

Computer Games Development and Cyber Security - BTEC Level 3 Extended Certificate in Computing

Overview

It is a 2 year vocational course studied at HSFC as part of an A Level programme. The full Extended Certificate is equivalent to 1 A Level and carries a maximum of 56 UCAS points (the same as an A* grade at A level). There are 4 units studied over 2 years with a core focus on games development in C# and cyber security.

Units

- Games Development
- IT Systems Security and Encryption
- Computer Science Principles
- Computer Systems Fundamentals

Lesson Delivery

- 1 block on the timetable
- Practical lessons in a computer room with some integrated and supporting theory
- Skills are taught with an opportunity to practice before assessment

Assessment

- 42% coursework set via assignments involving both written and practical tasks
- 58% external assessment with two written exams
- Assignments are staggered over the duration of the course
- No teaching/help during assessment period
- Strict deadline dates
- Assessment grading: Pass, Merit and Distinction
- May be an opportunity to resubmit work after initial grading

Entry Requirements

You should have at least a grade 4 or C in GCSE Maths. In addition you must be:

- self-motivated and able to work independently
- organised with good timekeeping
- good at problem solving
- able to prioritise
- confident at written communication

Skills developed on the course

- computational thinking skills to solve problems
- games development and programming in C#
- protecting against IT system security threats
- testing and reviewing protection
- application of cryptographic techniques
- familiarisation with the Unity Games Development Environment

Industry Standard Software used

- Visual Studio (with C#)
- Information Security Tools

Progression

This course offers progression onto a wide range of degree courses, apprenticeships and careers. They include:

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|----------------------|-----------------------|--------------------------|
| • Games Developer | • Digital media | • Accountancy |
| • Programmer | • Info Sec Specialist | • Teaching |
| • Penetration Tester | • Network support | • Advertising |
| • Systems analyst | • Business | • TV and film production |

Common Questions

Q. Can I study both Computer Games Development and Cyber Security and IT?

A. Yes, this would appear as 2 separate blocks on your timetable

Q. Can I study both Computer Games Development and Cyber Security and Computer Science?

A. Due to the overlap in content students do not usually undertake both Computer Science and Computer Games Development and Cyber Security. However please do speak with the Head of Department for further advice.

Q. Will universities accept a level 3 BTEC qualification as part of their entry requirements for entrance onto degree level courses?

A. Universities are seeing more and more applications from students with a mixed BTEC and A level profile and most will accept BTEC qualifications; however check each individual university's entry requirements carefully as some state a particular entry level.