If you have the desire to turn your passion for computers into a career, the Diploma in IT and Computing offered by **Ballsbridge Cyprus (Centre of Ballsbridge University)** is definitely a course you should consider. The Level 4 modules and assignments of this course are equivalent to the first year of a University Degree and the Level 5 modules and assignments are equivalent to the second year of a University Degree. Our online Level 4/5 IT and Computing Diploma course worth 240-credit course (120 ECTS), it includes 10 modules at each level.

The course is designed to equip you with the skills you need to Top Up to a full **Bachelor Degree in Information Technology** from **Ballsbridge University** by studying some extra modules, and go on to become an IT professional. While completing the course, students will have access to a variety of support services, including Tutor Support and Webinars, a Social Learning Forum, and additional materials to help in the completion of their Diploma course.

- -To enrol onto the Level 4 course, you must be at least 18 and have a full secondary education. Before enroling on to the Level 5 course, you must complete the Level 4 or equivalent.
- Whilst studying this course students will develop their skills in programming, systems analysis and design, software development. Upon successful completion of this Diploma course, students can pursue a career in IT within the public or private sector.

#### LIST OF MODULES:

#### LEVEL 4

## Computer systems and software

This module will develop learners' understanding of the integration of hardware and software components.

#### **Computer programming**

Learners will use different tools and techniques to design, implement and test programs, following the system life cycle.

#### Relational database systems

This unit will develop learners' understanding of database systems and data analysis and modelling.

## **Software engineering**

Leaners will gain an understanding of the need for Software Engineering and the different methods and techniques.

## Systems analysis and design

This module provides an understanding of IS concepts and how they relate to organisation needs in respect of business processes and transformation of information.

## **E- Commerce applications**

This module explores the role of e-commerce in the modern world and in particular the identification of aims and objectives within a business and the design issues arising from the definition of requirements.

#### **Human computer interaction**

This module will develop students understanding of principles and models of human computer interaction and evaluate existing HCI design and principles and use this to help them plan their own prototype multimedia user interface.

#### IT and society

This module examines the impact of technology on society and explores trends and changes created. It will examine management issues and potential conflicts in terms of security and data management.

#### Information systems project management

This module explores elements of project management key to successful development and implementation of specific IT projects.

#### **Management information systems**

This module focuses on understanding concepts of information systems and how they support business needs in terms of information processing and data processing.

#### LEVEL 5

## Innovative technologies in computing

This module looks at innovative trends and disruptive advances taking place and examines the new generation of skills and knowledge that will be required to work successfully in the sector.

### **Computing research methods**

This module will explore the knowledge and skills required to undertake research in this field and the qualitative and quantitative approaches required including use of literature and design of research proposals.

## Software development methodologies

This module looks at the role of systems engineering in development of software and various models of data, software and processes using modelling approaches.

#### Managing a computing project

Learners will find out about different project management tools and techniques that can be used when managing a computing project.

### Strategic management information systems

This module is concerned with developing an understanding of the strategic role of MIS within the organisation and how it impacts on the broader objectives and strategy of the business.

## Ethical, legal and professional issues in IT

This module explores current issues in the IT sector and how these may impact on areas of security, confidentiality, privacy and the law.

#### **Network Design**

This module explores the principles of networks and network design and implementation and support of network systems.

#### Web based development

This module will explore the design, deployment and management of virtualization and explore its commercial and potential impact.

#### **Cyber security**

This module will enable an understanding of the importance of digital security to business, to understand industry standards of digital security and be able to recommend improvements in security.

## Database design and development

Learners will extend their understanding of database design and development. They will research database management systems and will design and implement a complex database

**Tuition Fees:** 

Application fee - 50 EUROS (per student) Level 4 IT & Computing Fee - 1500 EUROS Level 5 IT & Computing Fee - 1500 EUROS Combined Level 4 + 5 - 2000 EUROS

\*Option for Level 5 IT & E-Commerce/Web Design/Networking Fee - 1500 Euros

(Please read information below)

#### **IT & E-COMMERCE**

#### LEVEL 5

# **Technopreneurship**

This unit aims to provide learners with the knowledge and skills needed to establish a new techno business. It includes understanding the characteristics of entrepreneurs, planning, marketing and finance.

#### **Network security**

This unit aims to provide learners with knowledge of network security issues in a networked

environment and the process of preventing and detection common security incidents

# **C#.NET Programming**

This unit aims to provide learners with the basic concepts and principles of ASP.NET programming using C#. This will enable learners to understand how to create dynamic web pages using server side programming techniques

# **System Administration**

This unit aims to provide the knowledge needed to administer a system in Linux and Windows. Topics covered include user and group management; file system management; task automation; shell scripting; Dynamic Host Configuration Protocol (DHCP) servers; mail servers; domain name servers; files and printers sharing; basic utilities and tools; application management; registry; local and group policies; backup policies; restore policies and performance tuning

# **Business to Consumer (B2C) E-commerce**

This unit aims to provide learners with knowledge of business to consumer ecommerce. This

includes the concepts and techniques used in mobile e-commerce and ticketing, the psychology of marketing, artificial intelligence (AI) in image recognition and social commerce.

## **Business to Business (B2B) E-commerce**

This unit aims to provide learners with knowledge of Business to business (B2B) e-commerce. This includes Electronic Data Interchange (EDI), Electronic Funds Transfer (EFT), online transaction processing, inventory management systems and supply chain management.

#### **IT & NETWORKING**

#### LEVEL 5

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# **Network Routing and Switching**

This unit aims to deliver the knowledge needed to carry out switching and the knowledge and skills needed to carry out routing – how to set up and configure a router and switches to interconnect a multi area network. The unit covers computer networks routing and switching including Router Information Protocol (RIP); Enhanced Interior Gateway Routing Protocol (EIGRP) and Open Shortest Path First (OSPF).

# **Network Design and Administration**

This unit aims to provide the knowledge and skills needed to enable learners to design a network i.e.how to scale and connect different networks to form an effective interconnecting network. It covers hierarchical network design; gathering network requirements; identifying network performance issues.

#### **IT & WEB DESIGN**

#### LEVEL 5

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#### **Network security**

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environment and the process of preventing and detection common security incidents

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# **Content Management Systems**

This unit aims to provide learners with the knowledge and skills needed to use content management systems (CMS) as a tool for the creation of digital content. Successful achievement of this unit will enable learners to understand CMS roles, content modelling, content aggregation, publication management and content migration.

## Web Design

This unit aims to provide learners with the skills and knowledge of client side programming and how to create a dynamic web pages using JavaScript (JS) programming language and Adobe Dreamweaver. The unit covers the creation of dynamic web pages that use form validation, validate user input, process user input at client side, dynamic navigation menu and a web client application.