# Leicester College

## **Computer Systems and Coding National Diploma level 3**

#### Course Overview

This course is a two year course that will develop your software and web development skill and prepare you for a career in the field of software development, web development or associated industries. During the course, you will develop skills in the use of industry-standard software packages including Visual Studio and Adobe Creative Suite. If you are aged 16-18, you will be enrolled on a study programme, which will include retaking GCSEs or undertaking Functional Skills in English and maths if you haven't already achieved a grade 4 or above. You will also be required to complete a work experience placement and an employability programme.

#### What you will learn

You will study the following subjects: principles of computer science, which will look at handling data within a program to examining the features of effective programming; fundamentals of computer systems, where you will learn about hardware and software installation; where you will learn about the technologies used in the coding industry; web development where you will learn about HTML, JavaScript and CSS and other development tools to produce an effective website. You will also study the application of social media and encryption techniques as well as security. In addition to the specialist course content, your study programme's English and maths (if applicable) and work experience aspects are important for applying to university, an apprenticeship or employment.

You will study four units in year 2: - Installing and upgrading software where you will learn how to install and configure the software as well as plan installations with backup procedures and keep the integrity of the data. Computer systems architecture where you will understand how data can be represented within computer systems and the principles of processor operations. - Networked systems security where you will learn about cyber security and the threats to computer networks and devices and understand and be able to apply aspects of network security. - Impact of the use of IT on business systems exploring the range of new technologies that impact businesses and how they will benefit and what the implications of change may be to that business. You will also be learning about e-commerce where e technologies are required for an e-commerce system and to understand the impact and effects of e-commerce. - Finally, you will be learning about computer graphics. You will learn about the hardware and software required to work with graphic images and understand types of graphic images and graphical file formats and be able to create and modify images to meet user requirements.

#### **Entry Requirements**

We ask that you have at least a level 2 in maths and English. This could be in the form of a Functional Skills Level 2 or a GCSE grade 4 (old grade C). If you intend to progress to a higher education course like an HND be mindful that you will require a level 2 qualification in maths and English. Additionally, a level 2 in IT subject or equivalent is essential as you will programming and code at level 3 when you start with us.

#### How you will be assessed

Assessment will be by way of external assessed exams, formative and summative assessments. Formative will include Q A, group and peer work, group discussions as well as exercises and tasks to assess your understanding. You will be able to work on assessments outside the classroom. Assignments and coursework are uploaded using Turnitin which will be through your course page using Moodle for accessing resources. For each unit, you will be graded with either pass, merit, or distinction depending on the number of tasks completed and the quality of the work submitted. There will be at least one opportunity to improve on those grades provided all work is completed within the designated assessment time scales.

#### **Course Fees**

Trip fees will be payable in year as and when trips are organised.

#### **Course Progession**

After completion of this course, you can either go into employment, an apprenticeship or higher education like a HTQ. There is also the vendor certification route. Vendor certifications are an invaluable addition to BTEC qualifications, as they give learners the skills they need to progress as IT professionals. Employers regard vendor certifications as the industry standard, and they're much sought-after by learners seeking employment and by professionals already working in IT and telecoms. The vendor certification routes are CompTIA A+ for the IT support industry, Cisco CCNA for anyone wanting to specialise in computer networks; Linux professional institute certification for anyone wanting to seek a career in environments that require a complete understanding of any Linux system. There are also certification through Oracle in databases and Microsoft with their office specialist modules.

#### What Happens Next

You will need details of your qualifications and a personal statement to complete your application. Once your application has been successfully processed, you will be sent a conditional offer and be invited to a Welcome

### **Course Details**

Course Code	P00219
Start Date	09/09/2024
Study Hours	Full Time
Duration	2 years
Campus	St Margaret's Campus
Level 3	

Apply Here

Event at the College to meet your tutors, learn more about your chosen course of study and tour the facilities. You will then need to confirm your acceptance of the course offered to you.