

# ACADEMIC SERVICES

# PROGRAMME SPECIFICATION

| Part 1: Basic Data                                 |  |                          |                |  |  |  |  |
|--|--|--------------------------|----------------|--|--|--|--|
| Awarding Institution                               | UWE  |                          |                |  |  |  |  |
| Teaching Institution                               | UWE  | UWE                      |                |  |  |  |  |
| Delivery Location                                  | UWE Frenchay Cam                                     | pus                      |                |  |  |  |  |
| Study abroad / Exchange / Credit recognition       |  |                          |                |  |  |  |  |
| Faculty responsible for programme                  | Faculty of Environme                                 | ent and Ted              | chnology (FET) |  |  |  |  |
| Department responsible for programme               | Computer Science a                                   | nd Creative              | e Technologies |  |  |  |  |
| Modular Scheme Title                               |  |                          |                |  |  |  |  |
| Professional Statutory or<br>Regulatory Body Links |  |                          |                |  |  |  |  |
| Highest Award Title                                | MSc Creative Technology                              |                          |                |  |  |  |  |
| Default Award Title                                |  |                          |                |  |  |  |  |
| Fall-back Award Title                              | N/A  |                          |                |  |  |  |  |
| Interim Award Titles                               | PGDip Creative Technology PGCert Creative Technology |                          |                |  |  |  |  |
| UWE Progression Route                              | N/A  |                          |                |  |  |  |  |
| Mode(s) of Delivery                                | FT PT  |                          |                |  |  |  |  |
| Codes  | UCAS: I9W91<br>ISIS2:                                |                          | JACS:<br>HESA: |  |  |  |  |
| Relevant QAA Subject<br>Benchmark Statements       |  |                          |                |  |  |  |  |
| First Approval Date                                | 31 January 2017                                      | Valid from               | Sept 2017      |  |  |  |  |
| Revision Approval Date                             | 26 June 2018 v2                                      | Revised with effect from | Sept 2018      |  |  |  |  |
| Version  | 2  |                          |                |  |  |  |  |

## Part 2: Educational Aims of the Programme

The broad educational aims of the programme are to:

- provide an intellectual experience and advanced study for creative technologists, underpinned by staff expertise, cutting-edge research, industrial links and experience
- develop deep and broad theoretical knowledge with practical and analytical abilities within a stimulating and challenging academic environment, informed by creative technologies research and enterprise
- develop the necessary reflective and evaluative skills required to undertake independent research and continuing professional development
- enhance written and verbal communication skills to engage confidently and fluently within academic and professional creative technologies contexts
- enhance technical and creative practice and the ability to work with stakeholders to formulate solutions and deliver projects to deadlines

Further, specific aims of the programme are to:

- provide a grounding in salient theories and technologies of the creative technologies
- provide up-to-date exposure to contemporary tools and methods
- balance the emphasis between core sector competencies and generic skills enabling the successful development, evaluation and communication of creative technologies
- Involving practitioners and subject-matter experts in teaching and assessment
- Linking computer science and technology with creative process and practice
- Exposure to a range of career options afforded by the specialization
- Expose students to the processes of both formal academic research and industrial practice within the creative technologies arena

# Programme requirements for the purposes of the Higher Education Achievement Record (HEAR)

The programme enables postgraduate students to apply intellectual, critical, technical and key transferable skills necessary to work in an area related to creative technology.

A successful graduate will be highly analytical and strategic with advanced communications skills enabling them to articulate their knowledge in the context of new media technology. On completion, graduates will be effective, independent life-long learners with a collaborative approach that makes them an active and productive team member.

# Part 3: Learning Outcomes of the Programme

The award route provides opportunities for students to develop and demonstrate knowledge and understanding, qualities, skills and other attributes in the following areas:

|   | UFCFJK-30-M | UFCFKK-30-M | UFCFMK-15-M | UFCFNK-15-M | UFCFLK-60-M | UFCFLJ-15-M | UFCE8J-15-M | UFCFMJ-15-M | UFCFL6-15-3 | UFCFV3-15-3 |         |
|---|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|---------|
| Learning Outcomes:  | UFCF        | UFCF        | UFCF        | UFCF        | UFCF        | UFCF        | UFCE        | UFCF        | UFCF        | UFCF        |         |
| A) Knowledge and understanding of:  |             |             |             |             |             |             |             |             |             |             |         |
| Issues, trends and developments within this rapidly emerging and evolving domain  | Х           | Х           |             |             | Х           | Χ           | Χ           | Χ           | Χ           | Χ           | χ       |
| The role, function, implementation and integration of a broad range of creative technology systems, including audio and visual methods and their coalescence in games and digital media | Х           | Х           | Х           | Х           | Х           | Χ           | Χ           |             | Х           | Χ           | >       |
| Creative technology systems design development and evaluation including hardware, software, testing, profiling, debugging and optimisation across multiple platforms                    | Х           | Х           |             | Х           | Х           | Χ           | Χ           | Χ           | Х           |             |         |
| Personal and collaborative, project management including interdisciplinary stakeholder engagement and deployment process  | Х           |             |             |             | Х           |             | Χ           | Х           | Х           |             | )       |
| User-centred approaches to interaction design   | Х           | Х           |             |             | Х           | Χ           | Χ           | Χ           |             |             |         |
| (B) Intellectual Skills   |             |             |             |             |             |             |             |             |             |             |         |
| Interdisciplinary and collaborative engagement skills including user requirements analysis and capture  | Х           | Х           |             |             | Х           | Χ           | Χ           | Х           | Х           | Χ           |         |
| Development of qualitative and quantitative research and data analysis methods  | Х           |             | Х           |             | Х           |             | Χ           |             |             |             | <u></u> |
| Communication in academic and industrial contexts to engage with and promote scholarship  | Х           | Х           | Х           | Х           | Х           | ,           |             |             |             |             |         |
| Finding, analysing, synthesising, evaluating, abstracting and summarising information   | Х           | Х           | Χ           |             | Х           | Χ           | Χ           | Χ           | Χ           | Χ           |         |
| Appreciating problem contexts and balancing conflicting objectives  | Х           | Х           | Χ           | Χ           | Х           | Χ           | Χ           | Χ           | Χ           | Χ           |         |
| Creativity and innovation   | X           | Χ           |             | Χ           | Χ           |             | Χ           | ļ           | Χ           | Χ           |         |
| C) Subject/Professional/Practical Skills  |             |             |             |             |             |             |             |             |             |             |         |
| Pragmatic approaches to software, design, development and prototyping   | Х           | X           |             |             |             | Χ           | Χ           | Χ           | ļ           |             |         |
| The ability to evaluate, compare, apply and creative audio, visual and web based technologies to a brief  |             |             |             |             | Х           | Χ           | Χ           | Χ           |             |             |         |
| Experience of Interdisciplinary, academic and industrial liaison between stakeholders in creative technology projects   |             |             |             |             | Х           |             | Χ           | Χ           | Χ           | Χ           |         |
| Creative technologies project lifecycle   | Х           |             |             |             | Х           | Χ           | Χ           |             | Χ           |             |         |
| D) Transferable skills and other attributes   |             |             |             |             |             |             |             |             |             |             |         |
| Self-, project-, time-, expectation-management  | Х           | Χ           | Х           | Х           | Χ           | Χ           | Χ           | Χ           | Χ           | Χ           | ļ       |
| Vritten and verbal communication with sympathetic awareness of diverse audiences  | Х           | Χ           | Х           |             | Χ           | Χ           | Χ           | <b> </b>    | Χ           | Χ           | ļ       |
| Leadership and team working including, negotiation, exercising initiative, responsibility and decision-making   |             | Χ           |             |             |             |             | X           |             | <b> </b>    |             |         |
| CT, communication and people-networking skills  |             | Х           | Х           |             | Х           | Х           | Χ           | Χ           | Χ           | Χ           |         |

| Part 3: Learning Outcomes of the Programme                   |   |   |   |   |   |  |  |  |
|--|---|---|---|---|---|--|--|--|
| Continuing professional development and independent learning | х | х | х | х | Х |  |  |  |
|  |   |   |   |   |   |  |  |  |
|  |   |   |   |   |   |  |  |  |
|  |   |   |   |   |   |  |  |  |
|  |   |   |   |   |   |  |  |  |

## Part 4: Student Learning and Student Support

# Teaching and learning strategies to enable learning outcomes to be achieved and demonstrated

At UWE, Bristol there is a policy for a minimum average requirement of 12 hours/week contact time over the course of the full postgraduate programme. This contact time encompasses a range of face: face activities as described below. In addition a range of other learning activities will be embedded within the programme which, together with the contact time, will enable learning outcomes to be achieved and demonstrated.

On the Creative Technology programme teaching is a mix of scheduled, independent and (optionally) placement learning. Students will undertake individual and group learning in scheduled contact sessions and in self\_directed working. They will work with a mixture of internal academic staff, visiting specialists and industry representatives.

**Scheduled learning** include lectures, seminars, tutorials, project supervision, demonstration, practical classes and workshops; fieldwork; external visits; supervised time in studio/workshop. Scheduled sessions may vary slightly depending on the module choices made.

**Independent learning** includes hours engaged with essential reading, case study preparation, group work, assignment preparation and completion etc. Scheduled sessions may vary slightly depending on the module choices made.

**Placement learning**: may include a practice placement in an associated specialist academic or industrial environment. Short (2-6 week) placement opportunities will be supported with academic, research or industrial partners for students pursuing specific topics or areas of interest.

Visits and opportunities: will include trips and visits to related industry and academic events and conferences. These include opportunities to visit international conferences such as Transmediale (Berlin), NordiCHI (Sweden), BCS EVA(London) and practice related and industrial events such as CTM(Berlin), Ars Electronica (Linz), SONAR (Barcelona) and MozFest (London) amongst others.

**Extra Curricular activities:** Regular engagement in local extra-curricular industrial and practice related activities are supported and encouraged, including Bristol Pervasive Media Studio, Bristol Games HUB, Bristol Web Folk, Bath Camp and Bristol HackSpace.

# Description of the teaching resources provided for students

Students will have full access to comprehensive computer labs, open workshops, specialist audio and video facilities. In addition there will be a range of additional technologies and equipment available ranging from audio and video equipment to experimental digital hardware. Students will also have access to the full learning resources from the Library. Individual modules will provide teaching materials as appropriate including online and printed texts, reading lists, slidesets, example code and design materials, video recordings and presentations in addition to online resources

## **Description of any Distinctive Features**

The programme combines research, practice and industrial relevance in a group and individual project orientated structure. Engagement with external communities of researchers

# Part 4: Student Learning and Student Support

and practitioners with support for trips, visits and placements make this programme stand out as a vehicle for post graduate learners to engage and refine their skills and practice in a real world context.

#### Part 5: Assessment

A: Approved to University Regulations and Procedures

# **Assessment Strategy**

Assessment strategy to enable the learning outcomes to be achieved and demonstrated is based on a variety of means:

- Written assessments will take a variety of forms including academic and industry research papers; design, process and development documentation; and reflective individual reports; culminating in the individual written dissertation report.
- Creative technology development skills will be assessed through methods including demonstration of systems and prototypes, interrogation of program code and QA testing, logged use of development repositories and collaborative project management environments.
- Oral presentation skills will be assessed through a range of presentations, viva examination and poster sessions.

Formative assessment will include iterative design and development processes drawn from creative technologies practice. Students will be expected to iteratively demonstrate, evaluate, and reflect on practical, written work with peers, academics and, if applicable, other stakeholders. These activities will be designed to enhance academic performance, practitioner craft and onward trajectory.

The range of assessments methods is designed to:

- Identify students' learning strengths and weaknesses, and individual development needs.
- Engage students in a range of formative and summative assessment methods relevant in the development of both professional and academic identities.
- Expose students to a variety of assessments to promote inclusive learning.
- Encourage and students to move dynamically between theory and practice, with each informing the other.
- Develop students' effectiveness in working independently and as part of a group.
- Encourage students to develop a deep approach to learning.
- Allow students to effectively demonstrate their learning as measured against learning outcomes and professional competency.

# Part 6: Programme Structure

This structure diagram demonstrates the student journey from Entry through to Graduation for a typical **full time student** and **part time student**, including: level and credit requirements, interim award requirements, module diet, including compulsory

and optional modules

#### **Full Time Track**

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|-------------|-------------|---|---|---|
| ENTRY       |             | Compulsory Modules  | Optional Modules (Students select 30 credits from either Group 1 OR Group 2)  | Interim Awards  |
| •           | Year 1 (FT) | UFCFJK-30-M Creative Technologies Toolkit  UFCFKK-30-M Creative Technologies Research and Practice  UFCFMK-15-M Creative Technologies Research  UFCFNK-15-M Digital Connections  UFCFLK-60-M Creative Technology Dissertation | Group 1 OR Group 2)  Group 1  UFCFLJ-15-M  Linked, Open Data and the Internet of Things  UFCE8J-15-M  Designing the User Experience  UFCFMJ-15-M  Machine learning and predictive analytics  Group 2  UFCFL6-15-3  Sonic Art  UFCFV3-15-3  Advanced Performance | PGCert Creative Technology (60CR with a minimum of 40CR at Level M)  PGDip Creative Technology (120CR with a minimum of 80 CR at Level M))  MSc Creative Technology (180 credits with a minimum of 120 CR at Level M) |
|             |             |   | Advanced composition 2  |   |

**GRADUATION** 

| Part Time Structure | Part | Time | Stru | cture |
|---------------------|------|------|------|-------|
|---------------------|------|------|------|-------|

| Part Time | Struc       | cture  |   |   |
|-----------|-------------|--|---|---|
| ENTRY     |             | Compulsory Modules   | Optional Modules<br>(Students select 30<br>credits from either<br>Group 1 OR Group 2) | Interim Awards  |
|           |             | UFCFMK-15-M<br>Creative Technologies<br>Research<br>UFCFJK-30-M            | Group 1 UFCFLJ-15-M Linked, Open Data and the Internet of Things                      | PGCert Creative<br>Technology (60CR,<br>with a minimum of<br>40CR at Level M) |
|           | (PT)        | Creative Technologies Toolkit  UFCFNK-15-M                                 | UFCE8J-15-M Designing the User Experience   |   |
|           | Year 1 (PT) | Digital Connections  | UFCFMJ-15-M<br>Machine learning and<br>predictive analytics                           |   |
| ¥         |             |  | Group 2<br>UFCFL6-15-3<br>Sonic Art   |   |
|           |             |  | UFCFV3-15-3<br>Advanced Performance   | PGDip Creative<br>Technology (120CR,<br>with a minimum of                     |
|           |             | UFCF9H-15-3<br>Advanced composition 2                                      |   | 80 CR at Level M)   |
|           |             | UFCFKK-30-M  | Croup 1   |   |
|           |             | Creative Technologies  | Group 1<br>UFCFLJ-15-M  |   |
|           |             | Research and Practice  | Linked, Open Data and   | MSc Creative  |
|           |             | UFCFLK-60-M  | the Internet of Things  | Technology (180 credits with a  |
|           |             | Creative Technology Dissertation  UFCE8J-15-M Designing the Use Experience |   | minimum of 120 CR<br>at Level M)  |
|           | Year 2 (PT) |  | UFCFMJ-15-M<br>Machine learning and<br>predictive analytics                           |   |
|           | λ,          |  | Group 2<br>UFCFL6-15-3<br>Sonic Art   |   |
|           |             |  | UFCFV3-15-3<br>Advanced Performance   |   |
|           |             |  | UFCF9H-15-3<br>Advanced composition 2   |   |
| CBADIIA   |             | <u> </u>   | / lavarioca composition Z   |   |

# **Part 7: Entry Requirements**

Typically applications require a relevant honours degree of 2:2 or above in a relevant discipline. Additionally, applicants will require knowledge and experience of computing and programming, either from a degree or equivalent work or voluntary experience, which should be outlined in the application.

Applicants without the normal entry requirement who do have relevant experience or qualifications may also apply outlining explicitly any relevant professional experience and qualifications in their application.

Applicants may be required to attend interview.

Up-to-date entry requirements are available through the postgraduate courses database.

#### Part 8: Reference Points and Benchmarks

Description of **how** the following reference points and benchmarks have been used in the design of the programme:

## QAA UK Quality Code for HE

National qualification framework

Subject benchmark statements

Qualification characteristics for Foundation degrees and Master's degrees (if applicable)

## University strategies and policies

Staff research projects

Any relevant PSRB requirements

Any occupational standards

Reference should be made to the graduate outcomes identified in the <u>QAA-HEA</u> <u>Guidance</u>

In designing this programme, the following external reference points and benchmarks have been used:

- QAA UK Quality Code for HE
  - National qualification framework
  - Subject benchmark statement Master's in Computing
  - QAA Master's degree characteristics
- University strategies and policies
- Industry consultation & external academic advice
- Academic services
  - o Careers / library

The design of this programme, and its associated module specifications, aims to address skills shortages in the creative technologies industry in the UK and, in particular, the South West tech corridor. This shortage has been identified as a significant barrier to growth within industry reports (NESTA, Skillset, TechCity), PSRB educational advisor / external academics, and range of industry professionals and collaborators. The MSc will be closely allied with the CSCT enterprise studios PlayWest and Impulse, hosting commercial creative technologies development projects, as well as innovative cross-disciplinary research and development work, to break new ground in UWEs postgraduate provision and to ensure that the curriculum and syllabus is informed by industry demands.

#### Part 8: Reference Points and Benchmarks

The programme structure and design is informed by QAA recommendations incorporating a range of learning, teaching and assessment methods to prepare students for immediate entry to further study or employment. Aims and learning outcomes of the programme and modules have been explicitly designed to align with Master's level study as defined within the FHEQ / SEEC descriptors and the QAA qualification characteristics for Master's degrees, matching vocabulary where possible to make these links particularly clear. While no subject specific benchmark exists for Creative Technology, strong correlation has been ensured with aspects of the SBS for Master's degrees in Computing. The ambitions of the programme closely matches those of the wider University; particularly in providing outstanding and innovative learning opportunities to breed ready and able graduates; in establishing new avenues for Creative Technologies research.

What methods have been used in the development of this programme to evaluate and improve the quality and standards of learning? This could include consideration of stakeholder feedback from, for example current students, graduates and employers.

- Employer / industry input / academic research community / feedback\*
- Current student / alumni consultation\*
- External academic / PSRB input / feedback\*

# FOR OFFICE USE ONLY

| First CAP Approva             | al Date | 31 Janua | ary 2017 |     |  |
|-------------------------------|---------|----------|----------|-----|--|
| Revision CAP<br>Approval Date | 26 Jun  | e 2018   | Version  | 1 2 | Link to MIA (ID 3325)<br>Link to RIA-12678 (ID 4817) |
| Next PER due date             |         |          |          |     |  |
| Date of last PER              |         |          |          |     |  |