NATIONAL CERTIFICATE MODULE DESCRIPTOR

-Module Number-	**0071921**	**-Session-** 1987-88
-Superclass-	**VF**	

-Title-	**DESIGN STUDIES: COMPUTER AIDED DESIGN**

-DESCRIPTION-

Purpose	A <u>specialist</u> module suitable for design students requiring an introduction to the hardware, software and techniques associated with computer aided design.

Preferred Entry Level	61703	Two Dimensional Design: Design for Print 1
	61706	Two Dimensional Design: Letterforms 1
	61708	Two Dimensional Design: Basic Typography 1
	61716	Drawing Skills: Technical Drafting 1
	61720	Drawing Skills: Analytical Drawing 1

Learning Outcomes	The student should:

1. understand the principles of computer aided design;

2. identify the hardware and software associated with computer aided design;

3. demonstrate correct setting up procedures;

4. produce computer aided designs in hard copy;

5. save designs on disk.

Content/ Context	<u>Corresponding to Learning Outcomes 1-5</u>:

1-2. Brief synopsis of how a computer works. Its linkage with other hardware - disk drives, VDU/monitor, digitizer, mouse, plotter, printer. Introduction to dedicated CAD software packages.

3.   Connection procedure for difference items of hardware. Switching on and off sequences.
Back-up procedures for discs.

4.   On-screen menu, digitise own drawings/ designs, alter drawings/designs on-screen, utilise wording eg. to label drawings or state dimensions.
Use of plotters and printers to produce hard copy.

5.   Use of on-screen menu and commands to save drawings and designs on disk for future use.

Suggested Learning and Teaching Approaches

Investigates uses of computer aided design techniques and their applications within the design world.

The students should have access to a CAD system capable of generating high resolution graphics. A ratio of student to computer of 2:1 is recommended.

Initial demonstrations by the tutor should be followed by hands-on experience with the emphasis on acquiring knowledge and understanding of computer aided design through the use of dedicated CAD packages selected for their suitability. Discussion of features should take place as they arise naturally within the module.

The study of CAD packages should take place in a resource based environment. Thus the student should carry out a series of assignments appropriate to the software and input/output devices available.

Assessment Procedures

Acceptable performance in the module will be satisfactory achievement of the performance criteria specified.

The following abbreviations are used below:

LO   Learning Outcome
IA   Instrument of Assessment
PC   Performance Criteria

LO1 IA   Observation.
2,3
& 5 PC   The student correctly:

(a)   sets-up CAD System and switches on hardware in sequence;

(b)   loads and runs CAD software;

(c)   uses input and output devices, e.g.: keyboard, mouse, digitizer, printer, plotter and screen display;

(d)   uses on screen menu and commands to save drawings and designs on disk.

LO4   IA   4 assignments each involving the production of:

(i)   digitised line drawings;
(ii)   "all-over" pattern using own motif/device;
(iii)   perspective drawing from plans and elevations;
(iv)   designs using digitised information and computer generated lettering.

PC   The student produces "hard-copy" drawings and four designs using CAD software for (i)-(iv) above which are carefully mounted and presented.