



Tameside College

Computing
Applicant Study Pack

Description of course:

This course is designed for learners who wish to develop their skills in IT and computing. You will learn how computers work and how they are used in businesses. You will gain knowledge in IT fundamentals, using the internet, use of email, website software and spreadsheets, all of which will help you progress to a higher level course. At level three you will learn a variety of topics including: website design and customisation, networking, systems analysis and data base development.

On our Esports course you will complete units that will develop your understanding of the following topics: Esports skills, strategies and analysis, enterprise and entrepreneurship, events and laws and legislations. You will also gain a firm grasp of the business elements, including live-steamed broadcasting, games design and more.

Task One

Before we begin, it's important to be ready for work. So here are some things to do before you start the main tasks.

1. On your computer, create a folder called 'College Prep'. Keep all your college prep work in here.
2. Create a bookmark folder in your preferred browser called 'College prep'. Book mark any useful sites you come across during your prep work.
3. Connect to the department through our twitter feed @TCollComputing. You can keep in touch here. And we will be sending out updates over the summer.



Task One a

Try to answer as many of the questions below without googling them straight away

1. Who is considered to be the first programmer?
2. How many characters were originally allowed in a 'Tweet' when Twitter first launched in 2006?
3. What does the acronym BIOS stand for?
4. Which science-fiction author wrote about the Three Laws of Robotics?
5. In which year did Steve Jobs introduce the first Apple iPhone to the public?
6. What does 'SD' stand for in the terms 'SD card' and 'micro SD card'?
7. What does PNG stand for when used to describe a computer image file format?
8. Blogs often provide a web feed, also known as 'RSS' – what does RSS stand for?
9. In which year was the Sony PlayStation released?
10. The Oric-1 was released in 1983 – what was it?

Task Two

Binary and Hexadecimal

This task will develop your skills in finding out and absorbing new information and methods. Make sure you bookmark your source pages.

1. You may well have learned about number systems at school. Research the concepts concerning binary numbers and hexadecimal numbers. Write a short summary of what you have found out. Make sure you include:
 - a. Explain how the binary number system works, with some examples.
 - i. Convert the numbers 62 and 41 into binary
 - b. Explain how the hexadecimal number system works, with some examples.
 - i. Convert the numbers 62 and 41 into binary
 - c. Demonstrate how to convert binary numbers into hexadecimal and back again.
2. Explain how hexadecimal is used to represent colours on computers with clear examples.
3. What are the advantages of using hexadecimal instead of denary numbers for representing some types of data in computers?

Task Three

Extended Writing

Part of being successful when working at college level is the ability to research, extract information, summarise findings and be able to turn that into a new piece of work. This task will challenge you to do just that.

Write a report of at least 500 words which attempts to answer the following questions:

“What has been the most significant event or development in the history of computing? Who was responsible for this? And why do you feel this was so important?”

Your report should be laid out according the following structure:

- Title and author
- Introduction
- Body of the report
- Conclusions
- Bibliography

You should back your report up with researched facts, and you should include a bibliography of sources using the following guide to help you.

<https://www.bibme.org/citation-guide/apa/>

What next?

- Visit our website – www.tameside.ac.uk for more information.
- Attend our Virtual New Students’ Day.
- Make it official, join us for enrolment in August. Letters will be sent to all applicants at the end of July with more details.