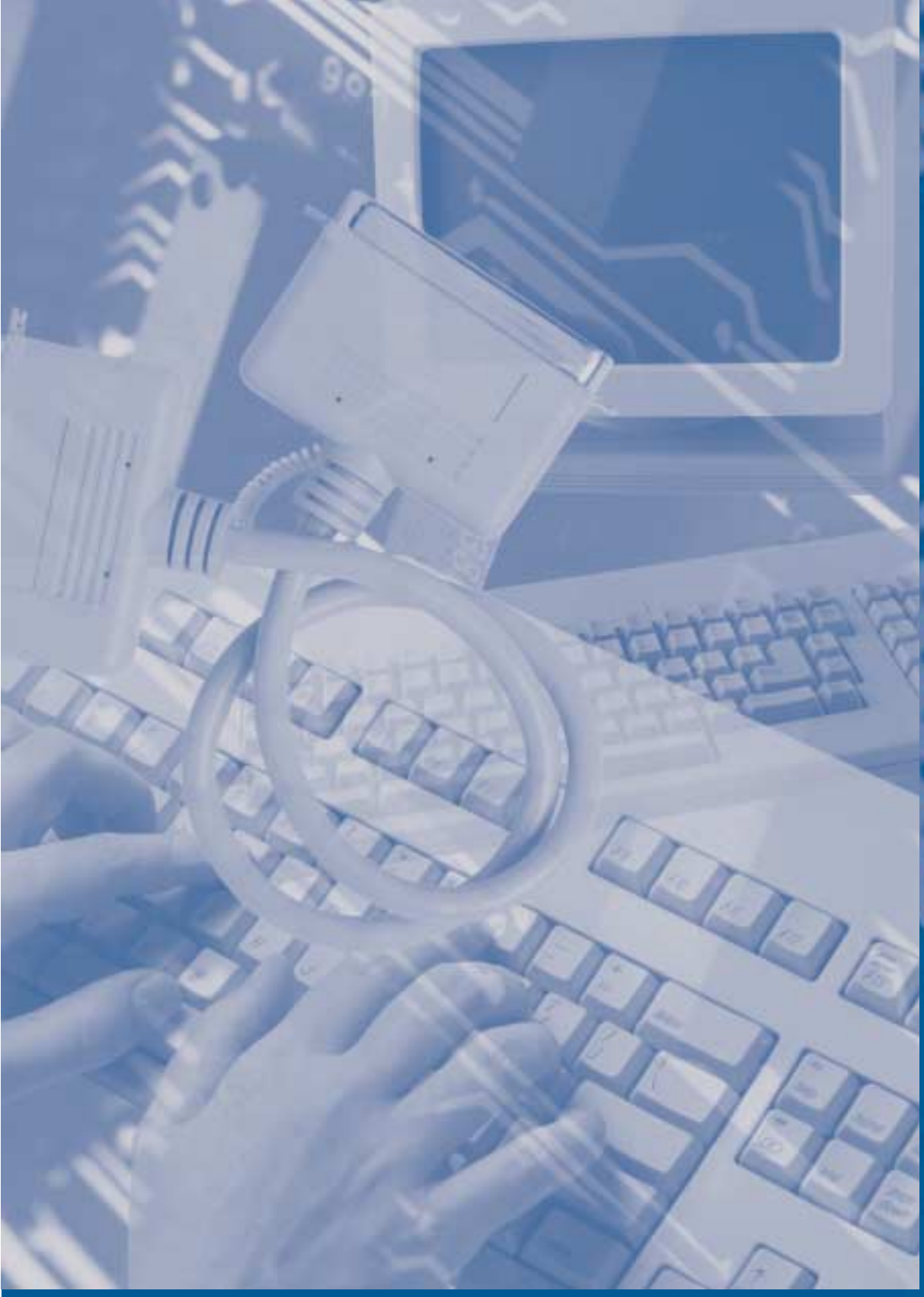
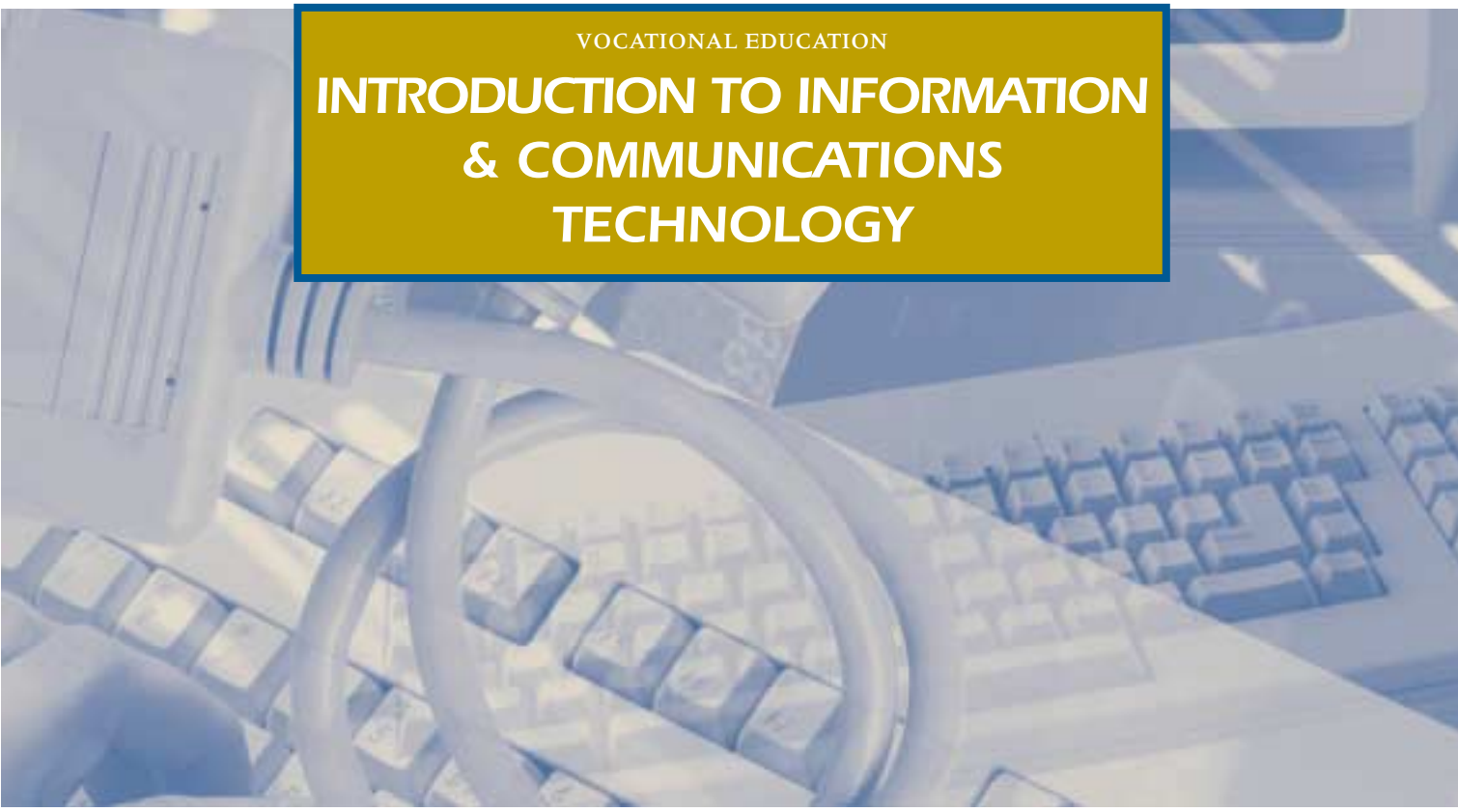


Introduction to Information & Communications Technology

LCA
LEAVING CERTIFICATE APPLIED
ARDTEISTIMÉIREACHT FHEIDHMEACH

INTRODUCTION TO INFORMATION & COMMUNICATIONS TECHNOLOGY

COURSE	TOPICS IN COMMON: Computer Graphics	Curriculum Vitae	Database	Keyboard Skills	Publishing/Presentation	Spreadsheet	System Records
Vocational Preparation & Guidance		■					
English & Communications		■			■		
Mathematical Applications	■		■			■	■
Social Education							
Active Leisure Studies							■
Agriculture/Horticulture							■
Childcare/Community Care							
Graphics & Construction Studies	■						
Craft & Design	■				■		
Engineering	■		■			■	
Hair & Beauty							■
Hotel Catering & Tourism				■			■
Information & Communication Technology	■		■	■	■	■	■
Office Administration & Customer Care			■	■		■	■
Technology	■						■
Gaeilge							
Arts - Visual-Drama-Music & Dance	■				■		
Leisure & Recreation							
Modern Language							
Religious Education							
Science	■					■	■
Sign Language							



VOCATIONAL EDUCATION

INTRODUCTION TO INFORMATION & COMMUNICATIONS TECHNOLOGY

CONTENTS

INTRODUCTION

RATIONALE

Information and Communications Technology forms part of the core curriculum for all Leaving Certificate Applied students. It is intended to give students the skills and understanding to use computers in both their current and future lives.

The Leaving Certificate Applied programme offers the ideal forum for students to apply these skills in a practical way, particularly in presenting task work and key assignments across the full spectrum of the curriculum.

The achieveable goals of developing accuracy, neatness and presentation skills generate a sense of pride in work done by students which enhances self esteem and motivates students to maximise their potential in other aspects of the course and in their personal lives.

NUMBER AND SEQUENCE OF MODULES

Both modules to be completed in the sequence presented below.

Module 1: Introduction to the Computer and Word Processing

Module 2: Introduction to Other Software Packages

DESCRIPTION OF MODULES

MODULE 1:

Introduces students to computers and develops basic keyboard and word-processing skills.

MODULE 2:

Introduces students to databases, spreadsheet and graphics packages.

MODULE 1

INTRODUCTION TO THE COMPUTER AND WORD PROCESSING

MODULE 1:

INTRODUCTION TO THE COMPUTER AND WORD PROCESSING

PURPOSE

This module has been designed for students with no formal or previous experience in Information Technology. It will provide an introduction to a range of practical skills and underpinning knowledge that will enable students to use computers confidently in their everyday lives.

PREREQUISITES

None.

AIMS

- To familiarise students with the role of computers in their everyday lives
- To introduce students to the essential elements of computer hardware and software
- To provide students with the opportunity to use common computer application packages
- To encourage students to develop good work habits in the use and care of the computer and equipment
- To stimulate interest and enjoyment in the use of computers.

UNITS

Unit 1: Introduction to the Computer and its Environment

Unit 2: Introduction to the Keyboard

Unit 3: Introduction to Word Processing

Unit 1: Introduction to the Computer and its Environment

LEARNING OUTCOMES

The student will be able to:

- identify the component parts of a computer system (i.e. input, process, output and storage)
- explain the difference between software and hardware
- identify common input devices (e.g. keyboard, mouse, scanner)
- identify common output devices (e.g. VDU, printer, disk drive)
- explain the function of computer memory
- explain the purpose of backing store
- define disk storage capacity
- describe the uses of common software applications
- explain the ability of computers to communicate with one another e.g.. computer networks, the Internet
- identify instances where the student interacts with computers in everyday life
- recognise the need to care for computer equipment
- practise the safe use of computers
- recognise and avoid potential dangers to health and safety

TEACHER GUIDELINES

- Use classroom equipment to demonstrate
- Look for examples in local community
- Deal with theory issues as they arise naturally
- Visit to computer store
- Selection of computer magazines
- List of key words posted in classroom and in student's folder
- Post computer room rules on the walls of the room
- Keep a set of dictionaries

Unit 2: Introduction to the Keyboard

LEARNING OUTCOMES

The student will be able to:

1. locate and operate alphabetical, numeric and punctuation keys
2. locate and operate keys with special functions e.g. backspace, delete, shift, caps lock, tab, insert, home, end, and enter/return
3. locate and operate cursor keys
4. use the keyboard with confidence to type text accurately

TEACHER GUIDELINES

Use typing tutor package

- Run intensive course in keyboard skills before introducing rest of module
- Practise skills while teaching word processing and other information technology modules

Unit 3: Introduction to Word Processing

LEARNING OUTCOMES

The student will be able to:

1. identify applications where word processing is advantageous
2. access a word processing system/package
3. open an existing document
4. create a new document
5. key in text accurately
6. edit text by inserting/deleting characters, words, lines and sentences
7. join and split paragraphs
8. enhance text using bold, italics and underline
9. format text using centring, left aligned, or justified as appropriate
10. use the spell check facility
11. proof-read documents
12. respond to some common proof-reading signs e.g. insert, delete, join and split paragraphs
13. save documents
14. use print preview
15. print documents
16. exit from the word processing system using proper procedures

TEACHER GUIDELINES

- Use book of assignments
- Source material from other modules e.g. key assignments
- Use word processing for task presentation
- Keep a set of dictionaries

Teaching Approach

It is not intended that the module be taught in the order in which the units are presented. The order of integration of units is the prerogative of the class teacher in response to the needs of the class group, the computer facilities available and the nature of the module assignments used.

However, it is suggested that Unit 1, being mainly theoretical, be taught throughout the year, with practical sessions in keyboarding and word processing proceeding concurrently.

Student Activities

Unit 1: Introduction to the Computer and its Environment

The theory of this unit should be taught very much at the level described. Safe work practices and care of equipment should be central to all the practical sessions, with emphasise on proper booting and closing down of the computer.

Unit 2: Keyboarding

While it is not intended that students should be able to touch-type at the completion of this module, it is recommended that students be given the opportunity to learn to use all the fingers of both hands to key in text.

Unit 3: Introduction to Word Processing

In order to prepare students for the world of work, the word processing package used should be in common commercial use. The underlying common skills involved in word processing should be emphasised, so that students realise that they could use any word processing package with practice. Students should be encouraged to use help files and find out information for themselves whenever possible.

RESOURCES

Practical computer room which provides the equipment and software needed for this module. There should be enough computers for every student to acquire the skills necessary to complete this module, with the ideal of one student per machine.

Basic I.T Assignments by B MCGettigan Published by Gill & McMillan

Computers for Beginners Published by Usborne Books

Computers Simplified 3-D Visual Series IDG Books
ISBN 0 -7645-6008-5 (Reference)

Keyboarding For Business Susan Burke and Maureen Reynolds
Publisher: Gill & McMillan ISBN 0-7171-2090-2

Basic Typing Skills K Dulmage Publisher:Longman
ISBN 0-582-38158-4

The Key to the Keyboard P.A.Murphy Publisher: Pitman
Any modern word processing package
Any modern typing tutor package.

KEY ASSIGNMENTS

CHECKLIST

I have used a word processor to create, store and print my CV ☐

I have used a word processor to create, store and print my theory notes ☐

I have used a word processor to open a document and carry out the following editing exercises:

- enhance and format text ☐
- insert and delete text ☐

I have used a word processor to create, store and print a report or assignment for any other module. ☐

MODULE 2

INTRODUCTION TO OTHER SOFTWARE PACKAGES

MODULE 2:

INTRODUCTION TO OTHER SOFTWARE PACKAGES

PURPOSE

This module has been designed for students with no formal or previous experience in Information Technology. It will provide an introduction to a range of practical skills and underpinning knowledge that will enable students to use computers and the associated technology confidently in their everyday lives.

PREREQUISITES

None.

AIMS

- To familiarise students with the role of computers in everyday life
- To provide students with the opportunity to use common computer application packages
- To familiarise students with the basics of databases and database software
- To familiarise students with the basics of spreadsheets and spreadsheet software
- To familiarise students with the basics of computer graphics and graphics software
- To encourage students to develop good work habits in the use and care of the computer and equipment
- To stimulate interest and enjoyment in the use of computers.

UNITS

There are 3 optional units of which at least 2 must be chosen.

Unit 1: Introduction to Database

Unit 2: Introduction to Spreadsheet

Unit 3: Introduction to Graphics

Unit 1: Introduction to Database

LEARNING OUTCOMES

The student will be able to:

1. identify applications suitable for a database
2. define the terms database, file, record, field
3. access a database system
4. recall an existing database
5. recognise field names
6. browse the database
7. edit data
8. add new records
9. delete individual records
10. sort the database on a single field
11. search the database on a single field
12. save a database
13. output data to screen and printer
14. exit from the database using proper procedures

TEACHER GUIDELINES

- Use any book of assignments
- Apply to students interests (e.g. hobbies)
- Use database for task presentation (e.g. surveys)

Unit 2: Introduction to Spreadsheets

LEARNING OUTCOMES

The student will be able to:

1. identify applications suitable for spreadsheets
2. define the terms spreadsheet, row, column, cell, label, value, formula
3. access a spreadsheet package
4. load an existing spreadsheet
5. enter numeric and character data in a spreadsheet
6. enter formulae to generate results i.e. add, subtract, multiply and divide
7. erase data from cells
8. edit cell contents
9. format column entries for currency (including Euro)
10. generate a chart
11. adjust column widths
12. save the spreadsheet
13. print the spreadsheet
14. exit from the spreadsheet using proper procedures

TEACHER GUIDELINES

- Apply to students' interests (e.g. home budgeting)
- Use spreadsheet for task (e.g. costing)
- Link with Mathematical Applications

Unit 3: Introduction to Graphics

LEARNING OUTCOMES

The student will be able to:

1. identify applications where graphics packages may be used
2. access a graphics system/package
3. use graphic software icons
4. demonstrate freehand drawing
5. draw simple geometric shapes e.g. boxes, circles
6. fill in/colour simple shapes
7. input text
8. enhance and format text
9. load an existing graphics file
10. edit an existing file
11. save files
12. print/plot files
13. exit from the graphics system using proper procedures

TEACHER GUIDELINES

- Use graphics for task (e.g. designing cover sheet)
- Some of the learning outcomes can be demonstrated using either a desktop publishing or presentation package. This may offer some students the opportunity to explore these programs

Teaching Approach

It is not intended that the module be taught in the order in which the units are presented. The order of integration of units is the prerogative of the class teacher in response to the needs of the class group, the computer facilities available and the nature of the module assignments used.

RESOURCES

Practical computer room which provides the equipment and software needed for this module. There should be enough computers for every student to acquire the skills necessary to complete this module, with the ideal of one student per machine.

Basic I.T Assignments by B MCGettigan Published by Gill & McMillan

Any modern database package

Any modern spreadsheet package

Any modern graphics package.

KEY ASSIGNMENTS

Select both key assignments from two of the following three units

CHECKLIST

Unit 1: Introduction to Database

- ☐ I have opened a database file and I have added, deleted and edited records
- ☐ I have opened a database file and I have searched and sorted it on a single field

Unit 2: Introduction to Spreadsheets

- ☐ I have entered data into a spreadsheet and I have used formulae to add, subtract, multiply and divide numbers
- ☐ I have entered data into a spreadsheet and I have changed the width of columns and formatted columns for currency

Unit 3: Introduction to Graphics

- ☐ I have used a graphics package to draw a picture that includes a variety of shapes and colours
- ☐ I have used a graphics package to design a cover sheet for one of my tasks.

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