CAMBRIDGE TECHNICALS IN IT

LEVEL 3 - TASTER LESSON

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• HERE IS AN OUTLINE OF THE COURSE AND THE MODULES YOU WOULD TAKE

- Fundamentals of IT -You will gain an understanding of IT technologies and practices that are essential for IT professionals. Information learnt
 in this unit will provide a solid foundation in the fundamentals of hardware, networks, software, the ethical use of computers and how
 business uses IT
- Global information You will gain an understanding of how organisations use information sources both internally and externally and the types of information you will encounter. The skills gained by completing this unit will give you knowledge of the functionality of information and how data is stored and processed by organisations. You will also learn about how individuals use information of various types
- Cyber Security You will gain an understanding of how organisations use information sources both internally and externally and the types
 of information you will encounter. The skills gained by completing this unit will give you knowledge of the functionality of information and
 how data is stored and processed by organisations. You will also learn about how individuals use information of various types
- Product Development This unit will prepare you to undertake product development activities. You will learn about different product design
 methodologies and the role of the product development life cycle. In addition, you will discover the factors that influence product
 developments.
- Internet of Everything This unit is about the use of the internet and how it is impacting people and society. You will learn about the Internet
 of Everything (IoE) and how it is used. Using your knowledge you will carry out a feasibility study for a potential idea. You will pitch your
 idea to potential stakeholders and use their feedback to revise your proposal.

INTERNET OF THINGS

• As part of this course you will complete a module on the Internet of Things (sometimes called the Internet of Everything).

- 90 second search task
- What is the Internet of things?

INTERNET OF THINGS

• This is the interconnection via the internet of computing devices embedded in everyday objects, enabling them to send and receive data.

• Think about this, there are 1000's of devices which are already on the market that can do this.

• How many can you jot down?



IOT DEVICES TEND TO FALL INTO A SERIES OF CATEGORIES.

- Body/health
- Home/garden
- City/neighbourhood
- Industry
- The environment
- Sort the devices you thought of into the categories.
- Do some research to find a device for any categories you are missing!

PICK ONE ITEM FROM YOUR LIST – IDEALLY A DEVICE YOU HAVE EXPERIENCE OF.

- Jot down your answers to the following questions.
- What does the device do?
- What does it do that makes it part of the Internet of Things?
- Do you think this functionality is a benefit to the user? Why do you think this?

LISTEN THIS THIS PODCAST AND LOOK ON THE NEXT SLIDE TO SEE WHAT YOU NEED TO LOOK OUT FOR.

 <u>https://www.mcafee.com/blogs/consumer/hackable/are-smart-padlocks-</u> secure-enough-to-protect-your-packages/

• This links to both our Internet of Everything Module and the Cyber Security module for this course!

AS YOU HAVE HEARD DEVICES BEING PART OF THE INTERNET OF THINGS IS NOT ALWAYS ENTIRELY A GOOD THING!

• From the podcast jot down the answers to the following questions.

• How do you feel about this type of smart device?

• Do you think the benefit of smart devices like this outweighs the risks that out outlined here?

NOW FOR YOUR OWN IDEAS

• If you could make one device 'smart' and add it to the 1000s that are already part of the Internet of Things, what would it be and why?

• Think about a need it might fulfil but also consider the existing items on the market and the risks that could be created by such a device.

• Create a short paragraph explaining your idea and why you think it is needed.

IF YOU WOULD LIKE TO LOOK AT OUR COURSE IN MORE DETAIL YOU CAN LOOK HERE:

 <u>https://www.ocr.org.uk/qualifications/cambridge-technicals/information-</u> <u>technology/units/#level-3</u>

• The full course title is the Cambridge Technicals Extended Certificate in Information Technology – Level 3.