BIRMINGHAM CITY
University

Computer Games Technology
BSc (Hons)

COURSE FACTS

Faculty	Computing, Engineering and the Built Environment
School	Computing, Telecommunications and Networks
Application	Apply through UCAS. Institution code B25, Course code G450
Location	City Centre Campus, Millennium Point
Duration	Full-time: three years, sandwich: four years

KEY FACTS

- This course provides skills that are in high demand by the games industry. The emphasis is on computer programming and 'coding', basic programming, through to the concepts behind game engine development, to working with game consoles and hardware.

- Developed in consultation with the games industry including Rare Ltd, Blitz Games Studios, Jagex and Eutechnyx as well as the industry accrediting body, SkillSet.

WHY CHOOSE US?

- Our School of Computing, Telecommunications and Networks is established as one of the leading academies for Apple, Microsoft and Cisco Systems, and our games course is supported by industry input from both Microsoft and Sony.

- Our strong links with Birmingham's independent games indusry has led to many internship and graduate opportunities for our students.

- The course involves project-based learning which gives you experience of working in teams to develop games and solve technical problems, as you would be expected to do in industry (i.e. programmers, artists and sound engineers).

- The course focusses on both the production of entertainment as well as educational 'serious games'.

COURSE OVERVIEW

Our course is designed to enthuse and enable you to pursue a career as a games programmer in the rapidly expanding computer games industry.

With a strong focus on the software tools and techniques required to develop and produce high quality games products this broad study programme covers essential fundamentals of computer science and broader computing fields such as user interfaces and artificial intelligence.

The topics in the course encompass basic programming through to implementing advanced industry standard game programming languages, working with game engines and learning how they were developed. There is also the opportunity to learn how the games consoles and associate hardware were designed.

CISCO
Networking
Academy

Business Theme	Toolbox Theme	Computer Technologies Theme	Game Development Theme	Game Programming Theme
YEAR 1				
Professional Context of Technology 15 Credits	Data Analysis 15 Credits	Computer Systems Technology 30 Credits	Games Design and Development 30 Credits	Introduction to Games Programming 30 Credits
YEAR 2				
Media Industry 15 Credits	Open Systems 15 Credits	Computer Networks and Distribution 30 Credits	3D Game World Development 30 Credits	Game Engine Programming 30 Credits
YEAR 3				
Individual Project 30 Credits		Web and Mobile Technologies 30 Credits	Artificial Intelligence 30 Credits	Game Hardware Programming 30 Credits

COURSE STRUCTURE

The course is based on a themed approach:

- **Business:** This theme provides professional development and an introduction to the business macro-environment sector. It gives you an understanding of market-led innovation planning and management. It also develops your teamwork skills in evaluating and effectively communicating information in both written and oral form.
- **Toolbox:** This develops your analytical skills for computer game development.
- **Computer Technologies:** This will look at computer hardware and software, as well as the distribution of data through computer networks with applications to mobile computing. There are further elements associated with operating systems and programming.
- **Game Development:** This looks at game design concepts, the process involved in developing and implementing games using widely used industry standard game engines.
- **Game Programming:** From introduction to the application of more sophisticated games programming languages. It includes developing and appreciation of issues associated with performance and optimisation in game development.

ASSESSMENT

A range of assessment methods is used throughout the course including continuous assessment, in-class tests, examinations, laboratory exercises and project work.

ENTRY REQUIREMENTS

- 280 points. Minimum of two six-unit or one 12-unit A-Level (GCE or VCE)
- Pass National Diploma with Merit Merit Distinction
- Advanced Diplomas are accepted
- AGNVQ overall Merit and GCSE Maths grade C
- Irish: 280 points in ILC, Scot: 280pts from four Highers, IB: 30pts

FURTHER STUDY

The University has a range of either taught (MSc) or research (MPhil and PhD) postgraduate programmes. Details can be found on the postgraduate section of the website.

EMPLOYABILITY

Recent graduates have gone onto work with game studios including Codemasters, Sync Interactive, Mixed Reality Studios, Team Football as well as in more traditional computer science and IT roles in private and public sectors.