

Computer Game Application Development

Key Features

- Provides qualifications suitable for entry to employment in a buoyant, multi-billion pound, worldwide industry.
- Provides an excellent grounding in the programming techniques required by the computer games industry and elsewhere.
- Work closely with game companies through project work.
- Work closely with other highly respected game programmes within the School.

About this Course

The programme will provide the skills necessary to enter the Computer Games Industry as an applications programmer. The programme is academically challenging and will develop your skills in real-time interactive graphics programming using industry standard game engines and application programming interfaces. In addition to the specialist core studies, there is freedom within the programme to take optional modules to develop interests in game associated areas such as Japanese Studies, Agile Development Techniques and Audio. You will leave us with the confidence and skills necessary to work in one of the most demanding industries in the world, and at a distinct advantage over other computing graduates intending a career in the computer games industry.

What You Study

Stage 1

In first year, you are introduced to the fundamentals of computer programming, media for computer games, console game architecture and game design techniques. You will also study the mathematics necessary for computer games development. This is the programme stage where academic practices and attitudes to study are established.

Stage 2

This year focuses on the technical skills necessary for game development. You will study console game development, graphics programming and game development using an industry standard game engine. Additional mathematics will be studied and there will be the opportunity to study various optional modules such as Japanese, Audio Effects and Composition, and Agile Development Techniques

Stage 3

At the end of third year, you will be eligible to graduate with a BSc degree. This stage prepares you for employment through developing high-level skills across theory, practice and communications by working on an interdisciplinary game development group project. In addition you will study modules on mobile and internet game development and industry standard Application Programming Interfaces such as Microsoft DirectX. There will be the opportunity to study various optional modules such as Japanese and Audio Production.

Stage 4

The final or Honours year gives you the opportunity to undertake a significant and sustained individual development project. In addition you will study modules on the structure of the games industry, network programming for games and advances game development techniques. By the end of this stage you will have demonstrated the range of individual and interpersonal skills necessary for employment in the computer games industry.

How You Learn

You will spend initially around 12-15 hours per week in lectures, tutorials and computing-based laboratories. Lectures are used to present the key concepts, theories and techniques throughout the programme. Tutorials and laboratory-based activities increase your understanding of the subject and allow you to develop your competence and confidence in technological and theoretical work. During the programme you will also be required to actively participate in group project work, discussion groups, seminars, and private study.

Course	UCAS Code	Duration
BSc (Hons) Computer Game Application Development	G450 BSc/CGAD	Four years FT

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How you are Assessed

There is a mixed assessment strategy used on the programme. The majority of modules are assessed through coursework – which may be continuous and may include project work and student led presentation. Some modules use a mixture of coursework and formal examination.

Professional Accreditation

Professional accreditation will be sought for this course from the Sector Skills Council for the Audio Visual industries (Skillset) and the British Computer Society (BCS).

Career Opportunities

As the computer games and associated industries mature, the roles of developers within these industries are becoming well defined. There is now a worldwide shortage of game programmers and a constant demand for first-rate computer programmers with knowledge of developing applications with middleware such as game engines. On graduating, you will possess a games orientated programming degree which is directly relevant to the needs of industry. The BSc (Hons) in Computer Game Application Development was created in response to industry requirements and is designed to meet the requirements outlined by Skillset. The University works closely with leading game developers such as Real Time Worlds, Electronic Arts, Sony Computers Entertainment Europe, Codemasters and Denki making graduates from the course highly employable within these industries.

Course Accessibility

Students participating in this course may be involved in the following activities: teamworking, attending lectures, tutorials, undertaking practical work in IT and network laboratories and using display screens. For advice on course accessibility you should contact Mr John Petrie (Student Advisor) at j.petrie@abertay.ac.uk or phone (01382) 308051.

Further Information

Details of the entrance requirements can be found on our website or in our current prospectus. If you would like more detailed information on Computer Games Technology, please contact the Student Recruitment Office (details at the bottom of the page).

The information in this leaflet is correct at the time of going to print. As the University has a policy of regularly reviewing its courses, the course or content may be subject to change without prior notice. 12/07

***At the time of going to press this course was under development for 2008 entry and is therefore offered subject to approval**

