



Anglia Ruskin  
University

Cambridge & Chelmsford

## BSc (Hons) Computer Gaming and Animation



Join the creative technology industry

Learn to create your vision for games  
and interactive multimedia

[www.anglia.ac.uk/prospectus/computing](http://www.anglia.ac.uk/prospectus/computing)

## **Computer Gaming and Animation**

Computer gaming requires some of the more sophisticated technology, design techniques and development applications found in the computing and creative industries. This course will help you to develop the core skills and academic underpinning for progression in the gaming and other media intensive industries.

- Games for learning, simulation, entertainment and business
- Animation and multimedia skills
- Software and game development
- Specialist facilities
- Combined technical and creative focus
- Use of industry standard and leading-edge technologies
- Personal development in communication, leadership and team work

### **Who is this for?**

This course is for those who want to develop their creative side but also want to develop that vision into a working reality. We expect our prospective students to be flexible enough to take on new ideas and work hard to get to grips with the technology. Anyone with an interest in developing computer games or creating and editing interactive multimedia will find plenty to stimulate them.

## Course Outline

In the first two years you will be introduced to the underlying rules of game design by identifying the qualities that are common to all well designed games, and the skills needed to create them. You will gain an appreciation of the elements specific to certain types of games, such as storytelling, scripting, artificial intelligence and design for multi-player interaction.

You will focus particularly on the component of computer games that is found in no other art form; namely game-play, or the interactivity of players with the game world and study how users interact with a game world, and how that game world can be made to respond to the choices that players make. During this time you will develop your practical skills in a variety of applications and programming environments.

In the third year, as well as taking specialised modules you will be able to use your final year project to implement your ideas. You will also develop generic skills such as group working and communication that are in demand from employers in all areas.



## Course Content

Here is an illustrative guide to some of the subjects, software and assessments that are core to this course. As this subject is at the forefront of development, the exact content may be change.

### Subjects studied

- Electronic content creation
- Multimedia tools and technologies
- Design for the Internet
- Introduction to programming
- Object Oriented programming
- Introduction to computer gaming
- Virtual world application development
- Game design and development
- 2D animation
- 2D character animation
- 3D modelling and animation
- Artificial Intelligence applications

### Typical software/ technologies

GameMaker, 3DGameStudio, Macromedia flash and action script, Java and C++, Microsoft XNA game development and C# visual express, Photoshop, 3DStudio Max, Audacity, DirectX and OpenGL.

### Typical assessments / portfolio

As well as exercises and assessments to asses your proficiency in different subjects of this course:

#### *First year*

- 2D game
- 3D game
- Multimedia content creation

#### *Second year*

- Group and individually developed game
- 2D animation
- 3D models from life and from imagination

#### *Final year*

- Major project – develop a topic of your choosing.
- Exhibition – develop a game product from scratch.

## Teaching methods

In common with best practice in higher education we seek to develop, technical, creative and personal skills in a variety of methods including exams, reports, software and multimedia deliverables. The balance is approximately 70% coursework and 30% exams. As well as lectures and classes we use online and group learning activities.

## Careers

The gaming industry, world wide and in the UK has demand for the technical, creative and managerial skills provided by this course. The core technical knowledge will allow opportunities in computing, software development and IT industries.

Additionally the graduate skills of independent research, communication and team work are in high demand by all employers. So we expect to see our graduates working in the gaming industry itself or in posts from a range of industries (film, television, web design, public relations and advertising) using their skills in interactive content creation.



## Generic Picture of Students and/or campus

The department of Computing is located at both the Chelmsford and Cambridge campus of Anglia Ruskin University.

At Cambridge the campus is a short walk from the beautiful historic city centre. The campus has recently undergone a £10 million investment in new facilities which include a new Students Union with bar, café, nightclub, restaurant and venue space.

At Chelmsford the department is moving into the new Rivermead campus which is a purpose built campus served with all the facilities for academic and social life.

### **Course code for UCAS application**

Institution code - A60 course code - GW46

Course requirements – 200 UCAS points.

Other related courses at Anglia Ruskin include:

BSc Computer Science

BSc Multimedia Computing

Bsc New Media Production Technology

For further information you can speak to an advisor at our contact centre on 0845 271 3333. They can also advise you on any upcoming open days.

Email: [answers@anglia.ac.uk](mailto:answers@anglia.ac.uk)

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