





### Thank you for your application to study A Levels at our amazing High Pavement Sixth Form Centre, part of Nottingham College.

We're excited to be welcoming you to Nottingham College this September. Soon you'll be receiving your invitation to one of our enrolment events so that you can secure your place with us. This invitation should be with you early in August.

To help you prepare for A Levels at Nottingham College we have produced some materials and other resources for you. These are for your benefit so please do your best to look through the information relevant to the courses you have applied for. We hope you find them useful in preparing for A Level study. If you have any questions please don't hesitate to get in touch with us.

## TASKS, RESOURCES AND RESEARCH

Before starting this course we want you to become a 'computational thinker'. Take a look at <u>our presentation</u> that will help you understand what this means and how to develop these skills.

We would also like for you to complete <u>a worksheet</u> that will help you with your abstract thinking. It should, we hope, be a bit of fun too!

Finally, we've compiled a resources list for you to take a look and have a go at over the summer:

C Programming: (get a log in, then go to 'Courses' link and do the 'C Tutorial' (NOT the C++ Tutorial))

https://www.sololearn.com/

Assembly code and LMC video: [watch the video ...]
<a href="https://www.youtube.com/">https://www.youtube.com/</a>
watch?v=e4q9avBPUv4

LMC: (then have a go at getting the code working from the video)

https://peterhigginson.co.uk/lmc/

# LEVEL for Computer Science

Computer science is a practical subject that enables you to apply the academic principles learned in the classroom to real world systems. It is a creative subject that helps you to develop the skills to solve problems, design systems and understand the power and limits of human and machine intelligence. There is an emphasis on learning computer programming and the mathematical skills used to express computational laws and processes.

Most businesses rely on computers to function effectively, so whether you want to work for an IT consultancy, a major organisation in retail, aerospace or healthcare for example, or even set up your own web design business, you'll have a great start to your career with a sought-after computer science qualification.



#### A career in Computer Scince

From games developer to manager of IT and communications services, computer science graduates have a range of opportunities open to them. Almost a third of computer science graduates employed in the UK are working as programmers and software development professionals.

Many are working as web design and development professionals.

It's a fast growing sector nationally and globally and careers in this field can be competitive but lucrative. Further study at university could include:

- computer science
- software engineering
- game design
- electrical and electronic engineering
- mechanical engineering
- cyber security and forensics
- information systems
- computer arts



#### More about studying at High Pavement

#### Taking care of you

Our Student Wellbeing team run activities, sessions and programmes to support your wellbeing. They also organise trips, host events and encourage you to get involved in a whole range of activities and movements in College and nationally. So, if you're passionate about the environment, why not join the Green Society, and if you want to champion LGBTQ rights, join our LGBTQ society. If you want to suggest setting something up, we're up for that too!

#### Who do you talk to?

Your Personal Tutor: if you need help with your course let them know right away.

Achievement Coach: if you are worried about things outside your course and you need to speak to someone, they'll be able to help you. If they can't resolve the issue, they will put you in touch with someone who can.

**Careers Adviser:** they can help you get advice and information about your next steps, plus work and training options. They can also access a range of support to develop the skills you need to progress to university, and ultimately into employment.

Specialist UCAS Advisers: they are at High Pavement to help with choosing your options, completing your UCAS application, and preparing for interviews. This can be particularly useful in preparing for Oxbridge, or those more difficult to access application processes, such as for medicine and veterinary science.

**Student Services:** if you need to talk to someone confidentially to discuss money or get some health advice, they are here for you.

#### **Sports and activities**

Love sport? You could take part in sports clubs and inter-college competitions. If you want to relax, we host stress-busting sessions to help you with your studies. We also have a wide range of sports on offer for beginners, plus activities such as British Sign Language and driving theory skills. Our specialist sports academies offer dedicated training in different sports, with the opportunity to gain coaching qualifications alongside your studies. You could even be in with the chance to apply for USA university sports scholarships. Find out more on our website.