



East Park Terrace
Southampton
SO14 0YN
UK
Tel: +44(0)23 8201 3000
www.solent.ac.uk

BSC (HONS) COMPUTER GAMES PROGRAMMING AND DESIGN

We would like to take this opportunity to firstly welcome you to the BSc (Hons) Computer Games Programming and Design degree at Southampton Solent University. Our many congratulations. We really hope that this will be an exciting, challenging and valuable chapter in your musical and creative lives. And so, in readiness, we'd like to provide you here with a little more detail regarding our expectations and recommendations, so that you perhaps feel a little more prepared when you first start.

GAME DEVELOPMENT GEAR

During the games programming and design course, you will be exposed to a lot of programming and game design concepts and techniques, and some of those require additional equipment to be procured by yourself – not just for use within the modules, but also at your own personal practice.

- For **Mobile Development**, we recommend you have **at least one Android mobile phone**.

In order to test your game across a range of android devices, we would also recommend you have access to a low-end and a high-end device, however that's not required.

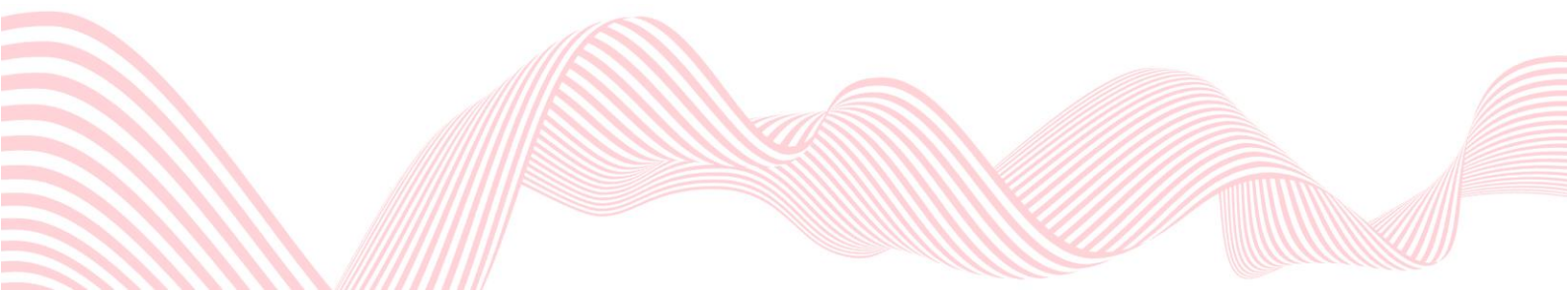
For **Input Programming** using gamepads/controllers, we suggest you use any **Xbox or PlayStation** game controller.

- Finally, in case you are interested in **developing games for VR**, we suggest you have a **VR headset of your choice** at your disposal. This, however, is *optional*. We don't formally cover VR/AR/XR in our course, however you may want to develop your final major project using it or convert an older project to also include VR-related gameplay modes.

THE MINDSET OF THE GAME DEVELOPMENT STUDENT

This is going to (most likely) be your first experience with higher education – so it would be imperative you are fully prepared for what's to come for your next three years.

Game Development is a skill that only improves with adequate practice. Consider that you are a hero in a Role-Playing game for one minute. The only way to improve is by defeating monsters in combat, right? The more you defeat, the more experience points (XP) you accumulate over time, leading to your character levelling up. This allows you to buy and equip better gear, improve your abilities and become stronger in general, meaning you can tackle tougher challenges. This is the typical game loop for an RPG game.





East Park Terrace
Southampton
SO14 0YN
UK
Tel: +44(0)23 8201 3000
www.solent.ac.uk

Your university experience doesn't differ that much. You will be constantly exposed to new knowledge and multiple opportunities to develop your skills. This is your cue to practice what you've just seen! Unlike in RPGs, your hero character is on a constantly moving train, battling through multiple dungeons, encounter after encounter. It is your job that in-between these encounters (activities) and boss fights (assessments) you prepare adequately.

The only way to do this is by investing time in practicing everything you see. You have seen something new in Visual Studio and C#? Practice it! You've been exposed to a new technique in Unity? Practice it! You've just been told to try something at home? Definitely practice it! By investing this time in improving, learning and mastering the taught concepts, there is nothing stopping you from getting straight As until the day of your graduation, guaranteed. You will probably get your dream job much faster than your peers (whether this institution or not).

At this point, you start to realize this is all about time-management and confidence. Across the years we've been running this course, it's very clear to us that students who put the time in, have the best outcomes and highest performance. This doesn't just translate to constant practice but also **started working on your assessments as early as possible** in order to fully master the taught concepts and content.

Finally, we cannot stress **how important and vital attendance and engagement is**. Like the above example, stats do indicate that students who fail modules are those who don't attend. Our brains are hardwired to comfort, and as such, on multiple occasions, we may feel that "It's not worth going to class", or "I'll sleep a bit more today" or "I'll just skip – the tutor uploads the material online anyway". The same effect happens in formative assessments (assessments that are not marked). "I am not marked, so I'll not do it".

All this is valid reasoning for our brains; however, we completely neglect the fact that **all the above actions disengage and disconnect us from the whole learning process**. The more disconnected a student is, the easier it is to fail a module, simply because time moves on, and workload increases over time, making it unbearable for students to "really" learn, leading to last-minute crunching to the point where the passion for the craft simply becomes a "mundane task". **You do not want this.**

As a summary from all the above, if you keep yourself to the following points, you are guaranteed to get a first across every single module:

- **Always practice what you've just been exposed to in class.** Invest time in your own development.
- **Start working on Assessments early and consistently.** Never ever leave work last week or last minute. The workload will most likely crush you if you are unprepared, leading to fails.
- **Do your very best to attend all your classes.** The more disengaged you are, the harder it is for you to learn and keep up with the pace of the taught concepts.



East Park Terrace
Southampton
SO14 0YN
UK
Tel: +44(0)23 8201 3000
www.solent.ac.uk

- **Participate in every single activity, including formative assessment.** What if the feedback from your tutor is enough to give you a marking boost?
- **Remember that every single module requires about 200 hours of involvement.** This is the combined effort of both attending sessions and self-study.

OTHER CONSIDERATIONS

If you are not already familiar with the game development software that we use on the course, do feel free to download a copy in advance of joining us, to familiarise yourself with their functions/processes. We primarily use Visual Studio (for coding). For game Engines, we use [Unity](#) as well as [Unreal Engine](#).

Acquainting yourself with this software will certainly help with regards to a more gradual learning curve at the beginning of the course, though it is not essential as we do briefly cover the more basic functions at the very start.

Please be aware that there will be times when you will require USB memory sticks/flash drives and SD cards for personal recordings, submissions, etc. The number required will vary, depending on optional modules selected, etc. However, one of each will certainly be required. You can either purchase these in advance, or as/when you need them once you're here (recommended).

We're really looking forward to welcoming you to Southampton Solent University later in the year and wish you the best with all your current game development endeavours.

Best regards,

Nick

Dr. Nick Hampton

Course Leader – BSc (Hons) Games Programming & Design

E: nick.hampton@solent.ac.uk

