

MSc  
PGDip

# Computer Games Technology Software Engineering (Computer Games Technology)

## KEY INFORMATION

### Course Length

Full-time: The PgDip is studied over one academic session (1 year) and this is followed by 5 months of additional study for the MSc.

Part-time: The PgDip is studied over two academic sessions (2 years) and this is followed by 9 months of additional part-time study for the MSc.

### Places Available

Approx 20

### SCQF Level

11

### Entrance Requirements

Applicants should have a minimum of a lower second class Honours degree that includes a substantial element of computer programming and have a reasonable background in Mathematics.essential.



## key features

- Highly respected programme in Computer Games Technology
- Expand and focus your existing programming skills for the development of computer games
- Designed in close association with Games companies, completion of this course will qualify you to take up employment in a buoyant, multi-million pound, world-wide industry
- Work closely with games companies through project work

## introduction

The video games marketplace continues to grow and develop, becoming a core technology of the fast-developing home electronic entertainment media. Computer games are produced in a studio environment, over years of development time, consuming several millions of dollars, and this in a team or teams of programmers, artists, musicians, designers, producers and others. Dundee City, Scotland, the UK and EU have a significant role in world video games development, and the demand for good 3D games programmers continues to be significant.

During the programme students will study aspects of game design technologies, design a full game and, in a team, produce a working prototype game level as a portfolio piece for a future employer. This course is designed for graduates who have sound experience in computer programming and a solid grounding in mathematics.

Every year several students also take the opportunity to compete in the Abertay based international Dare To Be Digital competition ([daretobedigital.com](http://daretobedigital.com)) and some go on to establish their own fledgling games companies.

## what you study

Students will study game design and development, programming games on the PC and XBox, the games marketplace, games mathematics, console game development and artificial intelligence for games. The programme emphasises the creation of a set of significant portfolio software pieces to show future employers

MSc  
PGDip

# Computer Games Technology Software Engineering (Computer Games Technology)

## how you learn

Most of the teaching is focused around lectures followed by laboratory sessions in a dedicated lab or by tutorial sessions. The game design and development course is taught in small tutorial groups using a problem-based learning approach. You will spend about 12 hours attending classes per week. This must be supported by 30 hours a week of private study.

## how you are assessed

The assessment strategy throughout the course is based on 100% coursework in all modules. Assessment can be based on a combination of practical work, class tests, reports, essays and presentations.

## professional accreditation

The course is accredited by the British Computer Society (BCS). Skillset accreditation will also be considered as soon as this becomes available for postgraduate programmes.

## career opportunities

Job opportunities exist in the following sectors - Computer Games Development, Graphics and Visualisation, Virtual Reality/Simulation, Multimedia and Education. Typical job titles include Games Programmer, Graphics Programmer, AI Specialist Programmer and Console Programmer. Employers range in size from small local companies to large multinational enterprises with offices all over the world. Opportunities exist for promotion through specialist technical routes to Lead Programmer or Project Lead or Director in larger companies. The salary actually paid depends on experience and record of success and can include substantial bonuses for hitting milestones or involvement in a successful game. Limited opportunities exist for new graduates to become self-employed, freelance contractors or to start their own games development business. However, for an experienced Games Developer it is still possible to start a new business.

Graduates from this programme can also seek employment in sectors which make use of their general software engineering design, analysis, communication, team working, research and lifelong learning knowledge, skills and attitudes. For example, graduates could seek employment and training opportunities in marketing, management, and sales within and outside the electronic entertainment sector. Alternatively, graduates from this programme could also seek employment in mainstream software engineering.



### Contact

For further information contact:

Admissions Tutor: Dr Louis Natanson  
University of Abertay Dundee,  
Bell Street,  
Dundee DD1 1HG

t: +44 (0) 1382 308600  
f: +44 (0) 1382 308627  
e: [cct@abertay.ac.uk](mailto:cct@abertay.ac.uk)  
text: +44 (0) 7781 472704

[www.abertay.ac.uk](http://www.abertay.ac.uk)

**University  
of Abertay**  
Breaking Barriers