

www.demont.ac.ae



# Pearson BTEC International Level 3 **Foundation Diploma** in Information Technology

Awarded by Pearson, UK



**DEMONT**  
INSTITUTE *of*  
MANAGEMENT  
& TECHNOLOGY



**Pearson**

## Dream & Achieve With Demont

DeMont Institute of Management and Technology is a Technical and Vocational Education and Training (TVET) providers in the UAE. DeMont offers NCFE, CMI and Pearson programs that are accredited by the Knowledge and Human Development Authority (KHDA). We have mastered the art, science, and practice of providing quality UK education with optimum result-centric teaching methods that include pedagogical and blended forms of learning. Imparting quality education, offering accredited certifications, and delivering lessons that will alter our student experience for the better are at the core of our institution's value. DeMont aspires to pave a promising career pathway for all those who walk through the doors of the institution with the desire to learn and grow.



### About



Pearson, UK is the world's leading learning company operating in countries all around the world. They provide content, assessment and digital services to learners, educational institutions, employers, governments and other partners globally. Pearson is committed to helping equip learners with the skills they need to enhance their employability prospects and succeed in the changing world of work. They strongly believe that wherever learning flourishes, people flourish as well.





# Introduction to BTEC

With a track record built over 40 years of learner success, BTEC International Level 3 qualifications are recognised internationally by governments, industry, and higher education. BTEC International Level 3 qualifications allow learners to progress to the workplace – either directly or via study at a higher level. Over 100,000 BTEC learners apply to university every year. Their Level 3 BTECs, either on their own or in combination with A Levels, are accepted by UK and international universities, and higher-education institutes for entry to relevant degree programmes.

---

## Why choose Pearson BTEC?

### ★ Practical Learning

BTEC International Level 3 focuses on practical learning which is appealing to students who prefer a hands-on approach to education. Practical learning includes real-world projects, assignments, and assessments, that simulate actual workplace scenarios.

### ★ Career-Focused

BTEC Qualifications are known for their alignment with specific career paths and industries. They are designed to prepare students for employment or further education in a particular field.

### ★ Recognition

BTEC Qualifications are recognized by employers and universities in the UK and other countries around the world. They serve as a pathway to both employment and higher education.

### ★ Global Perspective

BTEC International Level 3 is designed to have an international focus, which means it can be relevant to students from various countries and cultures. This global perspective can be valuable in today's interconnected world.

### ★ Progression Opportunities

BTEC International Level 3 can serve as a stepping stone to higher-level qualifications, such as BTEC Higher Nationals or university degrees. Many universities and colleges accept BTEC qualifications for admission.

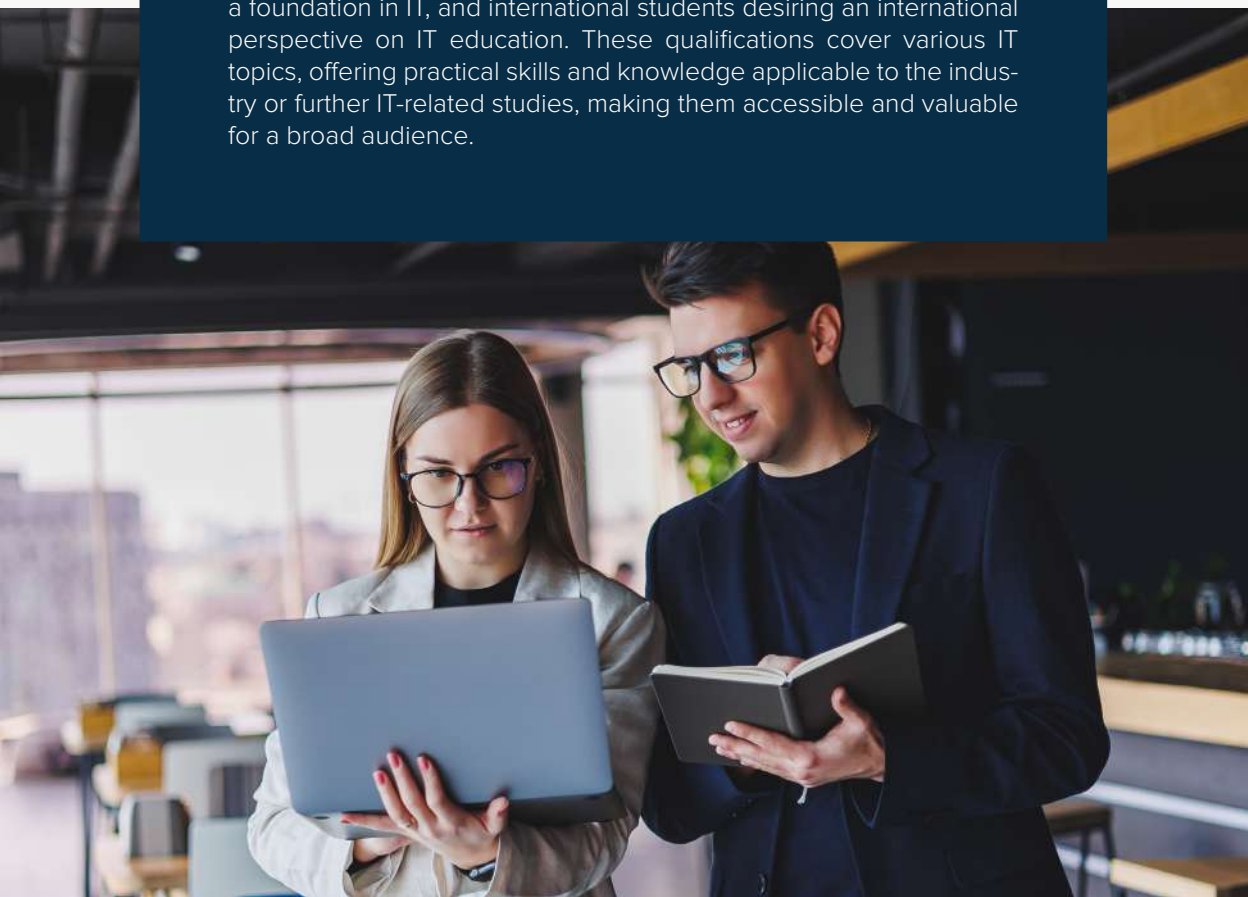
### ★ Real-World Skills

BTEC courses often emphasize the development of practical, real-world skills that are directly applicable to the workplace. This can enhance students' employability and job prospects.

# BTEC International Level 3 Qualifications in **Information Technology**

## Who are these **Qualifications** for?

Pearson BTEC International Level 3 Foundation Diploma in Information Technology cater to a diverse range of learners. They are suitable for secondary school graduates aiming to specialize in IT for post-secondary studies, post-secondary students seeking to enhance their IT skills or transition into IT careers, working IT professionals seeking formal recognition of their skills, career changers looking to establish a foundation in IT, and international students desiring an international perspective on IT education. These qualifications cover various IT topics, offering practical skills and knowledge applicable to the industry or further IT-related studies, making them accessible and valuable for a broad audience.



# Key Learnings of the BTEC International Level 3 Qualifications in Information Technology:

- ★ Be able to analyze and explain the intricate relationships between hardware and software components in IT systems.
- ★ Develop the capability to assess the impact of IT systems on organizations and their stakeholders, considering both positive and negative effects.
- ★ Possess fundamental knowledge across various IT areas, enabling a smooth transition to higher education courses in IT-related fields.
- ★ Gain the ability to evaluate existing websites, provide constructive feedback on design and functionality, and suggest improvements.
- ★ Acquire proficiency in scripting languages such as HTML, CSS, and JavaScript, and will be able to utilize these technologies effectively.
- ★ Be capable of using text editors or rapid application development tools to create functional websites, reflecting their understanding of design and functionality.
- ★ Explore the diverse applications of robotics and automation across industries, understanding how hardware, software, and data components work together to solve real-world problems.
- ★ Be able to design and construct physical robots to address specific challenges, applying their knowledge of robotics principles.
- ★ Investigate project management principles and methodologies relevant to the IT industry.
- ★ Demonstrate the ability to initiate, plan, execute, monitor, and close an IT project, including problem research, solution generation, feasibility analysis, and project requirement definition.
- ★ Develop basic coding and shell scripting skills including writing, executing and automating tasks using scripts and understand broader implications of technology use in a workplace.
- ★ Have a strong grasp of computational thinking principles, with practical application of these skills to design, develop, test, refine and review computer programs for various purposes.



# What does this Qualification Offer?

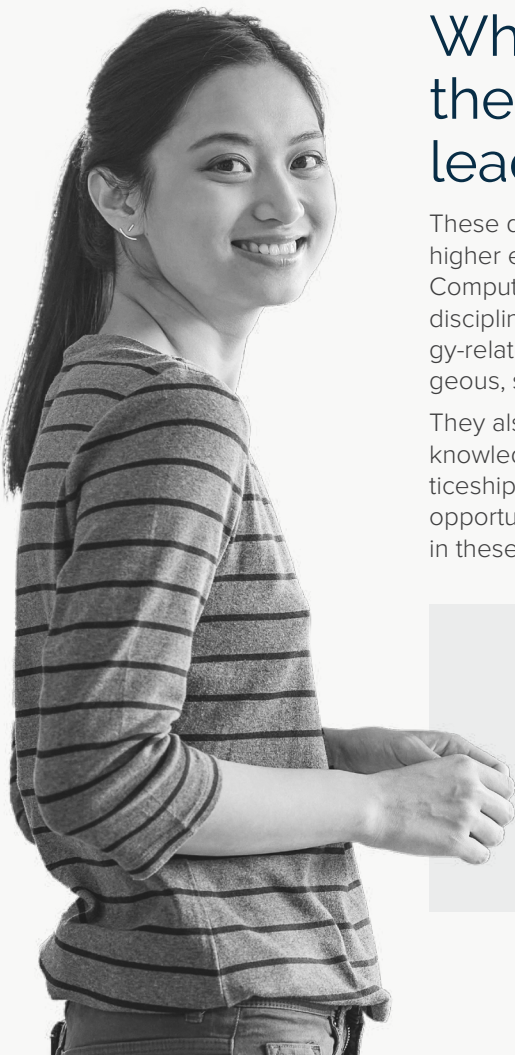
The content of these qualifications has been designed to support progression to particular roles in information systems, either directly into entry-level roles linked to these occupational areas or, more likely, via particular higher-education routes in these particular areas. The qualification content has been designed in consultation with employers, professional bodies and higher-education providers to ensure that the content is appropriate for the progression routes identified.

## What could these Qualifications lead to?

These qualifications allow learners to progress to higher education to study a BTEC Higher National in Computing, a degree in an information technology discipline or a degree where information technology-related skills and knowledge may be advantageous, such as business studies.

They also support learners who want to develop the knowledge and skills needed for vocational apprenticeship roles and allow for progression to job opportunities at trainee/entry levels. Jobs available in these areas include:

- **Software Developer**
- **Web/Content Developer**
- **Mobile App Designer**
- **Games Designer**
- **Programmer**
- **IT/Business Analysis Support.**



# MODULE LIST

## MODULE

Information Technology Systems – Strategy, Management, and Infrastructure

Website Development

Introduction to Robotics and Automation

IT Project Management

Technical Fundamentals for Computing Professionals

Programming

Data Modelling



## » Information Technology Systems – Strategy, Management, and Infrastructure

Through this module, students will explore the relationships between the hardware and software that form the IT system. They will examine the issues related to the use of IT systems and the impact that they have on an organization and its stakeholders. The module will provide students with a fundamental understanding of all areas of IT, supporting their progression to an IT-related higher education course. The module will also provide partial coverage to content from Microsoft Azure Data Fundamentals Certification.

### Learning Outcomes

- // Explore how IT infrastructure meets the needs of organisations and their stakeholders.
- // Understand how organisations make use of data and information.
- // Develop policies for the use of IT within an organisation.

## » Website Development

In this module, students will review existing websites – commenting on their overall design and effectiveness. They will review the use of scripting languages such as Hypertext Markup Language (HTML), Cascading Style Sheets (CSS) and JavaScript® and a simple text editor, or rapid application development tools. Finally, they will be able to reflect on the website design and functionality using a testing and review process.

### Learning Outcomes

- // Understand the principles of website development.
- // Design a website to meet client requirements.
- // Develop a website to meet client requirements.



## »» Introduction to Robotics and Automation

Through this module, students will explore how robotics and automation are used in different industries to solve problems and meet a range of needs. Students will explore physical and non-physical 'robots' and how the different hardware, software, and data components of a system are used to automate processes. Additionally, students will design and build a physical robot in response to an identified problem.

### Learning Outcomes

- // Investigate the use of automation and robotics.
  - // Design an automated solution for an identified need.
  - // Produce an automated solution for an identified need.
- 

## »» IT Project Management

In this module, students will investigate the principles of project management and different project management methodologies, as used in the IT industry. Students will deliver an IT project using at least one project management methodology and complete the five main stages of a project. They will initiate the project by researching a problem and using their creative skills to generate a range of solutions, undertaking a feasibility study to select an appropriate solution and outline the requirements of the project.

### Learning Outcomes

- // Investigate the principles and methodologies of IT project management as used in industry.
- // Carry out a project initiation for an IT project.
- // Carry out the planning, execution, monitoring and controlling of an IT project, using an appropriate methodology.
- // Undertake the closure of a project by reflecting on the success of personal performance and the project outcome.

## » Technical Fundamentals for Computing Professionals

In this module, students will explore the basic coding and scripting skills that will be useful in a range of technical roles. They will explore the fundamentals of coding and explore how to use shell scripting to perform and automate work tasks. Students will explore the fundamentals of coding and how to use shell scripting to perform and automate work tasks. They will explore how to use shell scripting to perform and automate work tasks. They will explore wider issues relating to the use of technology that can impact the workplace.

### Learning Outcomes

- // Explore the mathematics, logic, and processes of computer systems.
  - // Investigate issues relating to the use of digital systems.
  - // Design a computer infrastructure solution.
- 

## » Programming

Through this module, students will learn about computational thinking skills and the principles of designing and developing computer programs. They will apply computational thinking skills to design, develop, test, refine and review computer programs for a given range of purposes.

### Learning Outcomes

- // Examine the computational thinking skills and principles of computer programming.
- // Design a software solution to meet client requirements.
- // Develop a software solution to meet client requirements.



## » Data Modelling

Through this module, students will investigate the fundamentals of the decision-making process. They will find out how to use data modelling to provide the computational ability to compare consequences and determine a preferred course of action. This module will help students skills and techniques necessary to create spreadsheets to produce accurate information that informs decision-making.

### Learning Outcomes

- // Investigate data modelling and how it can be used in the decision-making process.
- // Design a data model to meet client requirements.
- // Develop a data model to meet client requirements.



---

DeMont Institute of Management & Technology FZE 802,  
Block No. 10, Dubai Academic City, Dubai, UAE

---

Toll Free  **800** **Demont**  
336668

[www.demont.ac.ae](http://www.demont.ac.ae)