



**INTERNATIONAL DIPLOMA IN COMPUTER  
STUDIES (IDCS)  
PROGRAMME HANDBOOK  
2008**

## Modification History

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# **1. An Introduction to NCC Education**

For over 35 years, NCC Education has been a global leader in providing education, allowing students the opportunity to gain internationally recognised qualifications by studying at one of our Accredited Partner Centres around the world.

In collaboration with over 300 Accredited Partner Centres in more than 45 countries, each year we help our 25,000 students develop the skills and knowledge required to access a rewarding career.

Our varied qualifications are recognised by universities and employers worldwide, enabling students to study for a degree course either through an existing NCC Education affiliated university or through one of their choice, in pursuit of their ideal job.

We aim to help students develop personally and professionally through our internationally recognised qualifications and to broaden the scope of opportunity for them.

## **2. Programme of Study**

### **2.1 International Diploma in Computer Studies (IDCS)**

The IDCS is equivalent to the first year of a computing degree programme in the UK university system (UK National Qualifications Framework Level 4, UK National Qualifications Framework Level Certificate (C)).

Graduates may progress to NCC Education's International Advanced Diploma in Computer Studies (IADCS).

### **2.2 Programme Aims**

To provide students with a knowledge and understanding of computer concepts, techniques and principles which will enable them to successfully enter a wide range of computing-related employment and/or to continue their studies in computing.

### **2.3 Programme Learning Outcomes**

The learning outcomes for the IDCS programme are given below. An explanation of learning outcomes is given in Section 9.

On successful completion of the IDCS programme students will be able to:

1. Present a working knowledge and understanding of some established principles of computing.
2. Apply their skills and knowledge to the development of small-scale computing systems.

3. Specify appropriate algorithms and data structures to solve well-specified computing problems.
4. Support the operation of computer systems and data networks.
5. Express their ideas clearly and concisely in written English using appropriate terms, in the domains of computing and business.
6. Demonstrate an awareness of the needs of the end users of computer systems.

## **2.4 Programme Duration**

The IDCS is a one-year, full-time programme. The programme is normally delivered in two 12-week semesters each with a subsequent examination period, although different periods of delivery are possible and the programme may be studied part-time, over two years for example. All assessments and reassessments (irrespective of whether the programme is taken full or part-time) must be completed within the eligibility period, which is three years from first commencement of the programme.

## **2.5 Entry Requirements**

- Holders of either the NCC Education International Certificate in Computer Studies or International Foundation Year qualifications,

**or**

- Holders of any local or international qualification deemed to be of a similar level to either the International Certificate in Computer Studies or International Foundation Year. These shall be agreed in advance with NCC Education.

**or**

- Holders of one 'A' level or an appropriate School Leavers' certificate,

**or**

- For mature students aged 21 years or over, ability to demonstrate over two years' work experience

**and**

- For candidates whose first language is not English: LCCI IQ 350 combined score in Reading and Listening (Writing 2, level 4), TOEFL® score of at least 500 or IELTS 5.0, an NCC Education English Language Framework Level 5 or an equivalent qualification.

## **2.6 Programme Modules**

The IDCS programme requires a student to complete eight modules; six of which are compulsory core modules and two of which are selected from a set of elective modules.

Each module is rated at 15 credits, where a credit is nominally equivalent to 10 study hours; thus, each module amounts to around 150 hours of study. When the module is delivered in a 12-week semester, each module is allocated around three hours per week in guided learning activities (lectures, workshops, laboratories and tutorials) and a further 9½ hours should be allocated by the student for independent study. In addition, students are advised to allocate time (around 30 hours per module is suggested) for revision for written examinations and the completion of global assignments.

In addition, there is a short Study Skills Induction that is designed to introduce students to the skills and techniques needed to study for the IDCS qualification. This induction should be completed early in the programme of study and should take around 15 hours of student time.

The table below lists the modules and the way in which they are assessed. The assessment types are discussed in Section 3.

Module Title	Credits	Assessment Type		
		Global Assignment	Global Examination	Local Examination
<b>Core Modules – must be taken</b>				
<b>Business Communication</b>	15		100%	
<b>Computer Technology</b>	15		100%	
<b>Fundamentals of Hardware and Operating Systems</b>	15	60%		40%
<b>Networking</b>	15	60%		40%
<b>Programming Methods</b>	15	60%		40%
<b>Systems Development</b>	15		100%	
<b>Electives – choose any 2</b>				
<b>E-commerce</b>	15	100%		
<b>Java</b>	15	60%		40%
<b>Organisational and Business Structures</b>	15	100%		
<b>Visual Basic</b>	15	60%		40%
<b>Web Design</b>	15	60%		40%
<b>Induction Activity</b>				
<b>Study Skills</b>	-	Not assessed		

Detailed module outlines are given in Section 7.

Students should note that the choice of electives can restrict their choices in subsequent years of study. The table overleaf indicates the modules in the

NCC Education International Advanced Diploma in Computer Studies (IADCS) which require that particular IDCS modules have been studied.

<b>IADCS Module</b>	<b>Requires IDCS Module</b>
Advanced Java	Java
Advanced Visual Basic	Visual Basic
Advanced Web Design	Web Design

### **3. Assessment**

There are three types of assessment used in the IDCS.

- Global assignments.
- Global examinations.
- Local examinations.

The way in which each assessment type contributes to the assessment of the modules is given in Section 2.6.

Formative assessment (diagnostic testing that does not contribute to grades) by teaching staff at the Accredited Partner Centre is encouraged by NCC Education in order to test the demonstrable knowledge and understanding of students in relation to the required learning outcomes, before a student is assessed in a module.

#### **3.1 Global Assignments**

The nature of global assignments varies between modules, but most global assignments require a written report. Full details of the report's specific requirements will be given with the associated assignment task, but more general guidance on the presentation and completion of reports is given in Section 10.

#### **3.2 Global Examinations**

Global examinations are set by NCC Education, taken under NCC Education regulations at the Accredited Partner Centre, and marked and moderated by NCC Education. The examinations are generally of two to three hours duration (depending on the module) and are the only assessment for the module.

Past examination papers for modules are available on the NCC Education Campus (see Section 8 for information about NCC Education Campus). Guidance on preparing for examinations is given in Section 11.

### **3.3 Local Examinations**

Local examinations are written by NCC Education, taken under NCC Education regulations at the Accredited Partner Centre, marked by the Accredited Partner Centre and moderated by NCC Education. The examinations are generally one to two hours in duration (depending on the module) and contribute 40% to the overall mark for the module. A mark of 30% or more must be gained in the local examination for a module to achieve a pass, irrespective of the mark gained in the associated global assignment (see Section 4 for further details).

Guidance on preparing for examinations is given in Section 11.

### **3.4 Assessment Dates**

Full details of global examination dates, and the availability and deadlines for global assignments are provided on the NCC Education Campus (see Section 8) and will also be provided to students by the Accredited Partner Centre where they are registered.

Local examination dates will be made available by a student's Accredited Partner Centre and will not be given on the NCC Education Campus.

## **4. Student Performance and Results**

### **4.1 Module Performance**

A student's performance in each module will be assigned one of four grades:

- Distinction – indicating outstanding performance.
- Merit or Credit<sup>1</sup> – indicating a high degree of competence in the subject.
- Pass – an acceptable level of performance in which all learning outcomes have been achieved.
- Referred – a failure to achieve all learning outcomes. The module can be retaken provided that the attempt is made within the eligibility period (see Section 2.4). A student will be referred in a module when his/her mark is less than 40%.

The table provided in Appendix A details the generic assessment criteria for the IDCS programme. Students should refer to this table when undertaking any assessment (including formative assessment).

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<sup>1</sup> The term 'Credit' has been used by NCC Education for a number of years to indicate highly competent performance in a module's assessment. This will be replaced by the term 'Merit' in 2008 as this better describes the achievement of the student and avoids confusion with the use of the term 'Credit' as a measure of the amount of work associated with a module.

Students who are referred on a module may choose to retake the assessment for that module. The reassessment may be taken any time that the module is offered and a student may make multiple attempts to pass a module on which they have been referred, subject to the restriction that all attempts must be made within the eligibility period (see Section 2.4). A student who subsequently passes a module on which he/she had previously been referred, will have the module result recorded as Pass, irrespective of the mark that is achieved (i.e. a Distinction or Merit cannot be awarded to a student for a module on which he/she has been referred).

Students who pass a module (i.e. they receive a grade better than 'Referred') may not retake the assessment of the module with the intention of improving their grades. So, for example, a student who receives a 'Pass' grade for a module may not retake the assessments in the hope of improving his/her grade to 'Merit' or 'Distinction'.

#### **4.1.1 Modules Assessed by both Local Examination and Global Assignment**

Where a module is assessed by global assignment and local examination, the overall mark for the module is given the weighted mean of the global assignment and local examination, using the weights given in the table in Section 2.6. There are additional pass criteria and reassessment regulations for such modules.

- If a student achieves an overall weighted module mean of less than 40%, he/she will be referred only in the components of the assessment for which he/she was awarded a mark of less than 40%. Thus, a student may be referred only in the local examination, only in the global assignment, or in both the local examination and global assignment.
  - On reassessment, the student will be awarded a Pass grade for the module when the weighted mean of the components results in a mark of 40% or more.
- If a student achieves a weighted module mean of greater than or equal to 40%, the student will be referred in the local examination if his/her local examination mark is less than 30%.
  - On reassessment, the student will be awarded a Pass grade for the module when he/she achieves a mark of 30% or more in the examination.

#### **4.2 Notification of Results**

After each assessment session, Accredited Partner Centres are issued with one results slip per candidate (in electronic format) which details the grade achieved in each module indicated as one of the following: Referred, Pass, Merit (or Credit) or Distinction, as described in Section 4.1.

#### **4.3 Programme-Level Certification**

A student will be eligible for an International Diploma in Computer Studies certificate when the six core and two elective modules are passed (i.e. each module has a grade of 'Pass' or better) within the eligibility period.

All students, whether they pass the required set of modules or not, will be issued with a Record of Achievement. The Record of Achievement indicates the grade that they have been awarded for each module for which full assessment has been undertaken within the eligibility period.

#### **4.3.1 Record of Achievement**

The Record of Achievement will:

- indicate the grade achieved by the candidate for each module completed. The grade will be Fail, Pass, Merit (or Credit) or Distinction.

The Record of Achievement will **not**:

- display numerical marks achieved in any assessment;
- record an overall grade for the qualification.

#### **4.3.2 Certificate**

The certificate will:

- carry the signatures of the Director of Academic Standards and Quality and the Chair of the Academic Board of NCC Education.

The certificate will **not**:

- record an overall grade for the qualification.

## **5. Programme Resources**

### **5.1 CD Contents**

For the International Diploma in Computer Studies (IDCS) the course materials are contained on two CD ROMs – one for the Lecturer and one for the Student.

It is the responsibility of the Accredited Partner Centre to ensure that:

- each lecturer has access to the module materials found on the Lecturer CD;
- each student has access to the module materials found on the the Student CD.

The CDs have an issue date and this date should always be checked to ensure that the current CD and syllabus are being used.

The information contained on each of the CDs is as follows:

Lecturer CD ROM:

- NCC Education IDCS Programme Handbook;
- Lecturer Guide for each module;
- Required textbook for each module in electronic format, where available;
- Downloadable tutor support material.

Student CD ROM:

- NCC Education IDCS Programme Handbook, which includes the document 'A Guide to Harvard Referencing' as Appendix D;
- Student material for each module;
- Required textbook for each module in electronic format, where available.

## **5.2 Textbooks**

All modules in the IDCS have a required textbook that is provided on the Student CD ROM in PDF format. Students are advised to obtain a hardcopy of the book, either by printing the PDF file or by gaining access to a bound hardcopy of the book. Information about purchasing textbooks and accessing supporting material online is given in Section 7.1.5.

The Lecturer Guide for a module often identifies a further set of useful textbooks and other resources (e.g. websites) which may be useful to students. The module lecturer will inform students of suitable supporting resources.

## **6. Student Regulations and Policies**

### **6.1 Assignment and Examination Irregularities**

NCC Education's Academic Dishonesty and Plagiarism Policy is contained in Appendix B. This details NCC Education's policies regarding unfair practices in assignments and examinations. Students are expected to familiarise themselves with the information contained in the policy. The penalties for breaking the rules are significant and may result in a student being excluded from an NCC Education course.

NCC Education requires students to submit the Statement and Confirmation of Own Work (which is provided at the end of Appendix B) with every assignment, to record that he/she has confirmed the work is entirely his/her own and that he/she has read the Academic Dishonesty and Plagiarism Policy.

### **6.2 Student Appeals**

A student may appeal against the grade awarded for a module following the Appeals Process outlined in Appendix C. A student is required to pay a fee to cover the administrative costs of his/her appeal. If the appeal is successful, the fee will be refunded. Students are advised to read the regulations carefully before making an appeal.

### **6.3 Special Circumstances**

Students may face exceptional circumstances such as prolonged ill-health, pregnancy, bereavement or family problems. These circumstances may affect a student's performance in his/her assessments and may be taken into

account by the awards panel for the programme when the student's results are considered.

Students experiencing special circumstances should inform their Accredited Partner Centre using the form in Appendix E. If the circumstances are judged by the Accredited Partner Centre to have had an adverse impact on the student's studies, the Accredited Partner Centre should inform NCC Education using the form given in Appendix E. A student experiencing special circumstances should also be aware of the material in sections 6.4 and 6.5.

## **6.4 Extensions to Assignment Deadlines**

A student who is unable to meet a global assignment deadline because of special circumstances (see Section 6.3 for examples of circumstances) may apply for an extension to the Accredited Partner Centre with which he/she is registered. If the extension is granted, the assignment will generally be assessed in the following assessment cycle.

On receipt of a request for an extension, the Accredited Partner Centre will investigate the circumstances and if found to be genuine, will forward the circumstances and all relevant details to NCC Education Support Services. Support Services will inform the Accredited Partner Centre of whether the request is approved or not.

Assignments submitted after the published deadline without an approved extension will receive a mark of zero.

## **6.5 Suspension of Studies**

A student who is experiencing special circumstances (such as prolonged ill-health, pregnancy, bereavement, family problems, exceptional financial difficulties, or a traumatic experience) may seek to suspend his/her studies. This process allows a student to suspend his/her studies and resume them at a later date.

Students who believe that they would benefit from a suspension of studies should contact the Accredited Partner Centre with which they are registered in the first instance.

## **6.6 Withdrawal from Programme**

A student who wishes to withdraw from the programme should inform the Accredited Partner Centre with which they are registered as soon as possible. Students who wish to withdraw because of special circumstances are advised to consider suspending their studies (see Section 6.5). Advice can be obtained from the student's Accredited Partner Centre.

## **7. Programme Module Outlines**

### **7.1 Reading Programme Module Outlines**

This section gives guidance on the information contained in the programme module outlines.

#### **7.1.1 Structure**

This section indicates the number of credits associated with the module, the number of hours of supervised and independent study, and the method of assessment.

Students should note that the number of independent study hours is the basic requirement for an average student to pass the module. Additional work may be required to obtain higher grades. The figure suggests that for every hour of supervised study a student should allocate around three hours of his/her time. Students should also note that this figure does not include revision time for the examinations.

#### **7.1.2 Introduction**

This section gives a brief introduction to the module; presenting the module's aims and introducing the material covered.

#### **7.1.3 Learning Outcomes**

The Learning Outcomes (LOs) for the module indicate the attributes and skills that a student will be able to exhibit when he/she has successfully completed the module. When reading the LOs the LO should be prefixed by the statement "on successful completion of the module the student will be able to".

The table also indicates the level which the LO falls into in the adapted form of Bloom's taxonomy used in this handbook.

Section 9 gives further information on understanding learning outcomes.

#### **7.1.4 Indicative Content**

This section presents the material that will be generally covered when the module is taught.

#### **7.1.5 Required Textbook**

All modules are supported by one or more textbooks which are provided in PDF format on the Student CD and Lecturer CD.

#### **Online Companions**

A number, but not all, of these books have online companions, including tests and other supporting material, that are designed to support study. The online companions are periodically updated, thus students should check for updates (using the procedure outlined below) on a regular basis.

To access materials:

- Go to [www.course.com](http://www.course.com)
- On the right hand side of the screen there are several headings. Under the heading entitled STUDENTS, click on Student Downloads
- Search for the required book. The title of the book or the ISBN (International Standard Book Number) can be used (see the module's outline for details).
  - for example, if searching for *Electronic Commerce*, input *either* the ISBN 1418837037 *or* the title and start the search
- A new screen will appear, with the details of the book. On the right hand side, under the heading entitled STUDENTS, click on Student Downloads
- A link for the Online Companion for this book will appear.

### Bound Hardcopies

Bound hardcopies of the textbooks can be obtained from Galatea at a price very significantly below the normal publication price. Contact Steve Newton (email: [steve.newton@galatea.co.uk](mailto:steve.newton@galatea.co.uk); telephone: +44(0) 1706 351389).

Students may also be able to obtain hardcopies from the Accredited Partner Centre at which they are studying.

Alternatively, textbooks may be obtained from online bookstores (for example [www.amazon.com](http://www.amazon.com)) or from the publisher's website. Searching using the book's ISBN is recommended.

## 7.2 Business Communication

### 7.2.1 Structure

Credits	Lecture/Tutorial/ Practical Workshop Hours	Student Independent Study Hours	Assessment
15	36	114	Global Examination

### 7.2.2 Introduction

This module is a general introduction to personal communication skills in the area of business and computing for students and IT professionals. The module will assist students in their studies, in seeking employment and in their professional development. The module develops skills in: the interpretation and creation of a range of written material; locating data and its processing into information; effective communication in a work environment; an

introduction to group working and meetings; and the creation and delivery of presentations.

### 7.2.3 Learning Outcomes

	Learning Outcomes (LOs)	Bloom's Taxonomy Level
LO 1	Describe skills and strategies for effective communication in business environments. Explain how communication technologies can facilitate the flow of information.	Knowledge, Understanding, Application
LO 2	Find data and process it to produce meaningful information.	Analysis
LO 3	Write business letters, memoranda and messages for electronic media. Describe the structure, content and function of business reports.	Knowledge, Understanding, Application
LO 4	Write résumés and job application letters. Describe the features and demands of job interviews, the preparation for an interview and how to perform competently during an interview.	Knowledge, Understanding, Application
LO 5	Discuss the benefits and difficulties of working in a group. Describe the planning and running of business meetings. Understand the role of meetings. Discuss the impact of intercultural differences on communication.	Knowledge, Understanding
LO 6	Give a presentation or demonstration on a business related topic to an audience, using appropriate aids.	Application

### 7.2.4 Indicative Content

- A. **Communication in organisational settings:** Using technology to improve business communication.
- B. **Finding, evaluating and processing information:** Identifying information sources for a number of topics.
- C. **Writing business messages and crafting messages for electronic media:** Using technology to compose, shape and revise messages.
- D. **Writing positive, routine, negative and persuasive messages.**
- E. **Writing reports and proposals.**
- F. **Building careers and writing résumés:** Preparing résumés and job application letters.

- G. Interviewing for employment:** Interview preparation and style, dealing with and asking questions.
- H. Working in teams and mastering listening and non-verbal communication.**
- I. Communicating in a world of diversity:** Improving intercultural communication skills.
- J. Creating and delivering oral presentations:** Research and prepare content for presentation.
- K. Presentations: visual aids and support materials:** Create visuals and supporting materials for performance of presentation to fellow students.

### 7.2.5 Required Textbook

Bovée, C.L. and Thill, J.V. (2008) *Business Communication Today*. 9th edition, Prentice Hall (ISBN 0131995359).

This textbook is included in electronic format on the International Diploma in Computer Studies, Student and Lecturer CDs.

## 7.3 Computer Technology

### 7.3.1 Structure

Credits	Lecture/Tutorial/ Practical Workshop Hours	Student Independent Study Hours	Assessment
15	36	114	Global Examination

### 7.3.2 Introduction

An effective computing professional benefits from a good working knowledge of the underlying principles of the hardware, systems software and data communications which are used in end-user computer systems. This module gives a broad overview of a variety of computing technologies so that students can appreciate the key characteristics of the technologies employed to implement today's computer systems and make sense of the new developments in computing technology.

### 7.3.3 Learning Outcomes

	Learning Outcomes (LOs)	Bloom's Taxonomy Level
LO 1	Demonstrate knowledge and understanding of computer hardware, software and peripherals, their performance, operation and application to real-life problems.	Knowledge, Understanding, Application
LO 2	Demonstrate knowledge and understanding of the data and information needs of organisations and the types and flows of data and their storage and representation.	Knowledge, Understanding, Application
LO 3	Demonstrate knowledge and understanding of the ways in which computers are used to support business processes in organisations.	Knowledge, Understanding
LO 4	Demonstrate knowledge and understanding of networking and its use in organisations.	Knowledge, Understanding
LO 5	Demonstrate knowledge and understanding of the Internet and multimedia and their uses in business and organisations.	Knowledge, Understanding, Application

### 7.3.4 Indicative Content

- A. **Computer Applications:** Identify a range of common modern applications of computers that meet the information needs of a variety of users, extending from the small business user to the multi-national corporation.
- B. **Computer Architecture:** Discuss different models of computer architecture. These models will include the CPU and its operation, the relationship of the CPU to memory and peripherals and the relationship between one processor and another in a network.
- C. **Data Storage Devices:** Compare and contrast the characteristics of different types of input, output and data storage devices.
- D. **Data Types and Data Flows:** Describe the characteristic data types and data flows within a range of businesses.
- E. **Operating Systems:** Give examples of the requirements for, and use of, Operating Systems and the facilities they offer.
- F. **Data Storage and Retrieval:** Describe typical forms of data representation and their implications for data storage and retrieval. Describe some popular file structures and methods for handling large volumes of data.

- G. Networks:** Describe the use of layered models to explore and understand communication networks and their practical implementation in real products and protocols. Describe the types of network architectures in use in business with some emphasis on client/server.
- H. Internet:** Evaluate the use of the Internet from a data communications and a business applications viewpoint with strong emphasis on its use in eCommerce.
- I. Multimedia:** Describe the benefits of multimedia in business, education and entertainment.

### 7.3.5 Required Textbook

*Computer Technology* (2007), NCC Education.

This textbook is included in electronic format on the International Diploma in Computer Studies, Student and Lecturer CDs.

## 7.4 Fundamentals of Hardware and Operating Systems

### 7.4.1 Structure

Credits	Lecture/Tutorial /Practical Workshop Hours	Student Independent Study Hours	Assessment
15	36	114	Global Assignment (60%) Local Examination (40%)

### 7.4.2 Introduction

This module is intended to provide a student with a thorough understanding of the technical and practical skills involved in the maintenance and configuration of personal computers. The module will be of particular benefit to students who seek employment in a technical support role. However, it will also be of great benefit to other students because a student or computing professional who has an understanding of the practical aspects of the maintenance and configuration of a personal computer is better placed to understand other material (in, for example, computer technology, programming, data networking, etc) and to interact with staff engaged in a technical support role.

### 7.4.3 Learning Outcomes

	Learning Outcomes (LOs)	Bloom's Taxonomy Level
LO 1	Explain the role and features of motherboards, processors and memory in an end-user computer system.	Knowledge, Understanding
LO 2	Explain the role of an operating system in an end-user computer system.	Knowledge, Understanding
LO 3	Install, configure, upgrade and troubleshoot the hardware of an end-user computer system.	Application
LO 4	Install, configure upgrade and troubleshoot a widely used operating system.	Application

### 7.4.4 Indicative Content

- A. Hardware installation, configuration and upgrading:** Peripherals and ports, installing disk drives, configuring peripheral devices, system upgrading and optimising.
- B. Diagnosing and troubleshooting:** Symptoms and basic troubleshooting techniques.
- C. Preventive maintenance, safety and environment issues:** Cleaning, surge protection, high voltage hazards, storage protection, disposal procedures.
- D. Motherboards, processors and memory:** Various types of current processors, clock speeds, types of RAM, motherboards.
- E. Printers and scanners:** Printer types, installation and servicing; Scanners, scanner types, and installation.
- F. Laptops and portable devices:** Types of laptops and portable devices; Introduction to WI-FI.
- G. Basic networking:** Local Area Network (LAN), network media, troubleshooting LANs, network repair, Internet connectivity (modem, ADSL, WI-FI).
- H. Windows Operating System (OS) fundamentals:** Windows XP, system files, command line functions, disk directories and files, system utilities.
- I. OS Installation, configuration and upgrading:** Installing Windows XP, patches and service packs, upgrading the OS, upgrade problems, dual booting with other OSs, system start-up, working with devices, applications and printers.

- J. OS diagnosis and troubleshooting:** Troubleshooting start-up problems, using XP System Restore, Emergency Repair, ASR backups, blue screen errors, application problems, virus symptoms, removal of viruses.
- K. Networking with Windows:** Windows network protocols, network printing, installing other network protocols, network troubleshooting tools, Internet connectivity, private IP addresses, Internet application protocols, configuring Internet options, WAN with Windows XP, Network Address Translation (NAT), Windows XP firewall.
- L. Hardware and software security:** Computer security risks to home and LAN users.

#### 7.4.5 Required Textbooks

*Hardware Service Technician* (2004) Galatea Training Services Limited.

*Operating System Technologies* (2004) Galatea Training Services Limited.

These textbooks are included in electronic format on the International Diploma in Computer Studies, Student and Lecturer CDs.

## 7.5 Networking

### 7.5.1 Structure

Credits	Lecture/Tutorial/ Practical Workshop Hours	Student Independent Study Hours	Assessment
15	36	114	Global Assignment (60%) Local Examination (40%)

### 7.5.2 Introduction

Nowadays it is rare to find a computer system that does not connect to a network of some sort and thus an understanding of the principles of networking is vitally important to the computing professional. This module provides a broad introduction to networking, ranging from underlying media to the deployment of networks in business. The module aims to provide a student with a good understanding of modern networks and the intellectual and practical skills to support the specification and deployment of networks.

### 7.5.3 Learning Outcomes

	Learning Outcomes (LOs)	Bloom's Taxonomy Level
LO 1	Demonstrate knowledge and understanding of networking concepts and technologies.	Knowledge, Understanding
LO 2	Demonstrate knowledge and understanding of current networking hardware and software.	Knowledge, Understanding
LO 3	Install and configure common networking hardware.	Knowledge, Understanding, Application
LO 4	Demonstrate knowledge and understanding of networking standards and protocols.	Knowledge, Understanding
LO 5	Use appropriate tools and techniques to analyse network requirements and document appropriate topologies and designs for common scenarios.	Application, Analysis

### 7.5.4 Indicative Content

- A. **Introduction to Networks, Networking Concepts and Network Design Essentials:** Computer networking terms and technologies, networking design concepts, networking device operations and topologies.
- B. **Networking Media:** Cables and connectors for network devices, Wireless networking.
- C. **Networking Interface Cards:** Connecting devices, computers to LAN, BUS interfaces, special purpose cards, wireless interface cards.
- D. **Making Networks Work:** Standards and specifications used to build networks, OSI and IEEE 802.
- E. **Network Communications and Protocols:** Language of Networks, TCP/IP, IPX/SPX, IP Addressing, introduction to IPv6.
- F. **Network Architecture:** Various network architectures, Ethernet, Token Ring, FDDI, Broadband, introduction to 10GB Ethernet.
- G. **Simple Network Operations:** Installing NOS, configuring network services for Windows, Linux.
- H. **Understanding Complex Networks:** Integration of multiple OS in a complex networking environment, Windows, Linux and Netware, introduction to PDAs.
- I. **Introduction to Network Security:** Trojan horses, worms, viruses, spammers and network security issues, developing a security policy.

- J. **Supporting Small Business Networks:** Unique technology requirements of small businesses, addressing the networking needs of small businesses.
- K. **Enterprise and Wide Area Networks:** Expansion of networks using switches, routers, WAN technologies, Frame Relay and ISDN.
- L. **Network Administration and Support, Solving Network Problems:** Creating users, account policies, monitoring network performance, backup policies, prevention of network downtime, data loss, security breaches, problem-solving processes.

### 7.5.5 Required Textbook

Tomsho, G. (2007) *Guide to Networking Essentials*. 5th edition, Course Technology, (ISBN 1418837180).

This textbook is included in electronic format on the International Diploma in Computer Studies, Student and Lecturer CDs.

## 7.6 Programming Methods

### 7.6.1 Structure

Credits	Lecture/Tutorial/ Practical Workshop Hours	Student Independent Study Hours	Assessment
15	36	114	Global Assignment (60%) Local Examination (40%)

### 7.6.2 Introduction

Students of computing and IT professionals greatly benefit from a good understanding of the underlying concepts that support computer programming. This module is designed to give students a thorough grounding in the key concepts, techniques and methods for the development of programming. The module is independent of programming language and focuses on a student gaining a good understanding of algorithms, data structures and widely-used computing paradigms.

### 7.6.3 Learning Outcomes

	Learning Outcomes (LOs)	Bloom's Taxonomy Level
LO 1	Describe different approaches to programming and programming languages.	Knowledge, Understanding
LO 2	Describe and apply control structures, data structures and programming techniques.	Knowledge, Understanding, Application
LO 3	Describe object-oriented approaches to programming languages.	Knowledge, Understanding
LO 4	Explain how programming fits into the software development process.	Knowledge, Understanding
LO 5	Analyse the software requirements of customers.	Analysis
LO 6	Use techniques to interpret customer requirements and design software.	Application

### 7.6.4 Indicative Content

- A. **Introduction to Programming:** Programming languages, historical development of programming languages, language models, introduction to object-oriented concepts.
- B. **Calculations:** Variables and simple data types, order of precedence, control structures, pseudocode, diagrams and charting.
- C. **Data Analysis:** The software development process, data structures and data structure diagrams, organising information, fixed and variable records.
- D. **Problem Analysis:** Structured programming diagrams, CRC cards.
- E. **Procedures and functions**
- F. **Arrays:** Declarations, use, sorting and searching.
- G. **Data structures and operations:** Singly linked lists, doubly linked lists, data structures: queues, stacks, graphs and trees.
- H. **Modelling Objects:** Why the UML was developed, advantages and disadvantages of the UML, UML diagrams, use-case analysis, class diagrams, generalisation, association, attributes, operations, sequence diagrams, recursion, collaboration diagrams, state diagrams, substates, history icon, activity diagrams, swimlanes, fitting the diagrams together.
- I. **Testing:** Documentation of tests, levels of testing, desk checking and dry running, diagnostic aids, interactive debugging, program maintenance, need for robust and reliable software.

- J. Alternative Methods:** Patterns, unified development process, re-factoring, design by contract, class libraries, visual programming, Java beans, application generators, DBMS, client server computing.
- K. Implementation:** Traditional systems life cycle, development life cycle models, need for documentation and coding standards, attributes of good documentation, elements of documentation, techniques of documentation, programmer's role.

### 7.6.5 Required Textbook

*Programming Methods* (2007), NCC Education

This textbook is included in electronic format on the International Diploma in Computer Studies, Student and Lecturer CDs.

## 7.7 Systems Development

### 7.7.1 Structure

Credits	Lecture/Tutorial/ Practical Workshop Hours	Student Independent Study Hours	Assessment
15	36	114	Global Examination

### 7.7.2 Introduction

The purpose of this module is to provide students with the knowledge relevant to the investigation, design and development of information systems. The module covers the processes that are followed when information systems are created or changed and the tools and techniques to support these processes.

### 7.7.3 Learning Outcomes

	Learning Outcomes (LOs)	Bloom's Taxonomy Level
LO 1	Understand an information system and the roles within an IS department.	Knowledge, Understanding
LO 2	Understand and apply underpinning mathematics and relevant statistics within the design and implementation of computer systems.	Knowledge, Understanding, Application
LO 3	Identify stages in a software project life cycle and be able to use simple models.	Knowledge, Understanding, Application
LO 4	Recall, compare and use structured modelling techniques, to solve simple problems.	Knowledge, Application, Analysis
LO 5	Recall the need for standards and produce simple documentation across the life cycle.	Knowledge, Understanding
LO 6	Identify the reasons for testing, the phases and explain the types of testing and their purpose.	Knowledge, Understanding, Analysis

### 7.7.4 Indicative Content

- A. Business Systems:** The role of computers in the modern world. Information systems and their role in business. Roles within information system departments. Overview of systems development life cycle. User involvement.
- B. Mathematics for Computing:** Number systems used in computing. Number base conversions. Arithmetic calculations. Data structures overview. Purpose of check digits. Basic statistics and probability.
- C. System Development Life Cycles (SDLCs):** Introduction to principles of software engineering. Stages of IS projects. Simple life cycle model. Alternative life cycle models, introduction to rapid application development and prototyping.
- D. Software Analysis and Design:** SAD methods, modelling techniques, traditional and structured methods. Introduction to objects and object-oriented analysis and design. Introduction to program specifications, structured diagrams.
- E. Documentation and Standards:** Introduce standards in everyday life, standards within IS development and link to quality. Types of documentation required in IS development, linked to SDLC. User involvement.
- F. Software Testing:** Importance and purpose of testing, identify issues from poor testing. Types of testing, black and white box, when and how to test throughout SDLC. Design, management and documenting tests. User involvement.

### 7.7.5 Required Textbook

*Systems Development* (2007), NCC Education

This textbook is included in electronic format on the International Diploma in Computer Studies, Student and Lecturer CDs.

## 7.8 eCommerce

### 7.8.1 Structure

Credits	Lecture/Tutorial/ Practical Workshop Hours	Student Independent Study Hours	Assessment
15	36	114	Global Assignment

## 7.8.2 Introduction

The advent of eCommerce has significantly changed the behaviour of many consumers and the way in which businesses and other organisations operate. This module aims to provide students with a thorough understanding of the major issues associated with the development of eCommerce solutions and applications. The module focuses on both the technology that underpins eCommerce activity and, to a greater extent, the management and organisational issues that relate to business and eCommerce.

## 7.8.3 Learning Outcomes

	<b>Learning Outcomes (LOs)</b>	<b>Bloom's Taxonomy Level</b>
LO 1	Identify the meaning and scope of eCommerce and eBusiness, the business challenges of introducing eCommerce to an organisation, the main business and marketplace models, revenue models for electronic trading and new access devices.	Knowledge, Understanding
LO 2	Explain the key decisions to be made when developing an eBusiness strategy and apply these decisions to the development and implementation of a successful strategy.	Understanding, Application
LO 3	Evaluate the main components of supply chain management and the role of technology in the support of supply chain management.	Evaluation
LO 4	Explain the importance of eMarketing, the development and deployment of an eMarketing plan, and the use of customer relationship management (CRM) to help acquire and retain customers.	Knowledge, Understanding
LO 5	Analyse the actions to be undertaken to launch an eCommerce application, including the security implications; develop plans for implementing any resulting organisational change and measuring the effectiveness of the application.	Analysis

## 7.8.4 Indicative Content

- A. Introduction to eBusiness and eCommerce:** Scope of eCommerce and eBusiness, drivers and barriers to adoption.
- B. The eCommerce Marketplace:** Business (B2B) and consumer (B2C) approaches to eCommerce.
- C. Business Models for eCommerce:** Auctions, portals and other business models.

- D. **New Access Devices:** Interactive digital TV and wireless access to the Internet.
- E. **eBusiness Strategy:** Strategy process model for eBusiness.
- F. **Strategy Definition and Implementation:** Review strategic approaches to eBusiness.
- G. **Supply Chain Management:** Main elements of supply chain management and the role of IT.
- H. **eMarketing:** Key elements of eMarketing and exploitation of new media.
- I. **Customer Relationship Management (CRM):** Role of CRM in acquiring and retaining customers.
- J. **Change Management:** Different types of organisational and human resource changes brought about by eCommerce.
- K. **eCommerce Security:** Approaches to developing secure eCommerce systems.
- L. **Implementation and Maintenance:** Planning eCommerce implementation and measuring its effectiveness.

### 7.8.5 Required Textbook

Schneider, G. P. (2007) *Electronic Commerce*. 7th edition, Course Technology (ISBN 1418837032).

This textbook is included in electronic format on the International Diploma in Computer Studies, Student and Lecturer CDs.

## 7.9 Java

### 7.9.1 Structure

Credits	Lecture/Tutorial/ Practical Workshop Hours	Student Independent Study Hours	Assessment
15	36	114	Global Assignment (60%) Local Examination (40%)

### 7.9.2 Introduction

Java is a widely used object-oriented programming language. This module is designed to provide students with an understanding of the core principles of Java, and to enable students to produce well-designed and effective applications that use some of the more advanced features of this language. By providing a practical introduction to programming using an object-oriented

programming language, this module will aid students in understanding the theoretical concepts of object orientation.

This module is a prerequisite of the Advanced Java module in the NCC Education International Advanced Diploma in Computer Studies (IADCS).

### 7.9.3 Learning Outcomes

	Learning Outcomes (LOs)	Bloom's Taxonomy Level
LO 1	Demonstrate knowledge and understanding of object-oriented terms, concepts and techniques.	Knowledge, Understanding
LO 2	Apply OO techniques to the analysis of simple problems.	Application
LO 3	Design solutions to simple problems using OO techniques and Java.	Application, Analysis
LO 4	Design and implement web-based projects using Java.	Application, Analysis

### 7.9.4 Indicative Content

- A. **Basic Java Programming:** What is a computer program? What is Java? What makes Java different from other programming languages? Comparison of Java with C++, JavaScript and Basic. What is a JVM? Writing a simple Java program.
- B. **Data Types and Operators:** Primitive types, operators, arithmetic statements, numeric type conversion, boolean data types, comparison operators, char data type, ASCII and UNICODE.
- C. **Methods, Classes and Objects:** Methods, method keywords, classes, class modifiers, objects, constructors.
- D. **Object-Oriented Concepts in Java:** Block and scope, overloading, ambiguity, this reference, pre-written constants and methods, inheritance, interfaces, packages.
- E. **Input/Output:** Keyboard input, GUI input/output.
- F. **Decision-making and branching:** Decision-making statements (if-then, if-then-else, switch), branching statements (break, continue, return).
- G. **Looping:** Java loop statements (for, while, do-while).
- H. **Strings:** Creating strings, string length, concatenating strings, creating format strings, converting between numbers and strings, manipulating characters in a string, comparing strings and portions of strings.

- I. **Applets:** Life cycle of an applet, applets versus applications.
- J. **Inheritance:** Extending classes, overriding and hiding methods, hiding information, final classes and methods.
- K. **Inheritance:** Abstract methods and classes, working with superclass methods and constructors, use of the object class and its methods, Interfaces and packages.
- L. **Swing components and Layout managers**
- M. **Advanced topics:** File input/output, multi-threading, animation, exception handling.

### 7.9.5 Required Textbook

Farrell, Joyce M. *Java Programming*, Thomson Learning, ISBN 0619016590.

This textbook is included in electronic format on the International Diploma in Computer Studies, Student and Lecturer CDs.

## 7.10 Organisational and Business Structures

### 7.10.1 Structure

Credits	Lecture/Tutorial/ Practical Workshop Hours	Student Independent Study Hours	Assessment
15	36	114	Global Assignment

### 7.10.2 Introduction

Information systems fulfil an important role in the management and operation of businesses and other organisations. Thus, the design of useful information systems requires a good understanding of the organisation and processes employed by a business. To address this need, this module aims to provide students with an understanding of the various types of organisation, the principal functional areas within organisations, the information needs of organisations and the needs of employees in the workplace.

### 7.10.3 Learning Outcomes

	Learning Outcomes (LOs)	Bloom's Taxonomy Level
LO 1	Describe and explain the form, aims, objectives and operation of various types of business organisations across the private, public and voluntary sectors.	Knowledge, Understanding
LO 2	Understand and evaluate organisational principles and structures, their appropriateness and relevance in the process of organisational development; contrast the mechanistic and organic forms of organisation structure and understand how the Internet enables new types of organisational structure.	Knowledge, Understanding, Analysis
LO 3	Identify and describe different types of organisational change, the characteristics of change, the steps in a change process, theories of change, and the forms of resistance to change.	Knowledge, Understanding
LO 4	Explain the different communication processes that are found within an organisation, the barriers to effective communication and the ways in which communication processes can help or hinder organisational performance.	Application
LO 5	Identify and monitor business performance, control processes and systems utilising budgetary and non-budgetary methods as appropriate, and identify key result areas.	Evaluation
LO 6	Analyse business as a human system, the micro-environment and interaction with the wider macro-environment.	Analysis
LO 7	Evaluate the role of management information systems in an organisation.	Evaluation

### 7.10.4 Indicative Content

- A. **Management Roles in Organisations:** Introduction to the function of organisations and how management affects their performance.
- B. **The Business Environment:** Organisational environments and associated analysis techniques and models.
- C. **Organisation Structures:** Vertical and horizontal organisation structures.
- D. **Organisational cultures:** Components and types of organisational cultures.

- E. **Human Resource Management (HRM):** Importance of HRM for organisational performance.
- F. **Organisational Development:** Mechanistic and organic organisation structures.
- G. **Contingency Approach to Organisation Structure:** Factors shaping organisation structures.
- H. **Organisational Change:** Types of change and change processes.
- I. **Effective Communication Processes:** Communication and management.
- J. **Monitoring Business Performance:** Finance and budgetary control.
- K. **Role of Information Systems In Organisations:** Types and associated roles of information systems.
- L. **Internet-based technologies:** Impact of Internet technologies on organisational structures.

#### 7.10.5 Required Textbook

Boddy, D. (2002) *Management: An Introduction*. (2nd edition), Financial Times:Prentice Hall (ISBN 0273655183).

This textbook is included in electronic format on the International Diploma in Computer Studies, Student and Lecturer CDs. This is a customised version that contains only the chapters relevant to the learning outcomes associated with this module. This version of the book is available in bound hardcopy from Galatea (see Section 7.1.5).

### 7.11 Visual Basic

#### 7.11.1 Structure

Credits	Lecture/Tutorial/ Practical Workshop Hours	Student Independent Study Hours	Assessment
15	36	114	Global Assignment (60%) Local Examination (40%)

#### 7.11.2 Introduction

Visual Basic is a widely used programming language for the Windows platform. It is an object-oriented language with particular focus on the rapid development of applications through the use of components. This module is intended to provide a firm foundation in the practical use of Visual Basic to develop applications of reasonable complexity. The module will also aid students in understanding the theoretical ideas behind object orientation and

practical experience in component-based development. The module focuses on Visual Basic 2005 which is targeted at Microsoft's .NET framework.

This module is a prerequisite of the Advanced Visual Basic module in the NCC Education International Advanced Diploma in Computer Studies (IADCS).

### 7.11.3 Learning Outcomes

	Learning Outcomes (LOs)	Bloom's Taxonomy Level
LO 1	Explain the purpose and structure of .NET FRAMEWORK.	Understanding
LO 2	Present and explain advantages of modular object-oriented programming over traditional programming paradigms.	Understanding
LO 3	Demonstrate an understanding of event-driven software systems.	Understanding
LO 4	Understand the specification of a required software system. Understand the specification of a software system design, implementation and testing.	Understanding, Analysis
LO 5	Design object-oriented solutions to a stated problem.	Understanding, Application
LO 6	Implement object-oriented solutions using appropriate structures and facilities of Visual Basic 2005.	Application

### 7.11.4 Indicative Content

- A. Introduction to Visual Basic Programming:** Event-driven systems, Graphical User Interface, fundamental program operations, the concepts of classes, objects, properties, methods and events, MSIL, CLR.
- B. Program and Graphical User Interface Design:** Components of GUI, common screen controls (objects), properties of controls, positioning of controls, introduction to program development life cycle.
- C. Program Design and Coding:** Programming an event procedure, structure of VB, program statement, triggering events.
- D. Variables and Operations:** Data types, declaration of variables, fundamental operations associated with particular data types, constants, assignment statements, the form load event, scope.
- E. Conditional Statements:** Categories of if statement, logical operations, nested if statements, radio button control, select case statement, validating data.

- F. Loop Structures:** Menu strip object, inputbox, listbox control, accumulators, counters, compound operations, for ... next loop, do ... until loop, nested loops, selecting the appropriate loop.
- G. Procedures and Functions:** Coding sub procedures, passing arguments, coding function procedures, exception handling.
- H. Program Design using Procedures and Functions**
- I. Arrays:** Declaring and initialising a one dimensional array, nature of subscripted variables, accessing array elements, for ... each loop, scope of array, searching, sorting, two dimensional arrays.
- J. File Handling:** Reading and writing a text file.
- K. Multiple Forms:** Instanting forms, accessing variables across forms.
- L. Databases with ADO.NET 2.0** The nature of a relational database, setting up a database structure in MS Access, database files, connecting a VB project to an Access database, binding database fields to controls on a VB form, accessing database records.
- M. Debugging Tools and Techniques.**
- N. Application deployment and publication.**

#### 7.11.5 Required Textbook

Shelly, G.B., Cashman, T.J. and Hoisington, C. (2006) Microsoft Visual Basic 2005 for Windows, Mobile, Web, Office and Database Applications, Course Technology (ISBN 0619254823)

This textbook is included in electronic format on the International Diploma in Computer Studies, Student and Lecturer CDs.

## 7.12 Web Design

### 7.12.1 Structure

Credits	Lecture/Tutorial/ Practical Workshop Hours	Student Independent Study Hours	Assessment
15	36	114	Global Assignment (60%) Local Examination (40%)

### 7.12.2 Introduction

Good website design is important for businesses. This module aims to provide students with the theoretical knowledge and practical skills to develop a high quality website.

This module is a prerequisite of the Advanced Website Design module in the NCC Education International Advanced Diploma in Computer Studies (IADCS).

### 7.12.3 Learning Outcomes

	<b>Learning Outcomes (LOs)</b>	<b>Bloom's Taxonomy Level</b>
LO 1	Describe the concepts of the Internet and the World Wide Web and their use in business.	Knowledge, Understanding
LO 2	Use HTML and web development tools to plan and develop websites.	Application
LO 3	Explain the use of advanced HTML features, XML and CSS.	Knowledge, Understanding
LO 4	Knowledge and understanding of forms, frames and tables.	Knowledge, Application
LO 5	Apply the technology and tools needed to use multimedia (sound, graphics, animation, photography and video) in the context of a website, and on stand-alone media such as CD-ROM.	Knowledge, Application

### 7.12.4 Indicative Content

- A. The Internet and how it works, URLs, web page basics, tags, Internet services, web browsers.**
- B. Web Design Principles, browsers, platforms, standards, monitor resolution, connection speed and methods, fonts, audiences.**
- C. Planning a website, organising content and information. Graphic design principles. Understand the HTML development process, including testing.**
- D. Creating a web page using HTML. Tags and their syntax. Document structure, page titles etc. Saving and viewing HTML. Formatting text, and adding simple graphics. Using simple links.**
- E. Cascading Style Sheets (CSS) in outline and principle.**
- F. Graphics and their use in websites.**
- G. The use of links to other pages in the same site and to other sites. The use of image maps and other uses of links.**

- H. **Tables and frames in websites. Table and frame based HTML.**
- I. **Forms. Using forms to collect data through a website.**
- J. **Formats used for graphic, photographic and animated multimedia resources.**
- K. **Formats used for audio and video multimedia resources.**
- L. **Planning, developing and delivering multimedia material.**

#### **7.12.5 Required Textbook**

Robbins J.N. (2007) *Learning Web Design – A Beginners Guide to (X)HTML, Style Sheets, and Web Graphics*, 2nd edition, O'Reilly (ISBN 0596527527)

This textbook is included in electronic format on the International Diploma in Computer Studies, Student and Lecturer CDs.

### **8. NCC Education Campus**

The NCC Education Campus is available at <http://campus.nccedu.com>. A student will be provided with a login and password to access the NCC Education Campus.

The NCC Education Campus gives students access to teaching materials, past and current global assessments, past global examination papers and other useful resources. It also provides forums for student discussion.

The Campus also gives staff at Accredited Partner Centres access to a range of resources.

### **9. Understanding Learning Outcomes**

Learning outcomes identify the specific intentions of each module contained in the programme of study and the programme as a whole. They describe what students should know, understand, or be able to do at the end of a module and programme. The use of learning outcomes leads to a more student-centred approach: learning outcomes indicate the skills and attributes that students should possess following the successful completion of a module or programme.

To ensure comparability with the UK university sector on content, standards and quality, NCC Education uses the UK Government Quality Assurance Agency (QAA) subject benchmark statement for undergraduate computing, to construct the learning outcomes:

(<http://www.qaa.ac.uk/academicinfrastructure/benchmark/statements/computing07.pdf>)

together with the level descriptors provided by the QAA for level C (certificate). UK National Qualification Framework level 4.

<http://www.qaa.ac.uk/academicinfrastructure/FHEQ/EWNI/default.asp#annex1>

Learning outcomes (LOs) will:

- help to guide students in their learning because the LOs explain what is expected of each student, therefore assisting them to succeed in their studies;
- help teaching staff to focus on exactly what they require students to achieve in terms of both knowledge and skills;
- provide a useful guide to inform potential candidates and employers about the general knowledge and understanding that an IDCS holder will possess.
- module assessment will demonstrate that students have achieved the module learning outcomes.

## 9.1 Types of Learning Outcome

At the programme level, learning outcomes are generally split into four groups:

- Knowledge and understanding – facts about the subject and understanding of concepts.
- Intellectual skills – the ability to apply knowledge and understanding in the subject area.
- Practical skills – the ability to carry out practical tasks in the subject area.
- Key transferable skills – skills that can be used in contexts outside the subject area.

## 9.2 Terms Used in Learning Outcomes and their Meaning

The following table, taken from the version of Bloom's Taxonomy updated by Anderson and Krathwhol (2001), provides clear definitions of the language used in the learning outcomes and examples of how students will be expected to demonstrate their skills and attributes, indicating that the learning outcome has been accomplished.

Term	Examples
<b>CREATING:</b> can the student create a new product or point of view?	Assemble, construct, create, design, develop, formulate, and write.
<b>EVALUATING:</b> can the student justify a stand or decision?	Appraise, argue, defend, judge, select, support, value, evaluate.
<b>ANALYSING:</b> can the student distinguish between the different parts?	Appraise, compare, contrast, criticise, differentiate, discriminate, distinguish, examine, experiment, question, test.
<b>APPLYING:</b> can the student use the information in a new way?	Choose, demonstrate, dramatise, employ, illustrate, interpret, operate, schedule, sketch, solve, use, write.
<b>UNDERSTANDING:</b> can the student explain ideas or concepts?	Classify, describe, discuss, explain, identify, locate, recognise, report, select, translate, paraphrase.
<b>REMEMBERING:</b> can the student recall or remember the information?	Define, duplicate, list, memorise, recall, repeat, reproduce, state.

Note that in the Module Outlines in Section 7, the term 'Knowledge' is used to stand for 'Remembering', and 'Synthesise' for 'Creating'.

## 10. Global Assignment Guidance for Students

This section provides information for students on tackling global assignments. The Study Skills Induction gives guidance on how to prepare and write reports. This section, therefore, focuses on general advice on tackling assignments, focusing on the formatting and presentation requirements.

Students are advised to:

- Carefully read the assignment specification. It is important that a student understands the assignment and that he/she addresses the questions and tasks specified.
- Be aware of the assignment deadline and plan their work accordingly.
- Ensure that they are clear about NCC Education's plagiarism policy (see Section 6.1 and Appendix B).
- Ensure that they follow NCC Education's word processing and presentation requirements for assignments (see Section 10.2).
- Ensure that they follow the referencing format specified (see Section 10.3).

### 10.1 NCC Education Global Assignment Resources

To help students in writing the assignment, the NCC Education Campus provides sample assignment questions from previous assessment sessions together with the marking schemes and assessment criteria (see Section 8).

The NCC Education Campus also provides moderation reports which include Global Assignment reports per module for staff at Accredited Partner Centres.

## **10.2 Word Processing and Presentation Requirements**

The way in which the assignment is presented is important. It is imperative that the marker is able to see the questions and the answers. It is essential to ensure that the grammar and spellings are accurate and correct. Students should use the checklist below as a guideline before submitting the assignment for marking:

- Use standard Arial font size 11.
- Submission to be printed single-sided, not double sided.
- Ensure that the word limit for the assignment is not exceeded.
- Include page numbers.
- Include title page.
- Include a table of contents.
- Start each task on a new page and include the question.
- Ensure any diagrams, screen shots, PowerPoint slides fit correctly on the page and are referenced, for example, Fig. 1, Fig. 2, etc.
- Use accurate Harvard referencing (see Section 10.3) and include a bibliography.
- Include a completed Statement and Confirmation of Own Work as the front page.
- Check spelling, grammar and punctuation.
- Submit the assignment on a floppy disk or CD ROM by the deadline date provided.

## **10.3 Harvard Referencing**

NCC Education requires students to use accurate Harvard referencing and to include a bibliography with each Global Assignment submission.

A guide to using the Harvard referencing system is provided in Appendix D and on the Student CD.

Students should also ensure that when direct quotes are taken from other sources, they are clearly marked as such (by the use of quotation marks) and correctly attributed. Failure to do so will contravene the rules on plagiarism (see Appendix B).

## **11. Examinations and Revision**

To help students in preparing for the examination, NCC Education provides global examination papers and marking schemes from previous assessment sessions, on the NCC Education Campus (see Section 8).

## 11.1 Revision Plan

Because examination papers are unseen, a well-structured revision plan must be incorporated into the learning timetable at the Accredited Partner Centre during the 12-week semester (full-time study period). A revision plan must be produced and followed by each student in order for them to develop their own knowledge and understanding, which they will then be able to demonstrate in the examination.

Revision should not be a last minute attempt to make up for poor study habits during the previous 12 weeks. Students should work consistently, always aware of the forthcoming examination, and allow time to revise accordingly.

## 11.2 Revision Tips

Students should:

- Ensure that they know the format of the examination paper; formats vary between modules. Some papers allow a student a free choice of questions, others allow no choice.
- Ensure that they are organised. Notes taken during teaching periods should be easy to follow and well organised. Paperwork should be neatly filed and clearly labelled. Lists of reading and references should be maintained.
- Review past examination papers. Students are advised to attempt to answer questions from earlier papers.
- Keep a revision plan, which indicates the work that has been done and what is still to be done.
- Not let work pile up.
- Read through notes periodically. Notes should be used to form an overview of the module as it progresses. Material that is presented later in a module is often reliant on students having a good understanding of material from earlier in the module.
- Try to identify especially difficult or confusing parts of a module. These parts should be reviewed with reference to notes, text books and other resources (e.g. the Web). Students may also get advice from teaching staff, but must remember not to leave it too late to get advice.
- Ensure all exercises are completed as soon as possible and, throughout the teaching period, attempt past examination questions as soon as the relevant material has been taught.

## 11.3 Examination Writing Tips

Attention should be paid to the number of marks awarded for each question as this often gives some indication as to how much information is expected in the answer and the time to be spent in answering it. A part-question that is assigned 2 marks generally requires a considerably less detailed answer than

one that is assigned 10 marks. In the examination it is essential to ensure that not too much time is spent on one question, leaving insufficient time to complete the examination paper properly.

Students must ensure they comply with the following when sitting an examination.

- The required details are completed on the initial page of the examination paper.
- All answers are written as per the instructions on the examination paper.
- All answers are written legibly in ink (not pencil) in the answer booklet provided.
- The required number of questions is answered in the given time. If the paper requires four questions to be answered, a student should attempt four questions.
- Where a choice of questions is given, the student should not exceed the number of questions to be answered. For example, in a section of an examination paper that states that any two questions should be answered from a choice of four, students should only answer two questions. No credit will be given for answering additional questions.
- Work which is not to be marked should be crossed out.

## 12. References

Anderson, L.W. and Krathwohl, D.R. eds. (2001), *Taxonomy for Learning, Teaching, and Assessing: A Revision of Bloom's Taxonomy of Educational Objectives*, Longman, New York.



## Appendix A: Assessment Criteria

**NCC Education New Grading Scheme:** NCC Education will implement a new Grading Scheme for all diploma level awards including the International Foundation Year. This will be gradually introduced as we implement each new programme on our new NCC Education CRM system, and the specific dates when this will be implemented will be announced. The assessment criterion that follows provides a simple guide to future students and lecturers when marking and interpreting assessments.

International Diploma in Computer Studies	Mark awarded	
<p><b>DISTINCTION (A)</b>  <b>Distinction level work is relatively rare and is expected to stand out from the work of other students. Not many students will achieve a distinction.</b></p> <ul style="list-style-type: none"> <li>- directly addresses the question or problems raised</li> <li>- provides a coherent argument displaying an extensive knowledge of relevant information</li> <li>- evaluates concepts, techniques and theory</li> <li>- relates theory to practice</li> <li>- reflects the student's own argument and is not just a repetition of standard lecture, and reference material is very accurate</li> <li>- provides evidence of reading beyond the required reading</li> <li>- shows awareness of other approaches to the problem area</li> <li>- has an appreciation of methodological concerns and displays an awareness of the limitations of current knowledge</li> </ul>	DISTINCTION	<b>70% and above</b>
<p><b>MERIT (B)</b>  <b>This is a highly competent level of performance</b></p> <ul style="list-style-type: none"> <li>- directly addresses the question or problems raised</li> <li>- provides a coherent argument drawing on relevant information</li> <li>- shows some ability to evaluate concepts and theory and to relate theory to practice</li> <li>- reflects the student's own argument and is not just a repetition of standard lecture and reference material</li> <li>- does not suffer from any major errors or omissions</li> <li>- provides evidence of reading beyond the required reading</li> <li>- displays an awareness of other approaches to the problem area</li> </ul>	MERIT	<b>60% - 69%</b>
<p><b>PASS (C)</b>  <b>This is an acceptable level of performance and all competent students should expect to achieve at least this level.</b></p> <ul style="list-style-type: none"> <li>- addresses the question but provides only a basic outline of relevant arguments and evidence along the lines offered in the lectures and referenced readings but with little evidence of further reading</li> <li>- all learning outcomes are demonstrated</li> <li>- answers are clear but limited</li> <li>- some minor omissions and inaccuracies but no major errors</li> </ul>	PASS	<b>40%-59%</b>
<p><b>REFERRED (D)</b>  <b>Students attaining this level of performance should be in a small minority of those on the course</b></p> <ul style="list-style-type: none"> <li>- learning outcomes have not been demonstrated</li> <li>- relevant points have been omitted from the answer</li> <li>- there are errors in the answer</li> <li>- parts of the question remain unanswered</li> <li>- answers may be too brief and possibly in note form</li> </ul>	REFERRED	<b>0%-39%</b>



## **Appendix B: Academic Dishonesty and Plagiarism Policy**

### **Principle**

The principle to be applied is that no student shall obtain, or attempt to obtain, an advantage in assessment through unfair or improper means. Any such attempts shall be deemed to be in contravention of the regulations governing NCC Education's academic qualifications and subject to disciplinary action by NCC Education. This document is designed to explain what plagiarism is, why it brings severe penalties to the student, and how to avoid it.

### **What plagiarism is:**

Using someone else's work as your own, without citing the source.

This includes direct copying, rephrasing, and summarising, as well as taking someone else's idea and putting it into different words. Cutting and pasting paragraphs from different websites is the same as handing in a paper downloaded from the internet, both are examples of plagiarism.

### **Examples**

The following are provided as examples of **dishonesty** or **plagiarism**.

#### **A Examinations**

1. Taking of unauthorised material into an examination.
2. Consulting unauthorised material outside the examination hall during the examination.
3. Obtaining an unseen examination paper in advance of the examination.
4. Copying from another examinee (student).
5. Attempting to communicate with another examinee (student) during the exam.
6. Using an unauthorised calculator or other device e.g. mobile phone during the examination or storing unauthorised material in the memory of a programmable calculator or other device e.g. mobile phone which is taken into the examination.
7. Impersonation, where a substitute takes an examination, test or assignment on behalf of the student.

## **B Course work and Project work**

8. Falsifying data in experimental results.
9. Copying course work or project work from another person or source.
10. Collusion to present joint work as the work solely of one individual.
11. Plagiarism, where the work or ideas of another, are presented as the student's own.

## **C Other**

12. Bribery or attempted bribery of a person thought to have some influence on the student's assessment.
13. Any other conduct calculated to secure an unfair or improper advantage in an assessment.
14. If you share your coursework or examination paper with another student and he or she plagiarises it, you are considered as guilty as the one who has plagiarised your work, since you enabled the plagiarism to take place. Under no circumstances should a student make his or her coursework or examination paper available to another student unless the instructor gives explicit permission for this to happen.
15. It is also an offence under the regulations to knowingly assist in any or all of the above.

Plagiarism is a serious academic offence and NCC Education will discipline students for committing plagiarism. Students who plagiarise, including anyone who enabled the plagiarism to take place, are likely to be caught, and could be removed from completing their NCC Education award, and will not be allowed in future to take an NCC Education programme.

**Students are responsible for educating themselves about plagiarism, and NCC Education advice is to avoid plagiarism at all costs.**

## **Avoiding plagiarism**

Students learn from the work of others and may quote from it without penalty.

Where direct quotation appears to a student to be appropriate s/he must ensure that quotation marks and reference to the original author are clear within the text. Essays, projects and reports will also show the referenced works in the bibliography. One of the best ways to avoid plagiarism is to ensure you use references and citations properly, using the Harvard System.

<http://library.curtin.edu.au/referencing/harvard.html>

## **Actions**

### **Examinations**

Any student found to be acting dishonestly or committing plagiarism will be excluded from the examination hall. The student shall countersign the irregularities report made out by the invigilator, and will have the right to send a written explanation to the Academic Standards and Quality Manager at NCC Education, The Towers, Towers Business Park, Wilmslow Road, Didsbury, Manchester, M20 2EZ, United Kingdom within 24 hours. The student's explanation, along with all other evidence, shall be forwarded to the Awards Panel for due consideration.

### **Course and Project Work**

Where cheating or plagiarism is suspected with the course work or project work submitted by a student, then all the evidence will be collected and sent to the Chief Moderator who will undertake a formal investigation and hold a review hearing.

### **Outcome**

The Awards Panel shall make a decision on all of the available evidence. The Awards Panel decision shall be final and binding.





## Statement and Confirmation of Own Work

**Programme Qualification Name:**

All submitted work must have this form as the cover/first page. Please include this form as part of a standard format when submitting an assignment.

### Student Declaration

I have read and understood NCC Education's regulations on plagiarism.  
I can confirm the following details:

**Student ID/Registration Number:**

**Name:**

**Module Name:**

**Title of Work:**

**Module Leader:**

**Number of Words:**

I confirm that this is my own work and that I have not plagiarised any part of it. I have also noted the grading criteria and pass mark for assignments.

**Due Date:**

**Student Signature  
& Submitted Date:**



## Appendix C: Academic Appeals Regulation



The purpose of this regulation is to safeguard the interests of registered students on NCC Education programmes. It should be used only when there are adequate grounds for doing so, as specified in the section below titled, 'Grounds for Appeal' and not simply if a student is dissatisfied with the outcome of his/her assessment or other decision concerning their academic position of progress.

An application for appeal may be made by a student if it is felt that one of the following actions occurred in the procedure following completion of the assessment. This is applicable to any Global Examinations, Local Examinations, Global Assignments or any other work which counts towards the overall mark for the module/programme as stated in the programme syllabus.

Students must be aware that programmes in collaboration with University partners may be subject to the University's own Academic Appeals Regulation. For clarification of this, please refer to the Programme Handbooks or contact NCC Education Support Services.

### Grounds for Appeal

Special Circumstances:

1. There exists or existed personal circumstances affecting the student's performance of which, for good reason, the individual(s) or assessment board may not have been aware when the final decision concerning the awarding of marks was taken and which might have a subsequent effect on the decision.

Note: If a student wishes to appeal on such grounds then they must lodge a Special Circumstances claim and complete the NCC Education Special Circumstances form as found in the Programme Handbooks and also available from NCC Education Support Services directly. This must be done within twenty working days (Monday – Friday) of the official notification of results by NCC Education to the Accredited Partner and sent to;

Support Services  
NCC Education  
The Towers  
Towers Business Park  
Wilmslow Road  
Didsbury  
Manchester  
M20 2EZ  
United Kingdom

2. That there may have been an administrative or procedural irregularity in the assessment process or in effectively following the regulations of the programme, which causes significant doubt as to whether the final decision may have been different if the irregularity had not occurred.

Note: An appeal which questions the academic or professional judgement of those charged with the responsibility for assessing a student's academic performance or professional competence shall not be permitted.

### Academic Appeals Procedure

1. Before submitting an appeal, a student is strongly advised to discuss this matter with his/her teacher, supervisor, programme director or other appropriate person at the Accredited Partner Centre. For any student studying on an online programme with NCC Education, they should discuss this matter with their Module Leader in the first instance and then the appropriate person at the Accredited Partner Centre, if necessary.

2. If a student still wishes to lodge an appeal they must complete the NCC Education Academic Appeals Form (Appendix 1 in this regulation document) and submit the appropriate fee. The Accredited Partner Centre must submit this to Support Services at NCC Education on the student's behalf at the address below:

Support Services  
NCC Education  
The Towers  
Towers Business Park  
Wilmslow Road  
Didsbury  
Manchester  
M20 2EZ  
United Kingdom

Note: The student should submit any documents relevant to the appeal with the official NCC Education Academic Appeals Form.

3. An appeal must be made within twenty working days (Monday- Friday) of the official notification of results by NCC Education to the Accredited Partner Centre.
4. Support Services will acknowledge receipt of the appeals form and supporting evidence via email to the Accredited Partner Centre and then pass this onto the Academic Standards and Quality Manager who will:
  - a) Initially consider whether the appeal covers either one of the grounds for appeal listed above.
  - b) If the appeal does not, then the Accredited Partner Centre will be notified within ten working days of the appeal being received.
  - c) It is the responsibility of the Accredited Partner Centre to inform the student immediately of this decision.
  - d) There shall be no opportunity for the student to appeal against this decision.
5. If either one of the grounds for appeal listed above has been identified then an investigation will take place to try to:
  - a) Identify relevant matters which were not known to the original individual(s) or assessment board marking/moderating the work in making the final decision or;
  - b) Identify that there had been procedural or administrative irregularities which might have affected the decision. In this instance the case shall be referred back to the original individual(s) or assessment board for reconsideration, taking into account the new information and any guidance from those reviewing the appeal. These individuals will have the authority to confirm or alter the original decision. There shall be no opportunity for the student to appeal against the decision of the individual(s) or assessment board.
6. If during the appeal serious or complex matters were raised which require further investigation and enquiry the case will then be put forward to other individuals at NCC Education on an Appeals Panel.
  - a) The Accredited Partner Centre will be given ten working days (Monday – Friday) notice of the date and time of the Appeals Panel and they must communicate this to the student immediately.

A Chief Examiner, who was not present at the Assessment Board when the original decision regarding the marks was made, will chair the Appeals Panel which will also include the Chairman of the Academic Board, or his representative, and the NCC Education Director of Academic Standards and Quality. The Secretary to the Academic Board shall act as Secretary to the Appeals Panel and keep a record of the proceedings.
  - b) The student may attend the panel and be accompanied at the meeting by a fellow student, or member of staff from the Accredited Partner Centre or NCC Education. If the

student does not attend the panel the appeal will still be heard. The student, via the Accredited Partner Centre, will be sent copies of all documents made available to the Panel who have the authority to call any individuals who may have useful information in regard to the case. The Accredited Partner Centre must send all documents to the students immediately.

7. Having considered the evidence, the Appeals Panel may:
  - a) Reject the appeal, in which case the student, via the Accredited Partner Centre will be given reasons for this. If the appeal is rejected there is no further right to appeal by the student, or
  - b) Refer the case back to the original individual(s) or assessment board for reconsideration taking into account the new information and any guidance from those reviewing the appeal. These individuals will have the authority to confirm or alter the original decision. There shall be no opportunity for the student to appeal against the decision of the individual(s) or assessment board, or
  - c) Revoke the original decision of the individual(s) or assessment board who marked/moderated the assessed work and allow the student the opportunity to satisfy the assessment requirements for continuation on the programme or element of the programme concerned.
8. Students, via the Accredited Partner Centre, will be notified of the outcome of the Appeals Panel in writing up to five working days after the panel has met. The decision of the Appeals Panel is final and cannot be appealed against.
9. If the appeal is upheld then the appropriate appeal fee will be refunded to the student.

### **Academic appeals against original appeals decision**

If the student is dissatisfied with the final decision made following the appeals procedure detailed above, then they may appeal against this decision within five working days of the decision being released to the Accredited Partner Centre by NCC Education.

1. The Accredited Partner Centre must submit further evidence in support of the re-appeal on behalf of the student, and the appropriate fee must be included, to the address below.

Support Services  
NCC Education  
The Towers  
Towers Business Park  
Wilmslow Road  
Didsbury  
Manchester  
M20 2EZ  
United Kingdom
2. Any NCC Education programmes subject to a re-appeal will be dealt with by the necessary individuals as deemed appropriate by NCC Education at the assessment board.
3. Any programmes validated or awarded by a University partner subject to a re-appeal will be dealt with in conjunction with the University.



## Appendix 1 Academic Appeals Regulation Form

This form must be completed by the Accredited Partner Centre on behalf of the student who wishes to appeal on either one of the grounds listed in the NCC Education Academic Appeals Regulation. This regulation is applicable to any Global Examinations, Local Examinations, Global Assignments or any other work which counts towards the overall mark for the module/programme as stated in the programme syllabus.

Students must be aware that programmes in collaboration with University partners may be subject to the University's own Academic Appeals Regulation. For clarification of this, please refer to the Programme Handbooks or contact NCC Education Support Services.

An appeal must be made within twenty working days (Monday- Friday) of the official notification of results by NCC Education to the Accredited Partner Centre.

Any supporting evidence must be submitted with this form as well as the appropriate fee.

Please provide the following information per module relevant to the appeal being brought forward.

Accredited Partner Centre (APC) Name	
Contact name and position at APC	
Address of APC	
Full name of student	
Student NCC Education ID number	
Programme Title	
Module Title	
Type of assessment	
Date of assessment sat or submitted	
Title of Global Assignment/Local Examination/Global Examination or work which contributes to the final mark for the module as detailed in the Programme Syllabus	
Date Academic Appeal submitted to NCC Education	

Please tick the box(es) to confirm the grounds for appeal in which the appeal is being brought forward.

There exists or existed personal circumstances affecting the student's performance of which, for good reason, the individual(s) or assessment board may not have been aware when the final decision concerning the awarding of marks was taken and which might have a subsequent effect on the decision.

Note; If a student wishes to appeal on such grounds then they must lodge a Special Circumstances claim and complete the NCC Education Special Circumstances form as found in the Programme Handbooks and also available from NCC Education Support Services directly. This must be done within twenty working days (Monday – Friday) of the official notification of results by NCC Education to the Accredited Partner Centre.

That there may have been an administrative or procedural irregularity in the assessment process or in effectively following the regulations of the programme, which causes significant doubt as to whether the final decision may have been different if the irregularity had not occurred.

Please write details and attach any evidence in support of the appeal being brought forward in the space below. Please use additional paper if necessary.

Signature of student: \_\_\_\_\_

Date: \_\_\_\_\_

This form and supporting evidence should be sent to;

Support Services  
NCC Education  
The Towers  
Towers Business Park  
Wilmslow Road  
Didsbury  
Manchester  
M20 2EZ  
United Kingdom



## Appendix D: Guide to Referencing and Bibliography



### A Guide to Harvard Referencing

Referencing is a way of acknowledging that you have used the ideas and written material belonging to another author. It demonstrates for example, that you have undertaken an appropriate literature search and that you have carried out appropriate reading around the subject matter.

NCC Education prescribes the use of Harvard Referencing as it is widely used internationally, and this guide is intended to help you with referencing your work. The following are examples of sources you may wish to access and therefore need to reference:

- Books
- Journal articles
- Electronic journal articles
- World Wide Web pages
- Newspapers

#### **Why is it necessary?**

- The readers of your assignments need to be able to trace the sources you have used in the development of your work.
- If you do not acknowledge another author's work or ideas, you could be accused of plagiarism.
- Accurate referencing is part of good academic practice and enhances the presentation of your work.

#### **What is citing?**

When you have used an idea from a book, journal article, etc. you must acknowledge this in your text. We refer to this as 'citing'.

#### **Citing in the body of the text**

When you cite a piece of work, you must always state the author/editor and the date of publication. If the work has two authors/editors you must cite both names. Only include the names and date, do not include the title, place of publication, etc. Full details of the reference should be written in your bibliography at the end of your essay.

Example – One author:

The work of **Smith (2001)** highlights the conflicting results of research carried out by Jones and Lewis.

Example – Two authors:

The work of **Thatcher & Blake (2004)** highlights the conflicting results of research carried out by Jones and Lewis.

If the work has three or more authors/editors, the abbreviation 'et al' should be used after the first author's name.

Example:

The work of **Smith et al (2001)** highlights the conflicting results of research carried out by Jones and Lewis. **Thatcher & Blake (2004)** however, considered that ....

If you are summarising or paraphrasing the proposition of an author, you must show that in your work.

Example:

... Many people believe that the Americanisation of the media, and what is called 'dumbing down', is having disastrous effects on the English language. One response to this is that language change is natural, so there is no reason for people to condemn it (**Aitchison, 1981 p.16**). Aitchison clearly views changes in language as neither good nor bad, merely inevitable...

If you cite a reference which has the same author and was written in the same year as an earlier citation, you must use a lower case letter after the date to differentiate between the two.

Example:

The work of **Smith (2001a)** highlights the conflicting results of research carried out by Jones and Lewis.

Citing from books with multiple authors

Some books may contain chapters written by different authors. When citing work from such a book, the author who wrote the chapter should be named, not the editor of the book.

### **Secondary referencing**

Secondary references are when an author refers to another author's work and the primary source is not available. When citing such work, both the author of the primary source and the author of the work in which it was cited should be named.

Example:

**Ellis (1990) cited by Cox (1991)** discusses ....

**NB:** Secondary referencing should be avoided if possible.

### **Quoting in the text**

Often it is better to paraphrase than to use direct quotes. This demonstrates that you have understood the meaning and context of what you have read. If a direct quote from a book, article etc. is used you must:

- Use single quotation marks (double quotation marks are used for quoting direct speech)
- State the page number

Example:

Simpson (2002: p6) declared that 'the explosive behaviour was unexpected.'

- Have a separate, indented paragraph for quotes over two lines.

Example:

Boden (1998: p72) states:

'The most common female crime prosecuted at the Quarter Sessions was that of battering men. This would suggest that women were not the passive and obedient members of society that men would have liked to believe they were.'

Alternatively...

'The most common female crime prosecuted at the Quarter Sessions was that of battering men. This would suggest that women were not the passive and obedient members of society that men would have liked to believe they were.'

(Boden 1998: p72).

Alternatively...

Part of the original text may be omitted from the quotation, as long as three dots are used to indicate this.

Example:

Boden (1998: p72) states:

'The most common female crime prosecuted at the Quarter Sessions was that of battering men ...women beating or dominating a man was a particularly sensitive issue as it threatened the perpetuation of the patriarchal society ...'

Duplication of charts, diagrams, pictures etc. should be treated as direct quotes, in that the author(s) should be acknowledged and page numbers shown.

Citing and quoting from multi-media and online resources

### **Electronic journal (eJournal) articles**

When citing from an eJournal article, the same rules apply as a paper journal, the author's surname and the publication date should be stated.

### **World Wide Web (WWW)**

- If the website has an obvious author and date of publication, the information should be cited as in the case of a book or journal article.
- If there is not an obvious author, but the work is situated on an organisational website, the name of the organisation can be used as a 'corporate author'.

Example:

The Department of Health (2001).

If no author or corporate author is evident, use the title of the document as the main point of reference.

## Producing a Bibliography

Whichever way you refer to publications in a text, it is important to provide full references in your bibliography at the end of your work. There is no point in making a bibliographical reference if the reader cannot identify exactly the work referred to. Your bibliography will demonstrate the range of your reading for a particular piece of work and can also include books, websites and academic journals which you have not cited in your work. There are minimum requirements for all bibliographical references which must be adhered to when submitting an academic piece of work.

### **Books**

Surname, First name initial (Year of publication) *Title of Book*. Edition. Publisher, Place of publication.

**NB:** Only state the edition number if it is not the first.

Example:

Banks, J. (1999) *Worlds Apart*. Miami, Florida.

Ryan, L. (2001) *Nottingham – A History*. Blackwell, London.

**NB:** If there are three or more authors you must list every author in your reference list – **try not to** use et al.

Example:

Simpson, H. Jones, E. and Miles, C. (2000) *The History of Springfield*. 2<sup>nd</sup> edition. Bugle Press, Derby.

### **Chapters in books**

Surname, First name initial (Year of publication) Title of chapter, **In** Editor (ed.) *Title of Book*. Publisher, Place of publication, page numbers of chapter.

Example:

Stone, T. (2002) Libraries in the Twenty-First Century. In: Woolley, M. (ed) *The Changing World of Information Retrieval*. UOL Press, Luton, pp. 23 – 45.

### **Books which have been translated**

Surname, First name initial (Year of publication) *Title of book*. **Trans.** Name. Publisher, Place of publication

Example:

Kawanishi, M. (2003) *The History of Japan*. Trans. Brown, D. Hakodate Publishing, Hakodate.

### **Books written in a foreign language**

Surname, First name initial (Year of publication) *Title of Book* [Title in original language], Publisher, Place of publication.

Example:

Milani, F. (1994) *The Phantom of the Opera*. [Le Fantôme De L'Opéra] LeRoux, Paris.

### **Journal articles**

Surname, First Name initial (Year of Publication) 'Title of Article' *Name of Journal*, Volume (and number – if relevant), page numbers of article.

Example:

Prichard, J. (2006) 'Logistics and planning.' *Star Tribune*, 36, pp 44 – 49.

Brown A. and Wesley, C. W. (1995) 'An investigation of the Hawthorne effect', *Management Sciences Journal*, 42(1), pp 47-66.

### **eJournal articles**

Surname, First name initial (Year of Publication) 'Title of article' *Title of journal* [Online], Volume number, Page numbers of the article

Available from: URL, [Date of access]

Example:

Fisher, B. (2002) 'Time to go Home', *Journal of Travelling*, [Online] 6, pp122 – 123

Available from: <http://www.alu.ac.uk> [Accessed 6th June, 2002].

### **Web Publication**

There is no agreed standard for referencing Internet sources, but it is most important to supply the URL and date the source was accessed, due to the rapidly changing nature of the Internet.

#### Author

Surname, First name initial (Year of Publication) Title of webpage/article.

Available from: URL, [Date of access].

Example:

Young, J. (1996) The coherence theory of truth.

<http://www.seop.leeds.ac.uk/entries/truth-coherence/>, [accessed on 12/01/07]

#### No author

Name of source Year of Publication: Title of webpage.

Available on: URL, [Date of access].

Example:

BBC News 2007: Graduates 'face tough job market'.

<http://news.bbc.co.uk/1/hi/education/6252811.stm>, [accessed on 12/01/07]

## **Newspaper articles**

### **Paper copy**

Reporter Surname, First name initial (day, month and year of publication) Title of article, *Title of newspaper*, page numbers of the article.

Example:

Kline, J. (Friday 3rd October 2002) Skills for Leadership, *Daily Planet*, p. 27.

### **Note:**

- Authors must be presented in alphabetical order in the bibliography, with sources from the same author(s) presented chronologically.

**Plagiarism is a very serious academic offence. *The rule is that you must not represent the ideas of other people as your own.* With proper referencing and a full bibliography, this can be avoided.**

**Please also refer to the NCC Education Academic Dishonesty and Plagiarism Policy.**

# Appendix E - Special Circumstances Form

International Diploma in Computer Studies

## SPECIAL CIRCUMSTANCES FORM (Student)

This form should be completed by any student who during the course of the year, experiences any special circumstances which may have an adverse effect on their academic performance. These could include: prolonged ill-health, pregnancy, bereavement, or exceptional family problems.

Wherever possible, supporting documentary evidence should be supplied. The information recorded on this form will be made available at an NCC Education internal meeting and at the Awards Panel, where applicable, and will be dealt with confidentially.

The student should complete this side of the form and pass the form to his/her Accredited Partner Centre.

NCC Student ID No: .....

Full Name: .....

Current semester: .....

Special Circumstances (these should be noted as briefly as possible. Any medical certificates or other documentary evidence should be attached):

Period of study affected: .....

Medical Certificate attached Yes/No

Signature ..... Date .....

## **SPECIAL CIRCUMSTANCES FORM (Accredited Partner Centre)**

A responsible person at the student's Accredited Partner Centre should complete this section to confirm that the student's circumstances are exceptional and have affected the student's studies.

Notes on Student's Special Circumstances

Notes on Student's Attachments (medical certificates, reports, etc)

Signature of person completing form: .....

Name of person completing form: .....

Position of person completing form: .....

Date: .....