

THE INFORMATION TECHNOLOGY DIPLOMA

ADVANCED LEVEL UNITS

A GUIDE FOR LEARNERS

What is the IT Diploma?

The IT Diploma will introduce you to the exciting and diversified Information Technology Industry giving you a unique insight which will allow you to make an informed choice about your future career. As well as understanding the theory behind Information Technology, learners will learn practical skills and develop an ability to solve problems both individually and as part of a team. The course is designed to be interesting, and to open up a wide range of educational, training and career opportunities

What does the course involve?

Compulsory Units...

IT Diploma learners will complete a series of compulsory and optional units, designed to give them the knowledge, skills and experience. The foundation level units have been summarised on the following pages of this booklet.

Work experience...

Diploma learners will do a minimum of 10 days work experience. They will also get the chance to learn from and be mentored by professionals in a variety of business situations.

The learner project...

All Diploma learners will complete a project to demonstrate the skills and knowledge they have acquired. Learners can choose their own project.

English, maths and ICT...

All Diploma learners need to achieve a minimum standard in English, Math's and ICT. These subjects are studied as part of the Diploma and will be taken as a GCSE alongside it

Personal Learning and Thinking Skills...

Mastering essential life and work skills is crucial in today's competitive market.

All Diploma learners are encouraged to develop skills like teamwork and self management as part of their course. They will learn to express themselves confidently and how to apply their knowledge and skills creatively in a business environment

What could the Diploma lead to?

The Diploma is designed to broaden a person's horizons and give them a wide range of next-step options. The Progression and Advanced Diploma could both lead onto college or university or to further training and employment. Learners who have completed the Advanced Diploma in Information Technology might choose to go on to do a University Degree or go on to study in a different area. They could also decide to start an Apprenticeship or take a job with further training

A Diploma in IT does not mean learners have to pursue a career in the Construction Industry. A Diploma gives a learner relevant and transferable skills that will be welcomed by colleges, universities and employers

The IT Diploma – Advanced Level

Unit 1:

The Potential of Technology

Externally assessed

. In this unit you will investigate how technology has impacted on, organisations and individuals, focusing particularly on global business competitiveness and the transformational effects of the internet and mobile communications. You will find out more about emerging technologies and investigate how technology can help an organisation achieve its objectives.

- LO.1 Understand the role of legacy systems and emerging technologies in achieving organisational objectives in a number of sectors
- LO.2 Understand how organisations and individuals innovate through and with technology to improve competitiveness and service
- LO.3 Be able to identify and assess examples of successful and unsuccessful innovations using technology
- LO.4 Understand how new technology can help organisations achieve their objectives, taking account of opportunities and risks
- LO.5 Be able to identify opportunities for innovation using technology-enabled solutions.

Unit 2:

Understanding Organisations

Internally assessed

This unit is all about understanding organisations and their organisational structures and employee roles and responsibilities — with an ICT focus. The impact of ICT systems on organisational performance can increase the efficiency and profitability of an organisation. However, changing or upgrading current systems to facilitate these improvements is not without risk.

- LO.1 Understand how the type, structure and ownership of organisations relate to their objectives
- LO.2 Understand typical organisational functional activities, roles and responsibilities
- LO.3 Understand the principles of key technology-enabled business processes considering local, national and global dimensions
- LO.4 Understand success and risk indicators for organisations
- LO.5 Understand the implications of introducing different types of technology systems into an organisation
- LO.6 Understand the principles of integration and interaction between systems
- LO.7 Be able to analyse and document business processes and propose technology-enabled improvements

Unit 3:

Professional Development

Internally assessed

This unit will supply you with the knowledge, and some of the skills needed to operate effectively in a business environment. You will study the media used to communicate within a business environment the legal and ethical protocols that organisations have to practise. You will be given the chance to work in a team and improve your interpersonal skills.

- LO.1 Understand the principles of effective communication in business and the implications of using different communications media
- LO.2 Understand differing personal styles and behaviours and their impact on others
- LO.3 Be able to demonstrate correct, contextually appropriate and effective English in a range of common business situations
- LO.4 Be able to apply mathematical concepts in order to understand business dynamics and find solutions
- LO.5 Be able to develop and present compelling business cases for technology-enabled solutions
- LO.6 Understand how ethical, social, professional and legal constraints affect what organisations can do

The IT Diploma – Advanced Level

Unit 4:

Creating Technology Systems

Internally assessed

In this unit you will learn about the role and interaction of key components of technology systems and how to apply industry-standard approaches to design, develop and test small-scale technology-enabled solutions.

You will extend your understanding of database software and learn how to create database systems with a three tier architecture (relational database, program code and user interface).

You will use an event-driven programming language such as Visual Basic for Applications (VBA) to customise and enhance the functionality of the database systems you produce.

- LO.1 Understand the role and interaction of the key components of database systems
- LO.2 Understand the principles of the solutions life cycle
- LO.3 Be able to design, develop, test and implement a relational database solution with a three-tier architecture
- LO.4 Be able to produce operating information for users
- LO.5 Be able to seek feedback, review the system and prioritise opportunities for improvement

Unit 5:

Managing Technology Systems

Externally assessed

This unit looks at understanding the core techniques for managing the availability and security of technology systems. You will learn how to manage small-scale live technology system operations, how to ensure systems availability and troubleshoot system problems involving viruses and user errors. You will learn how to configure a small-scale technology system suitable for business use, including fixed line and mobile communications, networking and security.

- LO.1 Be able to configure and test a small-scale technology system
- LO.2 Be able to plan the implementation and testing of systems change in response to new business requirements
- LO.3 Be able to apply the principles of effective change management for technology systems
- LO.4 Be able to assess the impact of problems in technology systems
- LO.5 Be able to handle problems in technology systems
- LO.6 Be able to produce technical support information for managing the availability and security of technology systems

Unit 6:

Multimedia and Digital projects

Internally assessed

There are many types of multimedia products such as computer games, digital brochures, simulations, virtual reality, advertisements and virtual tours. In this unit, you will design and develop your own multimedia product.

You will evaluate your products for their impact and effectiveness and consider what improvements could be made and which improvements are the most important.

- LO.1 Know about different types of digital media and their use for a variety of purposes
- LO.2 Be able to establish business requirements and audience needs
- LO.3 Be able to create, edit and integrate multimedia assets
- LO.4 Be able to design, develop and test informational websites
- LO.5 Be able to design, develop and test multimedia products
- LO.6 Be able to assess the effectiveness of multimedia products, identifying opportunities for improvement

The IT Diploma – Advanced Level

Unit 7:

Managing Projects

Internally assessed

Project management is becoming one of the most important functions in the business world and a good project manager can be literally worth their weight in gold.

This unit will equip you with some of the skills needed to become a good project manager.

On completion of this unit a learner should:

- LO.1 Understand the principles of project management
- LO.2 Understand the key factors in the success or failure of projects
- LO.3 Be able to review, interpret and develop project plans for technology-enabled solutions, using industry standard approaches
- LO.4 Be able to assess the effectiveness of project management techniques
- LO.5 Understand the implications of changing external factors on project plans