

CAREERS ACTIVITIES LINKED TO KEY INDUSTRY SECTORS

INFORMATION TECHNOLOGY CAREERS ACTIVITY (KS4)

Whether you know exactly what job you want to do and how to get there, or whether you aren't sure just yet, researching the job roles within different industry sectors will help you to expand your knowledge and help you understand the learning pathways, skills and qualifications which potential employers may be looking for from young people entering their industry sector.

During this activity you will be able to explore these different job roles, begin to look in more detail at specific job roles and then use labour market information to understand what type of employers you could end up working for.

As part of this series of careers activities you will be given the opportunity to explore the many careers that may be open to you should you wish to take up a role within the Information Technology sector.

SECTION 1

WHAT IS INFORMATION TECHNOLOGY?

Let's start by understanding exactly what is meant by Information Technology and the different job roles that are within the industry.

[Watch this short VIDEO which should help you understand what is meant by Information Technology.](#)

Next you should view the webpage below which provides you with an "[Overview of the UK's IT industry](#)"

Can you research and list below 10 different types of job roles which fit within the Information Technology sector?

Name of Job Role

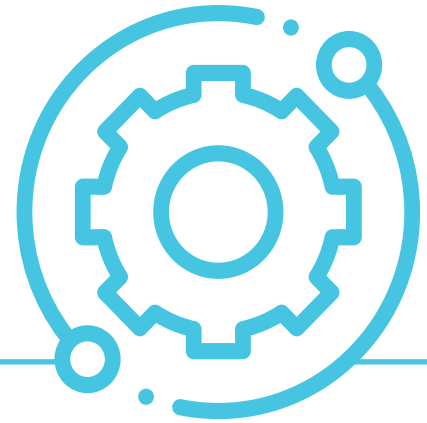
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SECTION 2

ROUTES INTO THE IT SECTOR

This section will provide you with a better understanding of the Entry Routes open to you should you wish to join the Information Technology Sector. Lets us explore these routes in more details.



THE TECHNICAL ROUTE

Known as Tech levels or T-levels, these include qualifications such as BTECs and NVQs in construction, ICT & the built environment.

Vocational courses prepare you for a particular job, industry or sector. They are often very practical and may include coursework assignments related to real-work scenarios, as well as links with employers. Vocational courses are offered at different levels and can lead onto apprenticeships, higher education (university) and employment

Research and answer the following questions about the TECHNICAL route into the Information Technology sector.

1. Using the internet can you research and list 5 x job roles which you think might suit the TECHNICAL Entry route?

2. Using the internet can you research and list the local colleges or training providers who offer T'level opportunities in Worcestershire?

3. What do you think are the benefits of choosing the TECHNICAL ROUTE into the Information Technology sector?

THE APPRENTICESHIP ROUTE



Apprenticeships allow you to earn money, combining on-the-job training with study. They can open doors to a wide variety of Information Technology jobs and can be taken at different levels, including intermediate, higher and degree apprenticeships.

You will generally need a minimum of five GCSEs (or equivalent) including English, maths and science or technology subjects, often at grades 9 to 4 (A* to C) due to competition for places.

Watch the short video by clicking on the link below to hear about from a few other young people who have already undertaken an IT apprenticeship. [Video - Apprenticeship Route](#)

Research and answer the following questions about the APPRENTICESHIP route into the Information Technology sector.

- 1.** Can you research and list 5 possible IT related job roles which you could undertake as part of an Apprenticeship?

1
2
3
4
5

- 2.** Using the internet can you research and list some companies in Worcestershire that offer IT related Apprenticeships?

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- 3.** What do you think are the benefits of choosing the APPRENTICESHIP ROUTE into the Information Technology sector?

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THE UNIVERSITY ROUTE

After completing your A-Levels, T-levels, IB, Highers, BTEC Level 3 or equivalent, you may decide to go on to study a subject relating to the Information Technology sector at university.

Students would usually complete a university course over a period of three to four years. Depending on the subject, these courses combine coursework, exams and practical learning also. It is possible to study your degree part time and in your private time. Students would normally focus on one course which would support their entry into a specific job role.

You normally need to have studied maths, English and Science or a related vocational course to Level 3, in order to apply to IT related degrees at university

Research and answer the following questions about the UNIVERSITY route into the Information Technology sector.

1. Using the internet can you explore and list the different IT related courses you could study at University?

2. Can you list 5 x job roles which you could undertake once you have completed an IT related degree at university?

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3. Using the internet can you research and list some local, regional and nationally based universities where you could study IT related degrees?

SECTION 2

EXPLORING JOB PROFILES

To help you understand and obtain more information about a variety of these job roles you can begin to explore their "Job Profiles"

A job profile should give you key information about the role including entry routes, qualifications, potential earnings and the tasks the job involves.

Using this link can you explore the following [JOB PROFILES](#) and then answer these questions for each of the job roles?



BUSINESS ANALYST

1. How many hours per week would you expect to work as a BUSINESS ANALYST?

2. Can you name the qualifications which might help you become a BUSINESS ANALYST?

3. What would the starting salary be for a fully qualified BUSINESS ANALYST be?

4. What "Work Experience" could you undertake before looking to become a BUSINESS ANALYST?

5. Can you write a paragraph about the tasks you might be required to undertake as a BUSINESS ANALYST?

[Why not watch this short video about the role of a Business Analyst?](#)



WEB DESIGNER

1. How many hours per week would you expect to work as a WEB DESIGNER?

2. Can you name the qualifications which might help you become a WEB DESIGNER?

3. What would the starting salary be for a fully qualified WEB DESIGNER?

4. Can you write a paragraph about the tasks you might be required to undertake as a WEB DESIGNER?

5. Can you list 3 x employers in Worcestershire where you could be employed as a WEB DESIGNER?

[Why not watch this short video about a "Day in the life of a Web Designer"?](#)



CYBER SECURITY ANALYST

1. How many hours per week would you expect to work as a CYBER SECURITY ANALYST?

2. Can you name the qualifications which might help you become a CYBER SECURITY ANALYST?

3. What would the starting salary be for a qualified CYBER SECURITY ANALYST?

4. Can you write a paragraph about the tasks you might be required to undertake as a CYBER SECURITY ANALYST?

5. Can you list 3 x employers in Worcestershire where you could be employed as a CYBER SECURITY ANALYST?

[Why not watch this short video about James who is a Cyber Security Analyst and works for Inmarsat?](#)

THE FUTURE OF TECHNOLOGY



You should now have a better understanding of the Information Technology Industry and some of the roles you could choose if you wanted to enter this sector.

Your next task will be to look to the future and use your imagination to look at how the Information Technology sector could change the way we live in the future.

Can you think of some ways in which the Information Technology sector could change the way we live in the future?

In the free text box below list some of your ideas.

Think about ALL the different things that might change as Information Technology becomes more advanced and the impact this could have on our day to day lives.



[Now watch this short video to see if your ideas are like those featured within the video.](#)

Now you have had a glimpse of the future can you write a few paragraphs on how technology and the use of IT will change the way you live in the future?

If you are feeling artistic why not create an example drawing of what some of your idea/s may look like?

Here are some questions which might help you come up with some ideas.

Perhaps think about giving examples of how we might be entertained in the future?

How will transport change in the future?

How will technology support this?

Will artificial intelligence have an impact on medicine in the future?

What will change in our homes?

What jobs could be replaced by technology?

