


SEVERN BUSINESS COLLEGE

# Qualifi Level 3 Diploma in Information Technology

Course Handbook

**Qualification**
Qualifi Level 3 Diploma in Information Technology

**Ofqual Number**
610/0659/2

**Level**
3

**Total Qualification Time**
600

**Credit Value**
60

**Aim of the Course**
The aim of the Qualifi Level 3 Diploma in Information Technology is to equip learners with the skills and knowledge required to work in the IT sector or progress to further study. The qualification is designed to ensure that each learner has an opportunity to build sector knowledge and learn current skills and practices in computer systems, networks, coding, website development, mobile communications, cyber security and social media for business.

**Assessment**
Assessment is through practical assignments, with no exams - to more accurately reflect the real working environment.

**Course Structure**

| Qualifi Level 3 Diploma in Information Technology | | | |
|---|---|---|---|
| **Unit number** | **Units** | **Unit level** | **Unit credit** |
| F/650/1908 | Computer Systems | 3 | 10 |
| H/650/1909 | Coding and Website Development | 3 | 10 |
| L/650/1910 | Networks | 3 | 10 |
| T/650/1913 | Mobile Communications | 3 | 10 |
| A/650/1915 | Cyber Security | 3 | 10 |
| D/650/1916 | Social Media for Business | 3 | 10 |

**Assessment Grades**

| Grade | Marking Criteria |
|---|---|
| Pass | All learning outcomes are achieved. All assessment criteria are met. |
| Fail | All learning outcomes are not achieved. All assessment criteria are not met. |
| No Marks | Plagiarism |

## UNIT SPECIFICATIONS

**Unit Title**
Computer Systems

**Level**
3

**Learning Time Hours**
100

**Credit Value**
10

**Unit aim**
The aim of this unit is to introduce learners to the basic hardware and software components that make up computer systems and for learners to carry out basic installation and configuration. This unit is designed to assist learners to understand the basic components of computer systems and how they are adapted to individual needs.

**Learning outcomes and assessment criteria**

In order to pass this unit, the evidence that the learner presents for assessment needs to demonstrate that they can meet all the learning outcomes for the unit. The assessment criteria determine the standard required to achieve the unit.

| Learning Outcome | Assessment Criteria |
|---|---|
| 1. Understand the purpose of computer systems. | 1.1 Explain different types of computer systems.<br>1.2 Evaluate the role of computer systems in different environments<br>1.3 Identify a range of computer systems that are used. |
| 2. Understand computer system components. | 2.1 Analyse the common hardware components of a computer system<br>2.2 Analyse the common software components of a computer system<br>2.3 Evaluate the differences between open source and closed source software. |
| 3. Be able to configure computer systems. | 3.1 Analyse different operating systems and their suitability in managing resources in a professional environment.<br>3.2 Describe the characteristics of different styles of computer system users.<br>3.3 Evaluate suitable components to meet user requirements within a professional environment.<br>3.4 Configure a computer system for a given user requirement. |

### Suggested Resources

- Nisan, N. (2020). The Elements of Computing Systems : building a modern computer from first principles. MIT Press.
- Bryant, R.E. and O'Hallaron, D.R. (2016). Computer systems : a programmer's perspective. Boston: Pearson.

## UNIT SPECIFICATIONS

### Unit Title

Coding and Website Development

### Level

3

### Learning Time Hours

100

### Credit Value

10

### Unit aim

The aim of this unit is to enable learners to understand the fundamental processes involved in developing simple programmes and applications as well as details of basic website design.

### Learning outcomes and assessment criteria

In order to pass this unit, the evidence that the learner presents for assessment needs to demonstrate that they can meet all the learning outcomes for the unit. The assessment criteria determine the standard required to achieve the unit.

| Learning Outcome | Assessment Criteria |
|---|---|
| 1. Understand the purpose and types of coding. | 1.1 Identify popular programming languages that are used within computer systems.<br>1.2 Differentiate between high level and lowlevel programming languages.<br>1.3 Explain how principles of computer programming are applied in different languages to produce software applications. |
| 2. Understand web architecture and components. | 2.1 Explain the web architecture and components that tenable internet and web functionality<br>2.2 Analyse the security risks and protection mechanisms involved in website performance. |
| 3. Be able to create interactive websites. | 3.1 Create or modify components of websites to meet business needs.<br>3.2 Explain the way in which a website meets the defined requirements and achieves the defined purpose. |

### Suggested Resources

- Bell, A. (2019). Computer programming : Fundamentals for absolute beginners.
- Duckett, J. (2011). HTML & CSS: Design and Build Websites (HTML and CSS). John Wiley & Sons Incorporated.
- Felleisen, M. et al (2018) How to design programs: an introduction to programming and computing. 2nd ed. MIT Press

- Robbins, J.N. (2018). Learning web design : a beginner's guide to HTML, CSS, Javascript, and web graphics. Sebastopol, Ca: O'Reilly.


## UNIT SPECIFICATIONS

### Unit Title
Networks

### Level
3

### Learning Time Hours
100

### Credit Value
10

### Unit aim
The aim of this unit is to enable learners to understand the importance of networks to computer systems and their essential use in a variety of application. Learners will also gain knowledge about network technologies and the delivery of a wide range of networked services.

### Learning outcomes and assessment criteria
In order to pass this unit, the evidence that the learner presents for assessment needs to demonstrate that they can meet all the learning outcomes for the unit. The assessment criteria determine the standard required to achieve the unit.

| Learning Outcome | Assessment Criteria |
|---|---|
| 1. Understand networking principles. | 1.1 Explain the features and functioning of a computer network.<br>1.2 Differentiate between 'client computers' and'peer computers' from network services perspective.<br>1.3 Describe local area network (LAN) and wide area network (WAN).<br>1.4 Describe the benefits and constraints of different network topologies. |
| 2. Understand how network hardware and software components are connected. | 2.1 Explain how hardware, software and addressing combine to support network communications.<br>2.2 Describe potential issues with computer networks.<br>2.3 Explain the steps required to set up and test a simple local area network. |
| 3. Understand the usage and security concerns relating to networking. | 3.1 Evaluate the features and services provided by a local and a wide area network.<br>3.2 Identify security issues relating to networking and how those security issues can be minimised.<br>3.3 Explain the steps to configure security on a local area network. |

### Suggested Resources

- Kurose, J. & Ross, K. (2017) Computer Networking: a top-down approach. 7th ed. Pearson
- Kizza, J. (2015) Guide to Computer Network Security. 3rd ed. Springer
- Tanenbaum, A. & Wetherall, D. (2013) Computer Networks. 5th ed. Pearson
- Bourke, M.K., Grimes, S. and Spacelabs Medical, Inc (1995). Networks. Redmond, Wash.: Spacelabs Medical, Inc.
- Hall, L. and Paddy Chayefsky (2018). Network. London: Faber & Faber.


## UNIT SPECIFICATIONS

### Unit Title
Mobile Communications

### Level
3

### Learning Time Hours
100

### Credit Value
10

### Unit aim
The aim of this unit is to explain the growth of mobile communication and how it has changed everyday life and to provide learners with an understanding of the functionality that underpins key business and ecommerce uses.

### Learning outcomes and assessment criteria
In order to pass this unit, the evidence that the learner presents for assessment needs to demonstrate that they can meet all the learning outcomes for the unit. The assessment criteria determine the standard required to achieve the unit.

| Learning Outcome | Assessment Criteria |
|---|---|
| 1. Understand the uses and features of mobile communication devices. | 1.1 Differentiate between different types of mobilecommunication device<br>1.2 Describe the main features of different types of mobile communication devices<br>1.3 Evaluate the usage of modern mobile communication devices. |
| 2. Understand the communication technologies used in mobile devices. | 2.1 Analyse various transmission technologies used by mobile communication devices.<br>2.2 Evaluate the need for various standards and protocols used by mobile communication devices.<br>2.3 Describe how wireless mobile communication technologies benefit businesses. |
| 3. Understand the implications of mobile communications technology. | 3.1 Assess the benefits of mobile devices in the workplace.<br>3.2 Evaluate the social and legal implications of using mobile technologies.<br>3.3 Analyse the health implications of lengthy exposure to mobile technologies. |

### Suggested Resources
- Greengard, S. (2015) The Internet of Things. MIT Press
- Shah, M. (2014) Mobile Working: technologies and business strategies. Routledge
- Rowles, D. (2014) Mobile Marketing: how mobile technology is revolutionizing marketing, Communications and advertising. Kogan Page
- Mobile communications. (1988). Editorial: Online.
- A Jagoda and M De Villepin (1993). Mobile communications. Chichester England ; New York: J. Wiley

## UNIT SPECIFICATIONS

### Unit Title
Cyber Security

### Level
3

### Learning Time Hours
100

### Credit Value
10

### Unit aim
The aim of this unit is to enable learners to understand cyber security and the consequences and implications of inadequate cyber security. They will understand the key terminology and the motivations of good and bad actors. They will also investigate the advantages and disadvantages of security by design.

### Learning outcomes and assessment criteria
In order to pass this unit, the evidence that the learner presents for assessment needs to demonstrate that they can meet all the learning outcomes for the unit. The assessment criteria determine the standard required to achieve the unit.

| Learning Outcome | Assessment Criteria |
|---|---|
| 1. Understand cyber security. | 1.1 Describe the concepts of cyber security.<br>1.2 Explain the importance of cyber security for businesses.<br>1.3 Describe the consequences and implications of inadequate cyber security for businesses . |
| 2. Understand core terminology and key aspects of cyber security. | 2.1 Define core terminology used in cyber security.<br>2.2 Compare typical behaviours of good actors and bad actors.<br>2.3 Analyse the sectors that are most vulnerable to a cyber-attack. |

| | |
|---|---|
| 3. Understand cyber threat intelligence. | 3.1 Identify the concepts of cyber threat intelligence<br>3.2 Explain the following terms in relation to cybersecurity:<br>• threats<br>• exploits<br>• risks<br>• vulnerabilities<br>3.3 Identify improvements to secure a network against cyber attacks. |

### Suggested Resources

- Easttom, C. (2016) Computer Security Fundamentals. 3rd ed. Pearson
- Kizza, J. (2015) Guide to Computer Network Security. 3rd ed. Springer.
- Geetha, S. & Phamila, A. (2016) Combating Security Breaches and Criminal Activity in the Digital Sphere. Hershey
- IT Governance Publishing (2013). Cyber Security. Ely, Cambridgeshire, United Kingdom: It Governance Publishing.
- Augastine, P.T. (2007). Cyber security. New Delhi: Crescent Pub. Corp

## UNIT SPECIFICATIONS

### Unit Title
Social Media for Business

### Level
3

### Learning Time Hours
100

### Credit Value
10

### Unit aim
The aim of this unit is to enable learners to explore how businesses use social media to promote their products and services. Learners will also create a social media policy and plan to meet business requirements.

### Learning outcomes and assessment criteria
In order to pass this unit, the evidence that the learner presents for assessment needs to demonstrate that they can meet all the learning outcomes for the unit. The assessment criteria determine the standard required to achieve the unit.

| Learning Outcome | Assessment Criteria |
|---|---|
| 1. Understand the importance of using social media in a business environment. | 1.1Analyse recent developments in social media that have changed the way businesses promote products and services.<br>1.2 Identify sources for social media channels to meet business needs.<br>1.3 Explain the importance of publishing social media content which engages the audience.<br>1.4 Explain the risks and issues relating to social media engagement |
| 2. Understand the need for social media content planning and publishing in a business environment. | 2.1 Analyse the considerations for regular posts and other content to be published on social media websites.<br>2.2 Explain the relationship between a social media website and a company website.<br>2.3 Evaluate the strategy required to create and encourage an online community. |
| 3. Be able to develop a policy and a plan to use social media in a business environment. | 3.1 Explain why a social media policy is important and consider the implications of not having a policy in place.<br>3.2 Develop a social media policy for a business that is capable of delivering its objectives.<br>3.3 Produce a plan to use social media in a business environment that is capable of delivering its social media policy objectives.<br>3.4 Produce a reflective account of the plan tHat suggests improvements. |

### Suggested Resources

- Lipschultz, J. (2015) Social media Communication: concepts, practices, data, law and ethics. Routledge
- Kasian-Lew, D. (2014) The Social Executive: why leaders need social media and why it's good for business. Wiley-Blackwell
- Vukanovic, Z. (2011). New Media Business Models in Social and Web Media. Journal of Media Business Studies, 8(3), pp.51 – 67.

- Mcdonald, J. (2018). SOCIAL MEDIA MARKETING WORKBOOK : how to use social media for business. S.L.: Createspace Indep Pub.
- Brown, E. (2012). Working the crowd - social media marketing for business. British Informatics Society.


Version:2507a