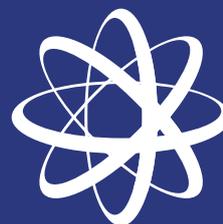


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CURRICULUM

# DIGITAL & COMPUTING

YOUR  
**NEXT  
CHAPTER**

PRE-ENROLMENT PACK



# A bit about the department

## DIGITAL & COMPUTING

On behalf of the Digital and Computing team – Welcome to Macclesfield College!

We are delighted that you have chosen to continue your education journey with us and look forward to a happy and successful working partnership together. College is a time of achievement and together we hope to help you achieve and exceed your true potential.

Within the Digital and Computing Department we currently offer the provisions listed below

**BTEC Level 1 Introductory Diploma in Information Technology**

**BTEC Level 2 First Certificate in Information & Creative Technology**

**BTEC Level 3 National Foundation Diploma in Information Technology – Games Development or Computing**

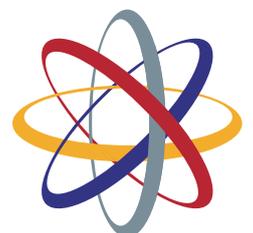
**BTEC Level 3 National Foundation Diploma in Esports**

**BTEC Level 4 Higher National Certificate in Computing**

The above courses have been carefully selected to give students the best chance to survive and thrive in tomorrow's digital, computing and gaming industries. They are delivered via unique immersive learning methods in areas such as Information Technology Systems, Using Social Media in Business, Programming, Digital 2D & 3D Graphics, Games Design and Digital Animation and Effects. Within Esports, you can typically gain experiences in Esports Skills, Strategies and Analysis, Entrepreneurship in Esport, Games Design, Psychology of Esports Performance and coaching.

We are a skills and employment focussed department within Macclesfield College that are dedicated to producing highly skilled learners, equipped with knowledge in the digital and computing fields, but also who possess fundamental transferable skills to enable them to operate effectively within an organisation, ahead of the 21st century industry curve. Students are able to build their expertise in future focused and adaptable areas on a unit by unit basis, while transferring theory into practice and by capitalising on with work experience opportunities.

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# A task to get you started



This pack has been designed to introduce the kind of skills and knowledge you will need to study on the digital and computing programmes at Macclesfield College and prepare you for your transition into further education. It will also assist in helping you to make an informed decision about your choice of course.

Tutors will also be reviewing the tasks on completion to check that you have engaged with the work, and the level of work completed will be considered when accepting students onto specific courses.

We hope that you will find the content interesting - it may be initially challenging to learn independently, but this is an important skill and the more effort you put in, the more rewarding it will be.

## Task 1

As a teccy, you should be familiar with most computing topics.

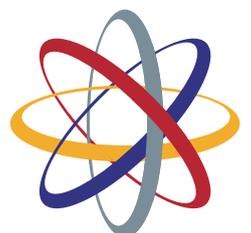
There are three fundamental topics, the first is...hardware; what it is, specifications, terminology, upgrades, meeting requirements & HOW IT FITS TOGETHER!

Subscribe to Linus tech tips <https://www.youtube.com/user/LinusTechTips>

This is an interesting and easy way of familiarising yourself with Hardware, what fits with what component, the different brands and their strengths. If you need a computer or you know someone who does, build them one, it's a great way to learn.

Want to see what a hardware pioneer looks like, or maybe you're interested in the electronic engineering side to computing? Check out Adafruit's Limor Fried on Youtube

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## Task 2

The second is software and particularly how to create it.

You can start to learn about programming languages here and if you only try one thing before starting a computing course, make it programming.

<https://www.codecademy.com/learn>

and when you're ready you can try this

<https://codecombat.com>

The languages we use for programming are  
C#; Java; Python; PHP & Javascript

You can start to learn here:

<https://www.w3schools.com/js/default.asp>

<https://www.w3schools.com/python/default.asp>

<https://www.w3schools.com/java/default.asp>

<https://www.w3schools.com/cs/default.asp>

<https://www.w3schools.com/php/default.asp>

The languages we use for web development are HTML/CSS and the bootstrap framework: <https://www.w3schools.com/html/default.asp>

Try building a website and implementing some of the functionality on the HOWTO page: <https://www.w3schools.com/howto/default.asp>

Thirdly...Databases drive almost all our websites, networks, software...and even the games we play. Learn about SQL (Pronounced 'Sequal'), the language of building, maintaining and programming databases here: <https://www.w3schools.com/sql/default.asp>

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# Additional Resources

For additional information about the awarding body used to deliver the current digital and computing qualifications at Macclesfield College, please review the following website links to the course specifications:

**[BTEC 2019 Specification \(pearson.com\)](#)**

**[BTEC 2019 Specification \(pearson.com\)](#)**

**[BTEC 2016 Specification \(pearson.com\)](#)**

**[BTEC HNCD Computing \(pearson.com\)](#)**

**[Pearson BTEC National Student book one 2016](#)**

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