



QUALIFI

SUCCESS THROUGH LEARNING
RECOGNISED WORLDWIDE

Qualifi Level 5 Diploma in
Information
Technology

Qualifi Level 5 Diploma in IT-
Networking

Qualifi Level 5 Diploma in IT-Web
Design

Qualifi Level 5 Diploma in IT-E-
commerce

1 Introduction

These qualifications look to provide a realistic and broad opportunity for learners seeking career and professional development. They will support learners in realising their potential and provide clear objectives.

These objectives are to:

- provide career path support to learners who wish to develop their management skills, enterprise capabilities and opportunities in their chosen sector
- improve learner understanding of any given business environments and organisations and how they are managed and developed • develop skills and abilities in learners to support their professional development.

These qualifications provide a rich mix of disciplines and skills development opportunities. Learners will gain insight into the functioning, objectives and processes of organisations, appreciating their diversity and the influences and impact of external forces on them. The fast-changing and complex business environment and different organisational ability to stay resilient and respond positively to change and opportunities will be explored.

1.3 Qualification Title and Codes

The qualification have been accredited to the Regulated Qualification Framework (RQF) and each qualification has its own unique Qualification Accreditation Number (QAN). This number will appear on the learner's final certification document. Each unit with the qualification has its own RQF code. The QANs for these qualifications are as follows:

QUALIFI Level 5 Diploma in Information Technology (603/4791/0)

QUALIFI Level 5 Diploma in IT-Networking (603/4792/2)

QUALIFI Level 5 Diploma in IT-Web Design (603/4793/4)

QUALIFI Level 5 Diploma in IT-E-commerce (603/4794/6)

1.4 Awarding Organisation

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Entry Criteria

The qualifications have been designed to be accessible without artificial barriers that restrict access and progression. Entry to the qualifications will be through centre interview and learners will be expected to hold the following:

- demonstrated some ability and possess qualifications at Level 4 for example any Qualifi Level 4 or similar vocational awards;
- spent some time in an organisational role and shown they have capability and drive to develop
- seeking further professional development and to gain work related skills and know-how.

In certain circumstances, managers with considerable experience but no formal qualifications may be considered, subject to interview and being able to demonstrate their ability to cope with the demands of the programme.

In the case of applicants whose first language is not English, then IELTS 6 (or equivalent) is required. International Qualifications will be checked for appropriate matriculation to UK Higher Education postgraduate programmes. The applicants are normally required to produce two supporting references, at least one of which should preferably be academic.

Structure of the Qualification

The QUALIFI Diplomas in IT are all Level 5 Qualifications made up of 120 credits. All units are 20 credits in value.

There are ten units available Each qualification requires core units to be taken and then elective units to determine which qualification is achieved. All units cover a number of topics relating to learning outcomes. Each unit has the equivalency of 20 credits.

Learners are required to complete 8 units to achieve the 120 credits required to gain any of the Level 5 Diplomas.

Learners will be expected to attend lectures and workshops that will introduce the subject matter. Formative assessments (weighted at 0%) may be used in lectures or tutorials to check knowledge and understanding of specific topics and subject areas.

Qualifi Level 5 Diploma in IT				
Learners must achieve all four core units and any two elective units* i.e. a total of 120 credits.				
Unit no.	Qualification unit title	Level	Credits	TQT
Core units				
5IT01	Technopreneurship	5	20	200

5IT02	Network Security	5	20	200
5IT03	C#.NET Programming	5	20	200
5IT04	System Administration	5	20	200
Elective units				
5IT05	Network Routing and Switching	5	20	200
5IT06	Network Design and Administration	5	20	200
5IT07	Content Management Systems	5	20	200
5IT08	Web Design	5	20	200
5IT09	Business to Business (B2B) E-commerce	5	20	200
5IT10	Business to Consumer (B2C) E-commerce	5	20	200

* Learners would like to undertake the “Diploma in IT” cannot choose the combination of electives that lead to a specialise qualifications in Networking, Web design or E Commerce. Therefore, the following combinations are not allowed – 5IT05 and 5IT06, 5IT07 and 5IT08, 5IT09 and 5IT10 as the 2 electives.

Qualifi Level 5 Diploma in IT-Networking				
Learners must achieve all four core units and any two elective units i.e. a total of 120 credits.				
Unit no.	Qualification unit title	Level	Credits	TQT
Core units				
5IT01	Technopreneurship	5	20	200
5IT02	Network Security	5	20	200
5IT03	C#.NET Programming	5	20	200
5IT04	System Administration	5	20	200
Elective units				
5IT05	Network Routing and Switching	5	20	200
5IT06	Network Design and Administration	5	20	200

Qualifi Level 5 Diploma in IT-Web Design				
Learners must achieve all four core units and any two elective units i.e. a total of 120 credits.				
Unit no.	Qualification unit title	Level	Credits	TQT
Core units				
5IT01	Technopreneurship	5	20	200
5IT02	Network Security	5	20	200
5IT03	C#.NET Programming	5	20	200
5IT04	System Administration	5	20	200
Elective units				

5IT07	Content Management Systems	5	20	200
5IT08	Web Design	5	20	200

Qualifi Level 5 Diploma in IT-E-commerce				
Learners must achieve all four core units and any two elective units i.e. a total of 120 credits.				
Unit no.	Qualification unit title	Level	Credits	TQT
Core units				
5IT01	Technopreneurship	5	20	200
5IT02	Network Security	5	20	200
5IT03	C#.NET Programming	5	20	200
5IT04	System Administration	5	20	200
Elective units				
5IT09	Business to Business (B2B) E-commerce	5	20	200
5IT10	Business to Consumer (B2C) E-commerce	5	20	200

4.3 Progression and Links to other QUALIFI Programmes

Learners completing any of the related **QUALIFI Level 5 Diplomas in IT** can progress to:

- the QUALIFI Level 6 Diplomas or
- the final year of undergraduate study in Information Technology, Computer Science or related ; or
- directly into employment in an associated profession.

4.4 University Exemptions

QUALIFI has exemptions for learners to progress to a number of universities to complete a master's degree. This generally requires completion of a dissertation only. The pathways are an indication of a learner's progress towards a university degree and are based on the university's review of QUALIFI's learning programmes and outcomes.

4.5 Recognition of Prior Learning

Recognition of Prior Learning (RPL) is a method of assessment (leading to the award of credit) that considers whether learners can demonstrate that they can meet the assessment requirements for a unit through knowledge, understanding or skills they already possess, and so do not need to develop through a course of learning.

The College recognises learners' previous achievements and experiences whether at work, home or at leisure, as well as in the classroom. RPL provides a route for the recognition of the achievements resulting from continuous learning. RPL enables recognition of achievement from a range of activities using any valid assessment methodology. Provided that the assessment requirements of a given unit or qualification have been met, the use of RPL is acceptable for accrediting a unit, units or a whole qualification. Evidence of learning must be valid and reliable. For full guidance on RPL please refer to QUALIFI's policy document on RPL..

7. Assessment

These qualifications can support a learner's career progression. To meet QUALIFI's aim to provide an appropriate assessment method each unit will be assessed through tasks that will be written in a way to make them realistic 'work-related' tasks wherever possible. Learners will need to demonstrate knowledge, understanding and. Original thought, problem solving and recommendations on actions will also be asked for from learners where appropriate for the unit. Intellectual rigour will be expected appropriate to the level of the qualification.

Assignments will contain a question strand for each of the given unit's learning outcomes. The assignment tasks will address the LO (learning outcome) and AC (assessment criteria) requirements. Within assignments there will always be requirements for learners to engage with important and relevant theory that underpins the subject area.

The assignment questions will require learners to draw on real organisations to illustrate their answers. To support this activity during the programme of learning, centres are required to make sure that they include case studies of relevant organisations and, wherever possible, facilitate in-company opportunities for learners to undertake research and investigation projects and/or support the organisation with various tasks. Mature and part-time learners will ideally be able to draw on their personal work experience too.

Course Requirements

Learners must complete all units and pass the appropriate mark to receive the full Diploma Award.

QUALIFI will issue certificates to all successful learners through the College.

Classification of Awards

All Diploma are pass/fail. Where a candidate has achieved an overall average mark of at least 70% from all the units, QUALIFI may award a Distinction, although offering such a grade to individual candidates is at the discretion of QUALIFI and is not normally given after any successful referral attempts.

Decisions about the overall classification of awards are made by QUALIFI through the application of the academic and relevant course regulations. It is based on the Average Percentage Mark (APM) or, at the discretion of QUALIFI, on the basis of your overall profile and performance subject to the minimum requirements.

Appendix 1: Unit Descriptors

Unit 5IT01: Technopreneurship

Unit code: F/617/6740

RQF Level: 5

Unit Aims

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.

Learning Outcomes and Assessment Criteria

Learning Outcomes: To achieve this unit, the learner must be able to:	Assessment Criteria: Assessment of these outcomes demonstrates the learner can:
1. Assess the nature of technological entrepreneurship	1.1 Evaluate the characteristics of techno entrepreneurs and the techno entrepreneurial process 1.2 Evaluate trends and opportunities within technological entrepreneurship 1.3 Analyse the features and application of the five pillars of technological entrepreneurship
2. Establish a new techno business	2.1 Evaluate the potential for new products or services and new potential markets for them 2.2 Take action to protect intellectual property that is appropriate to the nature of the business 2.3 Structure the business in a way that optimizes assets, investment and ownership 2.4 Prepare a business and marketing for a new techno business that sets SMART objectives and optimizes available resources 2.5 Market the business in accordance with the marketing plan
3. Evaluate the rationale for businesses' creation, delivery and capture of value	3.1 Evaluate the uses, strengths and weaknesses against the Business Model Canvas 3.2 Evaluate the suitability of different methods of exit from the business

Indicative Content

- - Technology Entrepreneurship: trends and opportunities
- Five pillars of technology entrepreneurship
- Technology venture idea generation
- Markets and product of service development
- Protecting intellectual property
- Legal structures and equity distribution
- Developing and implementing the technology business plan
- Capital and capital sources
- Launching the venture
- Marketing and selling products
- Contracts
- Venture management and leadership
- Valuing and closing the venture (exit)
- Exit strategies and valuations

Recommended Text

Duenning TN, Hisrich RA, Lechter MA (2014) Technology Entrepreneurship: Taking Innovation to the Marketplace, 2nd Edition, Academic Press

Therin F (editor) (2014) Handbook of Research on Techno-Entrepreneurship: How Technology and Entrepreneurship are Shaping the Development of Industries and Companies (Research Handbooks in Business and Management Series), 2nd Edition, Edward Elgar Publishing, Glos, UK

Nassar J (2018) Technopreneurship Financing and Startups Ecosystem: How Malaysia is Creating Another Success Story

Unit 5IT02: Network Security

Unit code: J/617/6741

RQF Level: 5

Indicative Content

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Unit Aims

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. The unit covers authentication; attacks and malicious codes; the security of remote access; email and web security; the security of directory and file transfer services; storage media; network security; intrusion detection; physical and security and disaster recovery.

Learning Outcomes and Assessment Criteria

Learning Outcomes: To achieve this unit, the learner must be able to:	Assessment Criteria: Assessment of these outcomes demonstrates the learner can:
1. Understand computer network security	1.1 Analyse the factors that affect network and computer security 1.2 Identify common security issues in a networked environment 1.3 Analyse the role that artificial intelligence (AI) could have in defending networks

<p>2. Understand methods of maintaining computer security</p>	<p>2.1 Analyse the strengths and weaknesses of different methods of authentication</p> <p>2.2 Analyse the nature of different types of attack and malicious codes</p> <p>2.3 Select the security tool that is appropriate to the nature of the security issue</p> <p>2.4 Evaluate practices that prevent common attacks from intruders (networks, remote access, email, web security, wireless and instant messaging)</p> <p>2.5 Analyse the differences between network and host intrusion detection systems</p>
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Network security (understanding security threats, creating a secure network & Windows server access control)

Authentication

Attacks and malicious codes

Remote access

Email

- Web security
- The use of AI in the defence of networks
- Directory and file transfer services
- Wireless and instant messaging
- Network devices
- Transmission and storage media
- Network security topologies
- Intrusion detection
- Physical security
- Disaster recovery and business continuity

Recommended Text

McNab C (2016) Network Security Assessment: Know Your Network, 3rd edition O'Reilly Media Inc.

Stallings W (2011) Network Security Essentials: Application and Standard, 4th edition, Prentice Hall

Indicative Content

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Forshaw J (2017) Attacking Network Protocols, William Pollock, USA

Unit 5IT03: C#.NET Programming

Unit code: L/617/6742

RQF Level: 5

Unit Aims

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. The unit covers component-based programming and how to access records in relational databases. Successful achievement of this unit will enable learners to create their own web applications and make them available on the internet.

Learning Outcomes and Assessment Criteria

Learning Outcomes: To achieve this unit, the learner must be able to:	Assessment Criteria: Assessment of these outcomes demonstrates the learner can:
1. Understand the use of ASP.NET	1.1 Analyse the components / structure of ASP.NET 1.2 Evaluate the advantages and disadvantages of using ASP.NET compared with other web development models 1.3 Analyse the advantages of using validators

<p>2. Design web applications using ASP.NET and ADO.NET</p>	<p>2.1 Use styles, themes and master pages to create an attractive and easily navigable web applications</p> <p>2.2 Display dynamic data from a relational database by using ADO.NET and data binding through different languages including C#</p> <p>2.3 Create a web page that uses client side navigation, client side browser redirect, cross page posting and server side transfer that meets the brief</p>
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Indicative Content

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- - Evolution of web development, HTML, ASP.NET, the .NET framework the C# language Visual studio
 - Web form fundamental
 - Web controls
 - Validation
 - Styles, themes and master pages
- Website navigation using ASP.NET
- ADO.NET

Recommended Text

Nagel C (2018): Professional C# 7 and .NET Core 2.0, Wrox

Price MJ (2017) C# 7.1 and .NET Core 2.0 – Modern Cross-Platform Development, 3rd Edition, Packt Publishing

Fagerberg J (2016) ASP.NET MVC 5 – Building a Website with Visual Studio 2015 and C Sharp: The Tactical Guidebook, csharpschool.com

Unit 5IT04: System Administration

Unit code: R/617/6743

RQF Level: 5 **Unit**

Aims

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.

Learning Outcomes and Assessment Criteria

Learning Outcomes: To achieve this unit, the learner must be able to:	Assessment Criteria: Assessment of these outcomes demonstrates the learner can:
1. Understand system administration	1.1 Analyse the role of the system administrator 1.2 Analyse the elements within system administration 1.3 Analyse the history of the active directory and Lightweight Directory Access Protocol (LDAP) 1.4 Analyse the difference between snapshots and backups 1.5 Analyse the differences between local and group policies on Windows and Linux 1.6 Analyse the role and requirements of backup and restore policies 1.7 Analyse the requirements of managing applications

Indicative Content

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2. Perform user management and file system management	<ul style="list-style-type: none">2.1 Write shell scripts that enable administration tasks to be performed on Linux and Windows systems: Get Help; Check Services; List Users and ping a list of servers2.2 Set up and configure users and groups to the agreed standard2.3 Install and configure file and printer sharing to agreed standards2.4 Write shell scripts to perform snapshots on Linux and Windows servers to agreed standards2.5 Tune performance through the application of a range of utilities and tools to agreed standards
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System administrators: duties, related fields; professional certification

Managing users and groups

Managing file systems

Automating tasks, processes and Daemon

Shell scripting

PowerShell

- NFS, NIS servers and WINS servers
- File and printer sharing
- Application management
- Customizing with Registry
- Local and group policies
- Backup and restore policies
- Performance tuning

Recommended Text

Nemeth E, Snyder G, Hein TR, Whaley B, Mackin D (2017): UNIX and Linux System Administration Handbook (5th edition), Addison-Wesley Professional

Frisch A (2002) Essential System Administration: Tools and Techniques for Linux and Unix Administration, 3rd Edition, O'Reilly Media, Sebastopol, CA, USA

Nickel J (2019) Mastering Identity and Access Management with Microsoft Azure: Empower users by managing and protecting identities and data, 2nd Edition, Packt Publishing

Unit 5IT05: Network Routing and Switching

Unit code: Y/617/6744

RQF Level: 5

Unit Aims

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).

Learning Outcomes and Assessment Criteria

Learning Outcomes: To achieve this unit, the learner must be able to:	Assessment Criteria: Assessment of these outcomes demonstrates the learner can:
1. Understand switching	1.1 Evaluate the considerations to be taken into account in the purchase of a switch 1.2 Analyse switching techniques and protocols 1.3 Analyse the features in managed switches 1.4 Analyse the differences between circuit switching and packet switching
2. Perform routing	2.1 Evaluate the considerations to be taken into account in making static and inter-VLAN routing decisions 2.2 Analyse routing techniques and protocols 2.3 Evaluate the considerations to be taken into account in dynamic routing 2.4 Evaluate the considerations to be taken into account in a single and multi area OSPF 2.5 Set up and configure a single area OSPF to agreed standards 2.6 Configure a multi area OSPF to agreed standards 2.7 Configure a multi area EIGRP to agreed standards

Switched networks

Switching concepts and configuration

Routing

Inter-VLAN routing

Static routing

Routing dynamically

- Frame relay

Indicative Content

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- Single area OSPF and multi area OSPF
- EIGRP configuration and troubleshooting
- Networking access control lists

Recommended Text

Diaz L (2018): CCNA Routing and Switching 200-125 Certification Guide, Packt Publishing

Cisco Networking Academy (2016) Routing and Switching Essentials v6 Companion Guide, Cisco Press, Indianapolis, USA

Emspon S (2016) CCNA Routing and Switching Portable Command Guide (ICND1 100-105, ICND2 200-105 and CCNA 200-125)

Unit 5IT06: Network Design and Administration

Unit code: D/617/6745

RQF Level: 5 **Unit**

Aims

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 inter-connecting network. It covers hierarchical network design; gathering network requirements; identifying network performance issues.

Learning Outcomes and Assessment Criteria

Learning Outcomes: To achieve this unit, the learner must be able to:	Assessment Criteria: Assessment of these outcomes demonstrates the learner can:
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1. Understand network design	1.1 Analyse the requirements of users 1.2 Analyse the different layers in hierarchical network design 1.3 Analyse competing protocols in link aggregation
2. Configure a local area network and a VLAN	2.1 Set up and configure a VLAN to agreed standards 2.2 Analyse the requirements of connectivity and scaling 2.3 Analyse the types and methods used in Network Address Translation (NAT) 2.4 Configure remote connections on Linux and Windows systems to agreed standards
3. Administer a network	3.1 Diagnose and resolve faults in the system 3.2 Configure a network backbone using link aggregation that demonstrates a speed increase 3.3 Analyse the history of the spanning tree protocol and its role in network redundancy 3.4 Analyse the role of a network administrator 3.5 Evaluate the technologies and applications available for network administration

Indicative Content

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Scaling networks including bandwidth, availability resilience, class of service, quality of service and price)

LAN redundancy Link

aggregation

Wireless LANS

Hierarchical network design

- Connecting to the WAN
- Point-to-point connection
- Securing site-to-site connectivity
- Monitoring and troubleshooting the network
- DHCP
- Network address translation for IPv4
- Network utilities and tools
- DHCP servers
- DNS servers
- Web servers
- Mail servers
- Proxy servers
- SSH servers
- Directory service
- AAA servers
- GUI-based configuration for Linux servers
- Network Attached Storage (NAS)
- Virtualization
- Cloud computing
- Network management and design

Recommended Text

Thomatis M (2017): Network Design Cookbook: 2nd edition, lulu.com

Dauti B (2017) Windows Server 2016 Administration Fundamentals: Deploy, set up and deliver network services with Windows Server while preparing for the MTA 98-365 exam and pass it with ease, Packt Publishing

Piper B (2017) Learn Cisco Network Administration in a Month of Lunches, Manning Publications

Unit 5IT07: Content Management Systems

Unit code: H/617/6746

RQF Level: 5

Unit Aims

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.

Learning Outcomes and Assessment Criteria

Learning Outcomes: To achieve this unit, the learner must be able to:	Assessment Criteria: Assessment of these outcomes demonstrates the learner can:
1. Understand content management systems (CMS)	1.1 Define the purpose of using CMS for digital content development and publication management 1.2 Evaluate the functional roles in a CMS 1.3 Evaluate the considerations to be taken into account in the acquisition of a CMS 1.4 Evaluate the considerations to be taken into account in content modelling 1.5 Evaluate the considerations to be taken into account in content aggregation
2. Operate a CMS	2.1 Select and use a range of CMS tools to create digital content that meet the brief 2.2 Model content in accordance with the brief 2.3 Edit content in accordance with the brief 2.4 Aggregate content in accordance with the brief 2.5 Migrate content across different CMS systems in accordance with the brief 2.6 Publish content to a server side application and a client side application in accordance with the brief

Types of CMS

- Points of comparison
- CMS feature analysis and acquiring a CMS
- Functional roles within CMS
- Content modelling
- Content aggregation

Indicative Content

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- Editorial tools and workflow
- Output and publication management
- Multiple Language Handling, language rules, form building and URL management
- Content migration

Recommended Text

Barker D (2016): Web Content Management: Systems, Features and Best Practice, O'Reilly Media

Boiko B (2004) Content Management Bible, 2nd Edition, Wiley Publishing, Indianapolis, USA

Kleppmann M (2016) Designing Data-Intensive Applications: The Big Ideas Behind Reliable, Scalable and Maintainable Systems, O'Reilly Media

Unit 5IT08: Web Design

Unit code: M/617/6748

RQF Level: 5

Unit Aims

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.

Learning Outcomes and Assessment Criteria

Learning Outcomes: To achieve this unit, the learner must be able to:	Assessment Criteria: Assessment of these outcomes demonstrates the learner can:
1. Understand web design	1.1 Differentiate between client-side and server-side programming 1.2 Analyse the history of Document Object Modelling (DOM) 1.3 Analyse the similarities and differences between XML and JSON 1.4 Evaluate the extent to which the benefits of using events outweigh the problems 1.5 Analyse the advantages and disadvantages of and differences between desktop and web applications 1.6 Analyse the problems associated with multimedia objects in browsers and recommend practicable solutions
2. Create dynamic web pages	2.1 Create a data model through the application of XML and JSON that meets the brief 2.2 Use JS to validate a form so that it meets the brief 2.3 Use JS to validate user input so that it meets the brief 2.4 Use JS to process user input at client side so that it meets the brief 2.5 Use JS to create a dynamic navigation menu that meets the brief 2.6 Use Dreamweaver to create a dynamic web page that uses Cascading Style Sheets (CSS) that meets the brief

Indicative Content

- - Adobe Dreamweaver
 - JavaScript, variables and data type definition
 - Arithmetic operator, condition and iteration statements
 - Arrays and objects
 - Function
 - Browser Object Model (BOM) and Document Object Model (DOM)
 - Form validation and regular expression
 - Events handling
 - Mouse and keyboard events
 - JQuery and styles sheets
 - Multimedia objects
 - Canvas
 - SML and JSON
 - AJAX

Recommended Text

Ruvalcaba Z, Delamater M (2017): Murach's JavaScript and jQuery (3rd edition), Mike Murach & Associates

Duckett J (2014) Web Design with HTML, CSS, JavaScript and jQuery Set, J Wiley & Sons Publishing

Frain B (2015) Responsive Web Design with HTML5 and CSS3: Build responsive and future-proof websites to meet the demands of modern web users, , 2nd Edition, Packt Publishing

Unit 5IT09: Business to Business (B2B) E-commerce

Unit code: T/617/6749

RQF Level: 5

Unit Aims

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.

Learning Outcomes and Assessment Criteria

Learning Outcomes: To achieve this unit, the learner must be able to:	Assessment Criteria: Assessment of these outcomes demonstrates the learner can:
1. Understand Electronic Data Interchange (EDI)	1.1 Analyse the history and standards of EDI 1.2 Analyse the role of EDI within a corporate environment 1.3 Assess the implications of peer-to-peer versus value added networks
2. Understand Electronic Funds Transfer (EFT)	2.1 Analyse the differences between online banking, instant payment and contactless payment systems 2.2 Analyse the suitability of different payment systems for different types of transaction 2.3 Assess the implications of crypto-currencies from economic and political perspectives
3. Understand online transaction processing (OLTP)	3.1 Analyse the requirements, uses and challenges of online transaction processing 3.2 Analyse the differences between OLTP and online analytical processing (OLAP) 3.3 Evaluate the advantages and disadvantages of centralized versus decentralized systems 3.4 Analyse the requirements of an OLTP system design
4. Understand inventory management systems	4.1 Analyse the scope of operations of inventory management software 4.2 Analyse the advantages and disadvantages of Enterprise Resource Planning (ERP) and cloud inventory management software 4.3 Analyse the interface between an inventory management system and the supply chain 4.4 Analyse the challenges of inventory management system design

5. Understand supply chain management	5.1 Analyse the historical development of supply chain management 5.2 Evaluate processes within the supply chain 5.3 Analyse the uses of just-in-time (JIT), material requirements planning (MRP) and total quality management (TQM) within supply chain management
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Indicative Content

- Early Electronic Data Interchange (EDI) implementation
- Standards in EDI including transmission protocols
- Direct and VAN EDIs
- Types of Electronic Funds Transfer (EFT) systems including online banking, instant payment and contactless payment
- Online transaction processing including concurrency, atomicity, system design
- Inventory management including tracking systems, ERP and the cloud
- Supply chain management
- Just-in-time (JIT)
- Material requirements planning (MRP)
- Total quality management (TQM)

Recommended Text

Thomas C (2017) B2B eCommerce MasterPlan: how to make wholesale ecommerce a key part of your business to business sales growth, Kernu Publishing, Truro, UK

Raisch W (2001) the eMarketplace – strategies for success in B2B ecommerce, McGraw-Hill, USA

Hanly L (2016) Content that Converts: How to Build a Profitable and Predictable B2B Content Marketing Strategy, Hanly Creative

Unit IT10: Business to Consumer (B2C) E-commerce

Unit code: K/617/6750

RQF Level: 5

Unit Aims

This unit aims to provide learners with knowledge of business to consumer e-commerce. 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.

Learning Outcomes and Assessment Criteria

Learning Outcomes: To achieve this unit, the learner must be able to:	Assessment Criteria: Assessment of these outcomes demonstrates the learner can:
1. Understand the concepts and techniques used in mobile e-commerce and ticketing	1.1 Create designs for mobile screens that demonstrate good practice in the use of fonts and graphics 1.2 Analyse the use of location-based services in mobile e-commerce 1.3 Create a mobile ticketing application that uses unique ticket verification
2. Understand the psychology of marketing	2.1 Analyse the factors affecting a buyer's purchasing decisions 2.2 Analyse the purchasing decision process 2.3 Analyse the impact of internal and external influences on the buying decision 2.4 Analyse the use of eye-tracking technologies in commerce
3. Understand the use of artificial intelligence (AI) in image recognition	3.1 Analyse the use of image classification in e-commerce 3.2 Analyse the benefits of augmented reality versus virtual reality in e-commerce 3.3 Assess the implications of using image recognition as a tool to find inappropriate content 3.4 Analyse the way in which image recognition can help eliminate counterfeit products
4. Understand social commerce	4.1 Evaluate the elements and features of social commerce 4.2 Assess the impact of Pinterest, micro-influencers and in-app purchasing in social commerce 4.3 Analyse the features of different categories of social commerce
	4.4 Analyse the distinctions between Soldsie, eBay, Groupon, The Fancy and Kickstarter social commerce applications

Indicative Content

- Concepts and techniques used in mobile e-commerce and ticketing
- Good practice in the use of fonts and graphics
- Psychology of marketing and the buying process
- Internal and external influences on purchasing decisions
- Eye-tracking technologies
- Artificial intelligence (AI) in image classification
- AI to manage inappropriate content
- Virtual Reality and Augmented Reality AI
- AI tools to identify Opinion SPAM
- Elements of social commerce: community, reciprocity, authority, scarcity, liking, social proof
- Features of social commerce: content, community, commerce, context, connection, conversation
- Categories of social commerce: onsite versus offsite

Recommended Text

Mangalam JM (2017): Turbocharge your B2C marketing performance: how to leverage analytics and data science in business-to-consumer marketing, Amazon Digital Services LLC

Kappler D 2018): B2B & B2C Lead generation: make your sales great again

Hughes T, Reynolds M 2016) Social Selling: Techniques to Influence Buyers and Changemakers, Kogan Page