	1
Written	N/A	N/A	N/A	N/A	2	2
TOTAL:	0	0	0	0	12	12
Of which...	Individual:	11	Group:	1		

9. Other information

Item	Information
a) Assessment regulations	https://www.gold.ac.uk/gam/taught-programmes/assessment/
b) Placement opportunities	N/A
c) Programme-specific requirements	Year 2 (2nd year MFA only): In order to progress to the 2nd year and the MFA assessment, students must fulfil the requirements for a pass at MA level (pass all 120 credits of taught modules plus the 1st year studio project of 60 credits). Students who fail one module in year one may progress to year two and re-sit that module in the second year.
d) Programme specific costs and resources	N/A
e) Employability and potential career opportunities	<p>Our programme opens multiple career options including:</p> <ul style="list-style-type: none"> • Solo artists/performers working independently and responding to commissions. • Creative technologist in digital/creative agencies. • Software developer in creative industries. • Educator in creative computing at all levels. • Technicians in arts/computing/digital fabrication environments. • Postgraduate Researchers. <p>Students are supported from the start to the finish of this programme in order to understand the different potential career journeys they can follow and to build a portfolio of work to demonstrate their capability to gain employment or freelance work in that area. Assessment has been designed to facilitate this process through the development of transferable or soft skills listed in the section above. Regular guest lectures from industry support the development of sector knowledge and awareness of different career paths.</p> <p>The Department's External Advisory Board ensures relevance of all our programmes to the current and future needs of employers. All programmes are designed in consultation with employers to make sure you develop transferable skills to improve your career opportunities and you will be applying your skills to real-world problems through live project briefs and group projects. The board and other employers attend showcase events where you can present your ideas, get feedback and build important connections.</p> <p>We have dedicated employability resource within the department to build employer relations and manage additional initiatives to support your future career opportunities, including regular communication of external opportunities for mentoring and work experience and an annual</p>

Item	Information
	Career week (a focussed week of career support every June in the department where you can access alumni panels by programme and a range of industry talks).

10. Academic support

There is a range of support available to you to give you the best possible chance of success in this programme.

Please see your tutors and student portal/VLE for details of what's available and how to access this support.

11. Curriculum map

Programme Learning Outcomes assessed by each module:

Module name	Code	Type	D 1	D 2	D 3	D 4	F 1	F 2	F 3	F 4	P 1	P 2	P 3	P 4
Critical Practices in Creative Technology		Compulsory	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Workshops in Creative Coding	IS71014	Compulsory	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Computational Arts-based Research and Theory	IS71076	Compulsory	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Coding for Arts Practice		Compulsory	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Generative Drawing	IS71084	Option - Shared	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Physical Computing 1	IS71102	Option - Shared	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Special Topics in Programming for Performance and Installation	IS71086	Option - Shared	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Poetic Machines		Option - Shared	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Game Development 1	IS71112	Option - Shared	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
XR Development		Option - Shared	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Hacking Your Creative Practice	IS71115	Option - Shared	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
History of Computer Games, Art & Animation	IS74024	Option - Shared	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Designing Interactions		Option - Shared	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Experimental Computational Art	IS71139	Option - Shared	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Physical Computing 2	IS71103	Option - Shared	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Computational Form and Process	IS71085	Option - Shared	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Module name	Code	Type	D 1	D 2	D 3	D 4	F 1	F 2	F 3	F 4	P 1	P 2	P 3	P 4
Advanced Audiovisual Processing	IS74017	Option - Shared	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Data and Machine Learning for Artistic Practice	IS71074	Option - Shared	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Extended Reality for Creative Practice	IS71105	Option - Shared	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Audio Experience for Games	IS71122	Option - Shared	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Escape Room Design and Immersive Theatre	IS71096	Option - Shared	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Motion capture techniques and digital embodiment	IS71114	Option - Shared	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Critical AI	IS71132	Option - Shared	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Applied AI for Industry	IS71138	Option - Shared	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Game Development 2	IS71113	Option - Shared	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Networked Experiences		Option - Shared	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Module name	Code	Type	D1	D2	D3	D4	F1	F2	F3	F4	P1	P2	P3	P4
Slow Computing		Option - Shared	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Final Project in Computational Arts	IS71020	Compulsory	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Computational Arts-based Research and Theory	IS71076	Compulsory	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Studio Practice	IS72010	Compulsory	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Computational Arts Critical Studies	IS72011	Compulsory	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Curating Computational Art and Professional Development	IS71141	Compulsory	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

