

St John's inspire programme

30 MINUTES A WEEK TO HELP YOU GET READY FOR
UNIVERSITY



▶ MATHS IN VIDEO GAMES



▶ LEARN TO PROGRAMME



▶ MAKE YOUR OWN VIDEO
GAME

*How to design a successful
video game:
Design your own
video game*

Maths in video games



James Hyde is a build engineer at Creative Assembly (a multi-award winning UK games studio based in Horsham, West Sussex) who are behind games such as *Halo Wars 2* and *Total War*.

Build engineers contribute to the design, development and maintenance of the world of the game. In his interview for Inspire Digital, James speaks about his passion for maths and how the knowledge and skills he

acquired at A-level and beyond can be applied to games software development. He tells us that video games are fundamentally underpinned by mathematical concepts such as algebra, trigonometry and calculus.

Click [here](#) to read more about this exciting career in the video gaming industry and why James thinks his is “the best job in the world”.

Any questions? Get in touch at: inspire@sjc.ox.ac.uk

Learn to programme

We've heard from build engineer James Hyde about why he loves his job in the video gaming industry and how he applies mathematical principles to his day-to-day work.

Combining the technological and the creative, the games industry is a career path which appeals to many young people. With roles in graphic design, animation and software engineering, to name but a few, the games industry certainly offers a varied range of employment opportunities.

If you're interested in exploring this field further, why not have a go at designing your own video game? Flowlab is a game creation toolkit which includes everything you need to design and develop up to three games completely free! It's easy to use and does not require any prior coding experience to build your own virtual world.

Click [here](#) to get started.

THIS WEEK'S CHALLENGE:

Learn to Programme



[Turtle Academy](#) is a simple-to-use website providing free lessons in basic computer programming. Using the LOGO language you can create amazing shapes and patterns - give it a try and see what you come up with!

Enter the Programming Challenge for your chance to win a £10 Amazon voucher or a St John's goodie bag filled with sweets, stationery and much more!



The best designs will be posted on Inspire Digital.



Email a picture of your design to inspire@sjc.ox.ac.uk by Sunday 24th March for the chance to win a prize!

What next?

Try some of our puzzles which have been set by Oxford tutors, as well as school teachers from around the country. Click on the links to test your skills – the answers are available online so you can check how many you got right!



[Momentum and Energy](#)

Problems dealing with the concepts of momentum and energy



[Chemistry Through Time](#)

Put your knowledge of chemistry to the test with history-themed questions



[The Physics of a Cup of Tea](#)

Should you add milk before or after hot water?



[Interview](#)

Meet Jenny – an Engineering student at St John's

Year 11 Summer School: 5th – 6th August 2019

In last week's email, you will have received details of our Year 11 Summer School. There are up to 150 places available for Year 11 pupils currently enrolled on our Inspire Programme. To sign up, please complete the Registration Form and email to inspire@sjc.ox.ac.uk. Places will be allocated on a first-come, first-served basis.