

# BSc (Hons) Computer Animation and Visual Effects

# **Programme Specification**

#### **Primary Purpose**

Course management and quality assurance.

#### **Secondary Purpose**

Detailed information for students, staff and employers. Current students should refer to the related Course Handbook for further detail.

#### **Disclaimer**

The University of Portsmouth has checked the information given in this Programme Specification. We will endeavour to deliver the course in keeping with this Programme Specification; however, changes may sometimes be required arising from annual monitoring, student feedback, review and update of units and courses. Where this activity leads to significant changes to units and courses, there will be prior consultation of students and others, wherever possible, and the University will take all reasonable steps to minimize disruption to students. It is also possible that the University may not be able to offer a unit or course for reasons outside of its control, for example; the absence of a member of staff or low student registration numbers. Where this is the case, the University will endeavour to inform applicants and students as soon as possible. Where appropriate, the University will facilitate the transfer of affected students to another suitable course.

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# **Course Details**

#### 1. Named Awards

BSc (Hons) Computer Animation and Visual Effects BSc (Hons) Computer Animation

# 2. Course Code (and UCAS Code if applicable)

C2700S (II15) C1555S

3. Awarding Body University of Portsmouth

# 4. Teaching Institution

University of Portsmouth

## 5. Accrediting Body

Joint Audio Media Education Support (JAMES)

## 6. QAA Benchmark Groups

Computing 2016 Art and Design 2016 History of Art, Architecture and Design 2016

#### 7. Document Control Information

Version 3, September 2017

# 8. Effective Session

2017/2018

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**10. Faculty** Creative and Cultural Industries

# **11. Department** School of Creative Technologies

# <u>Curriculum</u>

## **12. Educational Aims**

The BSc (Hons) Computer Animation and Visual Effects Programme:

Aims to equip students to work as practitioners in the artistic and technical aspects of computer animation and visual effects production industries and management as well as providing a broad based experience of the subject and prepare them for postgraduate study. In addition, and more generally, the course aims to:

- Provide a challenging, stimulating and self-rewarding study environment.
- Enable students to broaden their studies, at Levels 4, 5, and 6.
- Develop a range of key skills by means of opportunities provided in the study units.
- Accommodate student needs in relation to maximising their career potential by enabling them to develop knowledge, understanding and skills in their chosen subject area.
- Promote career aspirations by including study topics on general professional practice and study skills.

#### **13. Reference Points**

The major reference points are:

- University of Portsmouth Curriculum Framework Document;
- Subject Benchmark Statements;
- National Qualification Framework;
- The UK Quality Code for Higher Education.

In particular the programme has been designed with the following benchmark elements in mind: **Computing (CP)** - Hardware and networks, graphics processing, object libraries, visual modelling techniques and algorithms, programming, image processing, animation and manipulation of images,

techniques and algorithms, programming, image processing, animation and manipulation of images, information content, class definitions, scripting, video images, representation and storage, data transmission and digital forms and tool support. **Art and Design and History of Art, Architecture and Design (A)** - generate ideas independently

Art and Design and History of Art, Architecture and Design (A) - generate ideas independently and/or collaboratively in response to set briefs. Articulate and synthesise knowledge and understanding, attributes and skills in effective ways in the context of creative practice. Apply learning in different contextual frameworks and situations. Manage and exploit the interaction between intention, process, outcome, context, and the methods of dissemination. Research and information retrieval skills. Apply resourcefulness and entrepreneurial skills to support their own practice, or the practice of others. Explore the designer's relationship with audiences, clients, markets and/or participants. Employ self-management skills to set goals, manage workloads, meet deadlines and anticipate and accommodate change. Employ critical awareness through reflection, review and evaluation and identify personal strengths and needs. Articulate ideas and information comprehensively in visual, oral and written forms.

#### 14. General Learning Outcomes

#### Level 4

Certificates of Higher Education are awarded to students who have demonstrated:

- knowledge of the underlying concepts and principles associated with their area(s) of study, and an ability to evaluate and interpret these within the context of that area of study
- an ability to present, evaluate and interpret qualitative and quantitative data, in order to develop lines of argument and make sound judgements in accordance with basic theories and concepts of their subject(s) of study

Typically, holders of the qualification will be able to:

- evaluate the appropriateness of different approaches to solving problems related to their area(s) of study and/or work
- communicate the results of their study/work accurately and reliably, and with structured and coherent arguments
- undertake further training and develop new skills within a structured and managed environment

And holders will have:

• the qualities and transferable skills necessary for employment requiring the exercise of some personal responsibility

#### Level 5

Diplomas in Higher Education are awarded to students who have demonstrated:

- knowledge and critical understanding of the well-established principles of their area(s) of study, and of the way in which those principles have developed
- ability to apply underlying concepts and principles outside the context in which they were first studied, including, where appropriate, the application of those principles in an employment context
- knowledge of the main methods of enquiry in the subject(s) relevant to the named award, and ability to evaluate critically the appropriateness of different approaches to solving problems in the field of study
- an understanding of the limits of their knowledge, and how this influences analyses and interpretations based on that knowledge

Typically, holders of the qualification will be able to:

- use a range of established techniques to initiate and undertake critical analysis of information, and to propose solutions to problems arising from that analysis
- effectively communicate information, arguments and analysis in a variety of forms to specialist and non-specialist audiences, and deploy key techniques of the discipline effectively
- undertake further training, develop existing skills and acquire new competences that will enable them to assume significant responsibility within organisations

And holders will have:

• the qualities and transferable skills necessary for employment requiring the exercise of personal responsibility and decision-making

#### Level 6

Bachelor's degrees/Bachelor's degrees with honours are awarded to students who have demonstrated:

- a systematic understanding of key aspects of their field of study, including acquisition of coherent and detailed knowledge, at least some of which is at, or informed by, the forefront of defined aspects of a discipline
- an ability to deploy accurately established techniques of analysis and enquiry within a discipline
- conceptual understanding that enables the student:
  - to devise and sustain arguments, and/or to solve problems, using ideas and techniques, some of which are at the forefront of a discipline
  - to describe and comment upon particular aspects of current research, or equivalent advanced scholarship, in the discipline
- an appreciation of the uncertainty, ambiguity and limits of knowledge
- the ability to manage their own learning, and to make use of scholarly reviews and primary sources (for example, refereed research articles and/or original materials appropriate to the discipline)

Typically, holders of the qualification will be able to:

- apply the methods and techniques that they have learned to review, consolidate, extend and apply their knowledge and understanding, and to initiate and carry out projects
- critically evaluate arguments, assumptions, abstract concepts and data (that may be incomplete), to make judgements, and to frame appropriate questions to achieve a solution - or identify a range of solutions - to a problem
- communicate information, ideas, problems and solutions to both specialist and non-specialist audiences

And holders will have:

- the qualities and transferable skills necessary for employment requiring:
  - the exercise of initiative and personal responsibility
  - decision-making in complex and unpredictable contexts
- the learning ability needed to undertake appropriate further training of a professional or equivalent nature

# **15. Learning Outcomes**

#### A. Knowledge and Understanding of:

- A.1 The value of research in creative practice. A
- A.2 Industrial software and technologies and their applications. CP
- A.3 The production process including concept production and postproduction. A
- A.4 The historical, cultural and industrial context of computer generated imagery. A
- A.5 The development of the relationship between animation production and technology. A,CP
- A.6 Values and responsibilities in production. CP

# B. Cognitive (Intellectual or Thinking) Skills, able to:

- B.1 Solve problems relating to a variety of simulated dynamic scenarios. A, CP
- B.2 Make effective use of a wide range of animation software. A
- B.3 Critically review solutions. A, CP
- B.4 Plan, conduct and produce a report on a programme of original research, both individually and in a group. CP
- B.5 Apply professional codes of conduct and appreciate the ethical considerations that underpin them. A, CP.

#### C. Practical (Professional or Subject) Skills, able to:

- C.1 Use and manage appropriate software and hardware to produce designed outcomes. CP, A
- C.2 Project management based on a defined animation brief. CP
- C.3 Produce and manipulate mathematical models of dynamic events. CP
- C.4 Produce animation software modules. CP.

# D. Transferable (Graduate and Employability) Skills, able to:

- D.1 Communicate effectively through visual, oral written. A
- D.2 Continually develop knowledge and implementation of I.T. CP
- D.3 Develop problem-solving strategies. A, CP
- D.4 Network in a professional context, A, CP

#### D.5 Teamwork effectively. CP

D.6 Promote own work and develop strategies for career development. A, CP.

#### 16. Learning and Teaching Strategies and Methods

Knowledge will be gained through formal lectures, group work and practical project work as well as e-learning. This will be supported by professional practice visits to exhibition, festival, industry and other cultural and technology events, which are particularly related to the subject.

Projects will provide through research, development, planning, production and postproduction stages a full range of experiences and opportunities to develop critical engagement and evaluation in the subject. Teaching and learning will involve group and individual work. Regular seminar and presentation during the various stages will allow the development of students' ability to the contextually position and justify the work.

Workshops in scripting, drawing, creative thinking techniques, software skills, team working skills, self-promotion and project management will underpin specific project as required.

Development of Key Skills is essential for successful performance in the course. Projects will demand that students develop a full range of abilities to enable conception through development to successful implementation of solutions and promotion of solutions.

#### 17. Assessment Strategy

Assessment is both formative and summative.

Theoretical knowledge will be examined through a dissertation and the research and development element of a project. Research, development and production in projects will provide the major coursework elements.

Cognitive abilities will be evidenced through planning, research, and justification during development and project reports. Formal project proposals, research and development dossiers, project plans, production logs, presentations, completed product and dissertations will together inform the assessment. Competence in the application of underlying technologies will be assessed, in part by examination.

Subject specific skills will be evidenced through planning, concept generation, research and development and production. Research and development dossiers, project plans, production logs and completed product including a show reel and portfolio, will together inform the assessment.

Team working and project management skills will be assessed through peer assessment and tutor observation. Communicating effectively, visual, oral and written skills along with continuous development of knowledge and implementation of I.T. skills will constitute a major part of every substantial project. Develop problem solving strategies is contained within planning research and development. Network in a professional context will focus on the development of self-promotional material and planning an individual career path. Key Skills are embedded within project work.

The assessment strategy is complementary to the teaching and learning strategy and is coherent regardless of the units selected by the particular student. Assessment is determined to be appropriate to the individual unit in regard to its subject area and at the appropriate level. A wide range of different assessment methods are embedded within the course units.

At Level 4, many units are assessed with a coursework component which requires the production of an artefact with an associated report. Assessment is mostly related to the acquisition of skills, but essay writing is also tested within the course. The wide range of assessment types should build their confidence in dealing with different assessment strategies. All Level 4 students will engage in group activities that are assessed and will receive guidance on team role and team dynamics.

At Level 5, the course retains a balance between the proportion of units with examination-based assessment and those requiring coursework, with many units requiring a practical artefact-based component often for an internal or external client. Assessment is mostly related to the underlying

understanding of concepts and a development of the project management extending the skills introduced at Level 4, and focused on the chosen pathway.

At Level 6, a significant part of the assessment is related to project work, always with a major individual project, but often with opportunity for significant group project(s). These mostly involve production of artefacts, in the majority for internal or external clients. The associated reports are significant pieces of work and assessment is biased towards the production of professional quality artefacts, often with 'real' clients, with an associated focus on critical reflection, research methodology, report writing and project management.

# 18. Course Structure, Progression and Award Requirements

#### See <u>Unit Web Search<sup>1</sup></u> for full details on the course structure and units

This is a 3 or 4 year programme depending on whether a student elects a sandwich placement. The University strongly encourages the 4 year option since students gain invaluable experience from an industrial placement. The placement year usually takes place at the end of the second year and a placement student should expect to be in employment for a full calendar year.

The programme should be of interest to students seeking potential future career paths that include computer animation, visual effects, architectural visualisation, medical and forensic simulations.

The programme consists of 20 or 40 credit point units, where 20 credits represent 200 hours of study time. The course offers a total 360 credits for the award and includes a full-time project.

Standard University rules apply – the regulations must be consulted for a full description of exit awards.

It is expected that the graduates from this program will become employed in or work as consultants in the independent sector of the entertainment industry working in large and small enterprises. The type of roles are:

- Technology management
- Computer graphics and animation
- Computers and IT in entertainment technology
- Visual Effects Artists
- Architectural Visualizers
- Medical Simulation
- Forensic reconstruction simulation

The course includes opportunities for students to study foreign languages to increase their scope of employability.

As an alternative to the sandwich placement students can undertake a Study Abroad year under the Erasmus Scheme or with other exchange programme partner institutions.

#### **19. Employability Statement**

- Careers management skills are imparted through Level 4, 5 and 6 units in Eportfolio, Project Initiation and Career management, and Creative Professional Development.
- Informal links with employers and alumni occur through informal discussions with graduating alumni and employers e.g. Moving Picture Company (MPC), Framestore, ILM, EA games, Sony UK, Touch Surgery and Cinesite.
- The elements that are formalised in developing entrepreneurship include two professional pathways (CGI or VFX) to support student placements and elective units at Level 5. They also occur through informal discussion which we have found to be more fruitful than formal implementation.

<sup>&</sup>lt;sup>1</sup> www.port.ac.uk/unitwebsearch

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- PDP occurs at Levels 4, 5 and 6. An example is that PDP are discussed during induction week and are linked in with the CT careers unit.
- Students are offered the opportunity of a sandwich placement year between Levels 5 and 6.

On completion of the year-long work placement the student returns to full time study to complete Level 6.

# Course Management

#### 20. Support for Student Learning

- The Course is managed by a Course Leader.
- Extensive induction programme introduces the student to the University and their course.
- Each student has a personal tutor, responsible for pastoral support and guidance.
- University support services include careers, financial advice, housing, counselling etc.
- The Academic Skills Unit (ASK).
- CCi Creative Skills Centre and CCi Academic Skills Centre.
- CCi Creative Careers Centre.
- The Additional Support and Disability Advice Centre (ASDAC).
- Excellent library facilities.
- Student course and unit handbooks provide information about the course structure and University regulations etc.
- Feedback is provided for all assessments.
- Personal Development Planning (PDP) for all awards.
- For students that elect for a placement year there is a placement supervisor and a placement handbook.
- All placement locations are carefully vetted in terms of health and safety as well as their potential to support the programme learning outcomes. This is in line with the University of Portsmouth's Code of Practice for Work Based and Placement Learning.

# 21. Admissions Criteria

#### A. Academic Admissions Criteria

- 112 points to include a minimum of 2 A levels or equivalent.
- A range of qualifications as specified on the course page on the University of Portsmouth website.
- Applicants whose first language is not English must provide evidence of English language ability with a minimum IELTS score of 6.0 (normally with not less than 5.5 in any one component) or equivalent.
- Prior (formal and/or experiential) learning may be assessed and accredited.

#### B. Disability

The University makes no distinction in its admissions policy with regard to disability and will endeavour to make all reasonable adjustments in order to make it possible for students to study at Portsmouth on a course of their choice.

#### 22. Evaluation and Enhancement of Standards and Quality in Learning and Teaching

#### A. Mechanisms for Review and Evaluation

• Course Leader's Annual Standards and Quality Evaluative Review

- Head of Department's Annual Standards and Quality Evaluative Review
- Unit and Course Level student feedback considered at Board of Studies
- Unit Assessment Board consideration of student performance for each programme
- Annual Standards and Quality Reports to Board of Studies, including consideration of Subject and Award External Examiner Reports
- Periodic Programme Review
- Student Representatives and Student/Staff Consultative Committees
- National Student Survey
- National Postgraduate Taught Experience Survey
- Staff Performance and Development Review
- Peer Review and Development Framework
- Faculty Learning and Teaching Committee

# B. Responsibilities for Monitoring and Evaluation

- Unit Co-ordinators for unit content and delivery
- Course Leader for day-to-day running of course
- Board of Studies with overall responsibilities for operation and content of course
- Head of Department
- Associate Dean (Academic)
- Associate Dean (Students)
- Quality Assurance Committee
- Unit, Award and Progression Board of Examiners

# C. Mechanisms for Gaining Student Feedback

- Student Representation on Board of Studies
- Student Staff Consultative Committees
- Unit and Course level student feedback questionnaires
- University participates in external student surveys, e.g. National Student Survey (NSS), Postgraduate Taught Experience Survey (PTES), Postgraduate Research Experience Survey (PRES) and International Student Barometer (ISB)

# **D. Staff Development Priorities**

- Academic staff undertake activities related to research, scholarship, teaching and learning and student support and guidance
- Annual staff performance and development reviews match development to needs
- Managers undertake a variety of management development programmes
- New academic staff required to undertake appropriate University of Portsmouth learning and teaching programmes
- All academic staff encouraged to seek Higher Education Academy membership
- Academic staff undertake initial and continuing professional development within the Academic Professional Excellence Framework (APEX) programme which is aligned with the Higher Education Academy (HEA)'s UK Professional Standards Framework (UKPSF)
- Support staff are encouraged to attend short courses in areas such as minute taking, and specific IT packages

#### 23. Assessment Regulations

The current University of Portsmouth academic regulations will apply to this programme (*see <u>Assessment and Regulations</u><sup>2</sup>*).

#### 24. Role of Externals

Subject External Examiners who will:

- Oversee unit assessment and usually attend Unit Assessment Boards
- Review unit assessment strategy
- Sample assessment artefacts
- Present report to Unit Assessment Boards

Award External Examiners (usually also a Subject External Examiner) who will:

- Oversee and attend Award/Progression Boards
- Scrutinise and endorse the outcomes of assessment
- Ensure that the standard of the award is maintained at a level comparable with that of similar awards elsewhere in the United Kingdom

## 25. Indicators of Standards and Quality

#### A. Professional Accreditation/Recognition

#### Joint Audio Media Education Support (JAMES)

All graduates to be entered in the JAMES database and receive a JAMES accreditation certificate (or endorsement on their award supplement). Periodic Programme Review (or equivalent)

#### B. Periodic Programme Review (or equivalent)

The BSc (Hons) Computer Animation and Visual Effects (previously Computer Animation) participated in a successful Periodic Programme Review on 5th March 2014.

#### C. Quality Assurance Agency

QAA Higher Education Review, March 2015, judgements about standards and quality meet UK expectations (*for full report see <u>Higher Education Review of the University of Portsmouth, March 2015</u><sup>3</sup>).* 

#### D. Others

The Course Leader is a certified NUKE trainer and the School of Creative Technologies of the University of Portsmouth is his appointed certified NUKE training centre acknowledged by the Foundry and Fxphd. (NUKE is a compositing package used in the production of computer animation and visual effects and is a product of The Foundry. Fxphd delivers the Certified Nuke Trainers program for the Foundry). All graduates to receive a 'NUKE Certified Artist' certificate upon graduation (or endorsement on their award supplement).

# 26. Further Information

Further information may be found in:

- Student Handbook
- University of Portsmouth Curriculum Framework Document
- University of Portsmouth Prospectus

<sup>&</sup>lt;sup>2</sup> www.port.ac.uk/departments/services/academicregistry/qualitymanagementdivision/assessmentandregulations/

<sup>&</sup>lt;sup>3</sup> www.qaa.ac.uk/en/ReviewsAndReports/Documents/University%20of%20Portsmouth/University-of-Portsmouth-HER-15.pdf

- <u>University of Portsmouth</u><sup>4</sup> and <u>School of Creative Technologies</u><sup>5</sup> websites
- <u>etCeTera</u><sup>6</sup>

<sup>&</sup>lt;sup>4</sup> www.port.ac.uk/

<sup>&</sup>lt;sup>5</sup> www.port.ac.uk/school-of-creative-technologies/

<sup>&</sup>lt;sup>6</sup> www.ceetee.net/

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