

**DEFINITIVE COURSE RECORD**

Course Title	<b>BSc (Hons) Computer Games Technology</b>
Awarding Bodies	<b>University of Suffolk</b>
Level of Award <sup>1</sup>	<b>FHEQ Level 6</b>
Professional, Statutory and Regulatory Bodies Recognition	<b>None</b>
Credit Structure <sup>2</sup>	<b>360 Credits Level 4: 120 Credits Level 5: 120 Credits Level 6: 120 Credits</b>
Mode of Attendance	<b>Full-time and part-time</b>
Standard Length of Course <sup>3</sup>	<b>3 years full-time</b>
Intended Award	<b>BSc (Hons) Computer Games Technology</b>
Named Exit Awards	<b>None</b>
Entry Requirements <sup>4</sup>	<b>Typical offer: 110 UCAS Tariff points (or above), equivalent to BBC (A–Level), DMM (BTEC)</b>
Delivering Institution(s)	<b>University of Suffolk at West Suffolk College</b>
UCAS Code	<b>I660</b>

This definitive record sets out the essential features and characteristics of the BSc (Hons) Computer Games Technology course. The information provided is accurate for students entering level 4 in the 2017-18 academic year<sup>5</sup>.

**Course Summary**

The BSc (Hons) Computer Games Technology offers the opportunity to acquire the knowledge and skills sought after by the games industry. The course covers essential topics for an aspiring Game Developer including Game Engines, Graphics, Modelling, Animation, Artificial Intelligence, Physics, Platform Architecture and Audio. Students develop games on various platforms with the programming and creative tools that games industry professionals use to deliver awesome entertainment experiences.

<sup>1</sup> For an explanation of the levels of higher education study, see the [QAA Frameworks for Higher Education Qualifications of UK Degree-Awarding Bodies \(2014\)](#)

<sup>2</sup> All academic credit awarded as a result of study at the University adheres to the [Higher education credit framework for England](#).

<sup>3</sup> Where the course is delivered both full-time and part-time, the standard length of course is provided for the full-time mode of attendance only. The length of the part-time course is variable and dependent upon the intensity of study. Further information about mode of study and maximum registration periods can be found in the [Framework and Regulations for Undergraduate Awards](#).

<sup>4</sup> Details of standard entry requirements can be found in the [Admissions Policy](#)

<sup>5</sup> The University reserves the right to make changes to course content, structure, teaching and assessment as outlined in the [Admissions Policy](#).

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### Course Aims

Your course is designed to meet the requirements of the computing industry and to fit within the wider strategy of the University of Suffolk. These course aims encapsulate those expectations, principles and vision.

- To promote the understanding of computation and computer technology, and its design and exploitation as a means to support individuals, organisations and the wider community in their goals and aspirations.
- To encourage experimentation and problem-solving with the goal of developing high-quality solutions to problems, blending computing with aspects of other disciplines to support technical and creative innovation and entrepreneurship.
- To maintain professional and academic standards within study in order to positively impact the employability of our computing graduates and foster the desire for continuing study or research.
- To use teaching, learning and assessment as tools to inspire students in the field of computing and to have a positive impact on achievement and success.
- To provide an intellectually challenging experience and environment in which to study computing, while remaining inclusive and valuing the contribution of all members of our computing community.
- To develop interactions between students, staff and industry partners and to promote computing for the benefit of individuals, organisations, the community, and the economy.

### Course Learning Outcomes

The following statements define what students graduating from the BSc (Hons) Computer Games Technology course will have been judged to have demonstrated in order to achieve the award. These statements, known as learning outcomes, have been formally approved as aligned with the generic qualification descriptor for level 4/5/6 awards as set out by the UK Quality Assurance Agency (QAA)<sup>6</sup>.

On successful completion students will be able to:

#### Knowledge and Understanding

1. Demonstrate a systematic understanding of key aspects of computation and computer technology, including acquisition of coherent and detailed knowledge, at least some of which is at, or informed by, the forefront of defined aspects of the discipline
2. Demonstrate a systematic understanding of key aspects of computer games technology, including acquisition of coherent and detailed knowledge, at least some of which is at, or informed by, the forefront of defined aspects of the discipline
3. Demonstrate an appreciation of the uncertainty, ambiguity and limits of knowledge

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<sup>6</sup> As set out in the [QAA Frameworks for Higher Education Qualifications of UK Degree-Awarding Bodies \(2014\)](#)

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### **Cognitive Skills**

4. Deploy accurately established techniques of analysis and enquiry within the discipline of computer games technology
5. Demonstrate 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 computer games technology
6. Demonstrate conceptual understanding that enables the student to describe and comment upon particular aspects of current research, or equivalent advanced scholarship, in the discipline
7. Manage their own learning, and to make use of scholarly reviews and primary sources (for example, refereed research articles and/or original materials relevant to computer games technology)
8. 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 within the field of computer games technology

### **Subject-Specific and Practical Skills**

9. Critically examine and harness current and emerging creative and technical tools and techniques in the design, development, and production of computer games, their content and associated technology, for entertainment purposes and/or more serious domains of application
10. Develop ideas, strategy and plans in response to an identified opportunity, which may lead to creative and/or technical innovation, demonstrating professionalism and good practice, and evaluating critically the wider economic, social, moral and ethical implications of suggested entrepreneurial activities
11. Utilise advanced tools to measure and analyse performance, implement optimisations by taking advantage of low-level game programming techniques and computer games technology, and evaluate critically the outcomes of those optimisations on the design, development and performance of computer games and associated technology
12. Evaluate, design, and implement data structures and algorithms of varying complexity, through the utilisation of appropriate tools, for the development of computer games and associated technology

### **Transferable Skills**

13. 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
14. Communicate information, ideas, problems and solutions to both specialist and non-specialist audiences

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15. The qualities and transferable skills necessary for employment requiring the exercise of initiative and personal responsibility, and decision-making in complex and unpredictable contexts

16. Demonstrate the learning ability needed to undertake appropriate further training of a professional or equivalent nature

### Course Design

The design of this course has been guided by the following QAA Benchmark and Professional Standards:

- Computing (2016)
- In addition, the course takes into account the advice and requirements of BCS, The Chartered Institute for IT and Creative Skillset, as appropriate to each route.

### Course Structure

The BSc (Hons) Computer Games Technology comprises modules at levels 4, 5 and 6.

Module Specifications for each of these modules are included within the course handbook, available to students on-line at the beginning of each academic year.

	Module	Credits	Module Type <sup>7</sup>
<b>Level 4</b>			
	Computing Fundamentals	20	M
	Digital Tools	20	R
	Experience Design	20	R
	Game Asset Design and Creation	20	R
	Game Engines	20	M
	Production and Workflows	20	R
<b>Level 5</b>			
	Game Programming	20	R
	Game Tools and Services	20	R
	Industry, Professional and Project	20	M
	Modelling, Rigging and Animation	20	R
	Skills in Research and Problem Solving	20	M
	Texturing, Lighting and Rendering	20	R
<b>Level 6</b>			
	Contemporary Games Technology	20	R
	Digital Innovation and Entrepreneurship	20	M

<sup>7</sup> Modules are designated as either mandatory (M), requisite (R) or optional (O). For definitions, see the [Framework and Regulations for Undergraduate Awards](#)

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	Low Level Game Architecture	20	R
	Simulation and Behaviour	20	R
	Final project	40	M

### Awards

On successful completion of the course, students will be awarded a BSc (Hons) Computer Games Technology.

### Course Delivery

The course is delivered at the University of Suffolk at West Suffolk College. Students studying full-time on BSc (Hons) Computer Games Technology are likely to have approximately 216 contact hours at each level. The contact hours will be a mix of lectures and workshops. Students will normally be expected to undertake approximately 160 hours of independent study per 20 credit module, but should be prepared for this to vary based on assignment deadlines and class exercises.

### Course Assessment

A variety of assessments will be used on the course to enable students to experience and adapt to different assessment styles. Assessment on the course overall will be almost all coursework (including essays, reports, presentations, group work, reflective learning journals and research projects), with a single written examination at level four.

### Course Team

All staff are qualified in their subjects with their own specialist knowledge to contribute.

### Course Costs

Students undertaking BSc (Hons) Computer Games Technology will be charged tuition fees as detailed below.

Student Group	Tuition Fees
Full-time UK/EU	£9,250 per year
Part-time UK/EU	£1,454 per 20 credit module
Full-time International	£10,080 per year
Part-time International	£1,680 per 20 credit module

Payment of tuition fees is due at the time of enrolment and is managed in accordance with the Tuition Fee Policy.

### Academic Framework and Regulations

This course is delivered according to the Framework and Regulations for Undergraduate Awards and other academic policies and procedures of the University and published on the [website](#).