Kimberley School

Cambridge Technical Level 3

INTRODUCTORY DIPLOMA IN I.T.

SIXTH FORM ICT

East Midlands Education Trust

SUBJECT BOOKLET

What is the Introductory Diploma in IT?

The Cambridge Technical Introductory Diploma is a vocational qualification. Students study two units in Year 12 and three in Year 13 to get the full qualification.

Cambridge Technical qualification offers learners the opportunity to:

- Prepare for further learning or training.
- Develop essential knowledge, transferable skills and personal skills in a subject area that interests them with the aim of enhancing their employability.
- Move into different areas of employment.
- Develop their knowledge and skills as part of their Continual Professional Development (CPD).
- Achieve a nationally recognised vocational qualification.

Year 12 students will study the following units:

- Fundamentals of IT – this involves the fundamentals of hardware, networks, software, the ethical use of computers and how businesses use IT.
- Social media and digital marketing – students will look at digital marketing as a concept and look at the impacts of the use of social media as a digital marketing tool

Year 13 students will study the following units:

- Global Information – how organisations use information internally and externally and the types of information that you will encounter Internet of Everything – students will learn about the Internet of Everything and how it is used
- Data analysis and design – students will learn how to use data analysis techniques to provide evidence and interpretation for decision making for a range of organisational needs.

IT Roadmap: Cam. Techs. Introductory Diploma (Year 12/13)

Subject Aim: This qualification is designed for learners 16 years old or over who want to continue their education through applied learning by developing their knowledge and understanding of the principles of IT and global information systems. Achievement of this qualification can support progression to go on and study a wide range of relevant IT degrees in a Higher Education.

Contacts

Computing and IT Department: Mr Nicol (Subject Progress Leader), Mrs Puckey (Assistant Subject Progress Leader KS3), Mr Linworth. We are based in the Computing and IT Department C4, C5, C6. Student issues – please do not hesitate to ask for help. We also run "drop-in" sessions (open to students for any help/questions) in C4 on Monday-Friday during morning break or with individual teaching staff by prior arrangement.

Overview

The course is made up of **three** externally **examined** units and **two** further **coursework** units that are assessed by your teachers and moderated by the exam board.

Year 12: You will study **Unit 1 Fundamentals of IT** and **Unit 2 Global Information**. These units are mandatory and externally assessed. Unit 1 develops a sound understanding of hardware, networks, software, the ethical use of computers and how business uses IT. Unit 2 allows students to demonstrate the uses of information in the public domain, globally, in the cloud and across the Internet, by individuals and organisations. Unit 1 and 2 are both worth 50% of your first year course and contribute to 50% (combined) of your overall qualification.

Year 13: You will study **Unit 3 Cyber Security**, **Unit 4 Computer Networks** and **Unit 18 Computer Systems (Hardware).** Unit 3 Cyber Security is **externally** assessed by **examination** whilst Unit 4 and 18 are **internally** assessed and **externally moderated**. Unit 3 allows students to gain knowledge and understanding of the range of threats, vulnerabilities and risks that impact on both individuals and organisations. Unit 4 enables students will learn how to plan, implement and maintain computer networks, the function of networking protocols and how to maintain networks. Unit 18 provides students with the opportunity to build personal computers, install hardware upgrades, diagnose and fault find hardware faults as well as develop their skills in relation to installation, upgrading, troubleshooting and maintenance of hardware for computer systems.

Subject Specification

Click the link below or visit the Cambridge Technicals website for more information:
Cambridge Technicals - Information Technology - OCR (https://www.ocr.org.uk/qualifications/cambridge-technicals/information-technology/units/#level-3)

Unit 1 (Year 12) 25%	Unit 2 (Year 12) 25%	Unit 3 (Year 13) 16.66%
Fundamentals of IT • Worth 50% of Year 12 and 25% overall • Written exam (MC/short/med/long answer questions) • OCR set and marked • 1hr 30 minutes / 80 marks • January and June sittings • You can take twice – best grade counts **LO1:** Understand computer hardware **LO2:** Understand computer software **LO3:** Understand business IT systems **LO4:** Understand employability and communication skills used in an IT environment **LO5:** Understand ethical and operational issues and threats to computer systems	**Global Information** • Worth 50% of Year 12 and 25% overall • Written exam (short/med/long answer questions) • Pre-Release Scenario – 50% of exam • OCR set and marked • 1hr 30 minute 80 marks • January and June sittings • You can take twice – best grade counts **LO1:** Understand where information is held globally and how it is transmitted **LO2:** Understand the styles, classification and the management of global information	**Cyber Security** • Worth 33.33% of Year 13 & 16.66% overall • Written exam (short/med/long answer questions) • Pre-Release Scenario – 50% of exam • OCR set and marked • 1hr / 60 marks • January and June sittings • You can take twice – best grade counts **LO1:** Understand what is meant by cyber security **LO2:** Understand the issues surrounding cyber security **LO3:** Understand measures used to protect against cyber security incidents

	LO3: Understand the use of global information and the benefits to individuals and organisations **LO4:** Understand the legal and regulatory framework governing the storage and use of global information **LO5:** Understand the process flow of information **LO6:** Understand the principles of information security	**LO4:** Understand how to manage cyber security incidents

Unit 4	Unit 18
Computer Networks • Worth 33.33% of Year 13 and 16.66% overall • Coursework • Teacher marked /assessed and OCR moderated • Completed during lessons / study periods / own time • Split into 6 Pass Tasks, 3 Merit Tasks and 2 Distinction Tasks **LO1:** Understand the concept of networks **LO2:** Be able to plan computer networks to meet client requirements **LO3:** Be able to present network solutions to clients **LO4:** Be able to plan maintenance activities for computer networks	**Computer Systems (Hardware)** • Worth 33.33% of Year 13 and 16.66% overall • Coursework • Teacher marked /assessed and OCR moderated • Completed during lessons / study periods / own time • Split into 6 Pass Tasks, 3 Merit Tasks and 2 Distinction Tasks **LO1:** Understand the components of a computer system **LO2:** Be able to propose computer systems for identified business requirements **LO3:** Be able to build or upgrade computers **LO4:** Be able to test and evaluate the functionality of computer systems

	Topics (Year 12)	Assessment (Year 12 & Year 13)
AUTUMN TERM	**Unit 1 Examination (See above)**	You are regularly assessed in a range of ways: 1. End of topic tests (examined elements only). Once all activities for a topic are complete (LO = Learning Objective), you will have an online assessment during the lesson. The assessment includes multiple choice, true/false, short, medium and long answer questions as appropriate to each topic. 2. End of Unit mock examination (examined element only). Once the entire unit is complete, you will have a full 1hr 30 minute mock paper. We will use previous questions/exam papers directly from OCR ExamBuilder. 3. Homework: Mostly involves research and lesson preparation, this includes completion of VIN note sections and preparation for tests / exams. You will be marked using the Cambridge Technicals Grading Scheme – For more information, see the specification linked above.

	Topics (Year 12)	Homework (Year 12 & Year 13)
SPRING TERM	**Unit 2 Examination (See above)**	Homework will be set regularly usually in the following categories: • Maintaining skills over the holidays • At the end of each Exam Unit LO Theory Section there will be "revision homework" in preparation for the test • Exam Prep homework such as making "Exam Revision Cards" and doing Past Papers • Finishing VINs sections – work started in class to complete for homework • VINs checkpoints to ensure their quality / quantity • Watching videos / Doing Research as: backup / background / "extras" to lessons • Coursework Tasks (Unit 4 and Unit 18)
Summer Term	**Topics (Year 12)** Unit 2 Exam (see above) – May/June Unit 4 Coursework	**ASSESSMENT REVISION (Year 12 & Year 13)** Full details of any assessment, how to revise for it and the revision materials available will be accessible from the Educa8 VLE course homepage. **ENRICHMENT (Year 12 & Year 13)** There will always be opportunities to go "further than the course" and these will be accessible from the Educa8 VLE course homepage.

Where next from Year 12 IT?

The course continues into Year 13, where you will undertake the coursework element Units 4 and Unit 18 as well as the Unit 3 Cyber Security examination in January. You will then complete all remaining coursework from January until you leave in May, with the possibility of finishing sooner if you have all the exam results you require and have finished all the coursework units.

	Topics in Year 13
AUTUMN	Unit 3 – Cyber Security (See above) Unit 4 – Complete Computer Networks

	Topics in Year 13
SPRING	Unit 18 – Computer Systems (Hardware) January examination results in March Decide on potential resits/course of action

	Topics in Year 13
SUMMER	Continue with course of action until leaving date

See Mr S.Nicol for further details on the course.
Download the specification from **www.ocr.org.uk**