

# IT, Computing and Games Design Careers

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# **ComputerWeekly**







# IT, COMPUTING and GAME DESIGN CAREERS

- 1. Software Engineer
- 2. Video Games Developer
- 3. Web Designer/Developer
- 4. Graphical Designer
- 5. Systems Engineer
- 6. Software Developer
- 7. Business Analyst
- 8. Systems Administrator
- Project Manager

Information Communication and Technology and Computer Science degrees have an excellent reputation and are very popular amongst employers because graduates exhibit high level computer skills, are superb project managers, logical and develop good problem solving skills. Plus most industries are driven by computers and software.

# WHERE TO FIND JOB ADVERTS FOR COMPUTER SCIENTISTS

- Broadsheet daily and Sunday Newspapers, particularly the Guardian and Telegraph
- Computer Weekly Magazine also available online www.computerweekly.com

#### **Useful Websites for Computing or IT careers:**

- www.computing.co.uk/jobs
- www.tagrecruitment.co.uk
- www.gurucareers.com
- www.cwjobs.co.uk
- www.gradcracker.co.uk
- www.cititec.com
- www.dayjob.com
- www.wirelessmobile-jobsboard.com
- www.ITJobs-online.com
- www.technojobs.co.uk

#### GAMES DESIGN DEGREES

#### Subjects to study at A Level:

Subjects that are accepted for Games Design Degrees are Art, Design, Media, Creative IT.

#### COMPUTER SCIENCE DEGREES

#### Subjects to study at A Level:

Entry requirements for computer science degrees usually require an academic background in mathematics. It is not essential to have studied computer science at school, however experience in programming is very desirable.

It is also desirable for applicants to have studied further mathematics, pure mathematics, and/or a physical science (chemistry and physics).

#### **IT DEGREES**

#### Subjects to study at A Level:

There are no specific A Levels required to study IT at university however a good background knowledge of IT would be desirable.

#### **Gaining Additional Skills:**

Should you wish to beef up your programming or IT skills there are a vast array of online courses available that teach a huge variety

of skills. Some of these websites are:

- www.codecademy.com
- www.khanacademy.com
- www.code.org
- www.learnpython.org

Plus www.youtube.com has a huge library of video tutorials.

The top 10 UK Universities for Computer Science according to the Complete University Guide are:

There are 516 Games Design Courses delivered at 124 Providers. The top 10 Universities are:	There are 3261 Computer Science and IT Courses delivered by 242 providers. The top 10 Universities are:
<ol> <li>University of Hertfordshire</li> <li>UWE Bristol</li> <li>Manchester Met. University</li> <li>University Arts London</li> <li>Birmingham City University</li> <li>Glasgow Caledonian</li> <li>Bolton University</li> <li>Nottingham Trent University</li> <li>Bucks New University</li> <li>Brunel University</li> </ol>	<ol> <li>Cambridge University</li> <li>Oxford University</li> <li>St. Andrews</li> <li>Imperial College</li> <li>Edinburgh University</li> <li>Durham University</li> <li>University College London</li> <li>Glasgow University</li> <li>Liverpool Hope University</li> <li>Heriot-Watt University</li> </ol>

(check UCAS website for entry requirements for these universities:

#### www.ucas.com)

#### **GRADUATE PROSPECTS**

According to the Complete University Guide, the average starting salary for a computer science graduate was £22,311 and the average non-graduate salary £15,370.

#### **Internships and Work Experience:**

Gumtree recently completed a poll of employers with the results showing that work experience makes you 95% more employable. The good news carries on, two thirds of employers think candidates with work experience were more knowledgeable, 44% think they are more confident and 40% say they are more committed.

<u>Useful websites for Computer Science/IT related work placements and internships:</u>

- 1. www.inspiringinterns.com
- 2. www.milkround.com
- 3. www.ratemyplacement.co.uk
- 4. www.prospects.ac.uk

### ALTERNATIVES TO UNIVERSITY

# **APPRENTICESHIPS**

There are several types of apprenticeship. At any time there tends to be more vacancies at the lower levels of qualification.

Intermediate: Level 2 (equivalent to 5 GCSEs).

Advanced: Level 3 (equivalent to 2 A-levels).

Higher: Level 4 and above (equivalent to Foundation degree and higher).

Degree apprenticeship: Level 6 or Level 7 (equivalent to Bachelor's or master's degree). As well as working on the job you study for a degree. You earn from day one and your tuition fees are paid by the employer

Students can access apprenticeship vacancies through their Unifrog account - go to the Apprenticeship section.

### SCHOOL LEAVER PROGRAMME

Some employers run their own bespoke training programmes which give A-level students the chance to gain a university degree and/or professional qualification (depending on the programme), while working for the company and earning a wage. Employers include KPMG and PwC.

# ENTRY LEVEL GAMES DESIGN

At school or college:

This is a role where both art and science are useful.

If you want to go to university, take A-levels, Highers, Level 3 BTECs or UALs in a combination of arts and sciences from the following subjects:

- Art
- Art and design
- Graphic design
- Graphic communication
- Computer science
- Mathematics
- Physics
- Creative digital media production

If you want to go straight into a job or apprenticeship, the following Level 3 qualifications will be relevant:

- Aim Awards Diploma/Extended Diploma in Games Animation and VFX
- BTEC Diploma in Graphics
- BTEC Diploma in Digital Games Design and Development
- BTEC Diploma in Computing for Creative Industries
- UAL Diploma/Extended Diploma in Art and Design
- AQA Technical Level Entertainment Technology: Video Games Art & Design Production
- OCR Technical Diploma in Digital Media (Digital Content for Interactive Media)
- UAL Diploma/Extended Diploma in Creative Media Production & Technology
- AQA Technical Level IT: Programming
- OCR Technical Diploma in IT (Digital Software Practitioner)

#### Play games:

Play lots of different games. Think about the levels and the design of them.

#### **Build a portfolio:**

Create work that you can show off to employers. This is essential. Go to <u>build your games portfolio</u> to learn how.

#### **Start modding:**

Create levels of a game using software provided by the publishers.

#### Look for an apprenticeship:

At the moment, you're unlikely to find apprenticeships for level designers specifically. However, it might be possible to find an apprenticeship as a junior 2D artist. It might be worth taking that up, whatever industry, and then moving into games and level design from there. Check out <a href="What's an apprenticeship">What's an apprenticeship</a>? to learn more about apprenticeships and <a href="find an apprenticeship">find an apprenticeship</a> to learn how to find one in your region, or approach companies directly. Go to <a href="ScreenSkills information on games">ScreenSkills information on games</a> apprenticeships for the main apprenticeship schemes in games.

#### **Network:**

Get to know people in the games industry by attending <u>events</u>, including games conferences and expos. Meet professionals and ask them questions about their work, while demonstrating interest and knowledge in the industry. Offer to provide them with your professional contact details and try to stay in touch with them. Go to <u>how to network well</u> to learn how to do this.