


**DIPLOMA IN APPAREL DESIGN AND FABRICATION TECHNOLOGY**  
**SIXTH SEMESTER**

<b>Course Title: COMPUTER AIDED DESIGN</b>		
	<b>Credits (L:T:P) : 0:2:4</b>	<b>Total Contact Hours:78</b>
	<b>Type of Course: Tutorials &amp; Practice</b>	<b>Credit :03 SEE- 50 Marks CIE- 25 Marks</b>
		<b>Course Code: 15FT65P</b>
		<b>Core/ Elective: Core</b>

**Prerequisite: Basic knowledge of Computer in designing**

**Course Objectives**

1. Associate computer application and fashion software.
2. Practice Photoshop and Corel draw techniques.
3. Construction of basic designs in Textile and fashion.
4. Tabulate pattern making and grading techniques
5. Designing of Garments

**At the end of the course the students should be able to**

<b>Course Outcomes</b>		<b>CL</b>	<b>Linked PO</b>	<b>Teaching hrs</b>
<b>CO1</b>	Application of various software's in designing	A/C	1,2,3,5,6,7,8,10	<b>12</b>
<b>CO2</b>	Creating different textural effects and weaves in the fabric.	A/C/E	1,2,3,5,6,7,8,10	<b>12</b>
<b>CO3</b>	Drape various silhouettes and colour combination in the garments	A/C	1,2,3,5,6,7,8,10	<b>12</b>
<b>CO4</b>	Quick modification of existing marker and to finalise a marker.	A/E	3,4,5,6,7,8,9	<b>09</b>
<b>CO5</b>	Apply Marker for mass production	A/E	3,4,5,6,7,8,9,10	<b>15</b>
<b>CO6</b>	Developing mini marker on various garments	A/C/E	3,4,5,6,7,8,9,10	<b>18</b>

**COURSE-PO ATTAINMENT MATRIX**

<b>Course</b>	<b>Programme Outcomes</b>									
	1	2	3	4	5	6	7	8	9	10
<b>COMPUTER AIDED DESIGN</b>	<b>2</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>3</b>

**Level 3- Highly Addressed, Level 2-Moderately Addressed, Level 1-Low Addressed.**

Method is to relate the level of PO with the number of hours devoted to the COs which address the given PO.

If  $\geq 40\%$  of classroom sessions addressing a particular PO, it is considered that PO is addressed at Level 3

If 25 to 40% of classroom sessions addressing a particular PO, it is considered that PO is addressed at Level 2

If 5 to 25% of classroom sessions addressing a particular PO, it is considered that PO is addressed at Level 1

If  $< 5\%$  of classroom sessions addressing a particular PO, it is considered that PO is considered not-addressed.

## CONTENT

Unit	Major Topics	Hours Allotted
1	SOFTWARE APPLICATION IN DESIGNING	12
2	BASIC DESIGNING AND COLOUR RENDERING	12
3	FASHION AND TEXTILE CAD	12
4	GARMENT CAD	09
5	GARMENT GRADING AND MARKER PLANNING	15
6	EXERCISES	18
	<b>Total</b>	<b>78 hrs</b>

### UNIT-I

#### SOFTWARE APPLICATION IN DESIGNING 12 Hrs

- 1.1 Introduction to various fashion designing software
- 1.2 Application of Software – Auto CAD or Adobe Photoshop or Corel draw or Open Source
- 1.3 Practicing Designs using the above software tools.
- 1.4 Creating basic designs using geometrical patterns

### UNIT-II

#### BASIC DESIGNING AND COLOUR RENDERING 12 Hrs

- 2.1 Designing of repeats –  $\frac{1}{4}$ ,  $\frac{1}{2}$ ,  $\frac{3}{4}$ , Cross, Brick repeat.
- 2.2 Symmetrical and Asymmetrical designs.
- 2.3 One way design, abstract, all over
- 2.4 Checks, Stripes – vertical and horizontal, plaids

### UNIT-III

#### FASHION AND TEXTILE CAD 12 Hrs

- 3.1 Set Texture's Dye, Knitting effect, Crinkle, Leather effect
- 3.2 Light, display mode, Define show ratio, back ground colour, ruler, design E- studio, System shortcut forms, Layers, Material area.
- 3.3 Pick object, Create curve, Edit curve, Create surface, Modify Clip border, Rescale surface grid, Edit Surfaces grid, Fold, Create tape, Edit clip, Texture table, Rescale texture, Create, Text, Pick colour, Set canvas property.
- 3.4 Set canvas, Clip image, Edit image alpha, colour management, Draping, Fill colour, pen, Local skew, Pick colour.

### UNIT- IV

#### GARMENT CAD 9 Hrs

- 4.1 Pick up piece, How to draw darts, Weave line, Add seam allowance to a piece, set a piece information, print. Standard Tool Bar, Traditional tool bar, professional tool bar, Piece tool bar, Piece layout tool bar. File menu, Edit menu, Piece menu, Grading, View menu,

**UNIT- V****GARMENT GRADING AND MARKER PLANNING****15 hrs**

5.1 Standard tool bar, file Menu, Edit Menu, Pattern Menu, Modify Menu, Grading, Point Grading Menu, Option Menu.

5.2 Marker Tool Bar, File Tool Bar, Piece Tool Bar, File Menu, Piece Menu, Marker Option, Nesting.

**UNIT- VI****EXERCISES****18 Hrs**

6.1 Prepare the Mini marker and print the same for the following Garments with different fabric texture

1. Yoke Frock
2. Nehru Shirt
3. Salwar Kameez
4. Trousers
5. Any coats

**NOTE: i) The above units to be practiced using any of the following Fashion Designing Software's or open source**

**ii) Auto Cad, Corel Draw, Fashion CAD, Pattern and Garment CAD**

**iii) Folder Containing all the exercises of units I, II, III and VI and to submit the same in the end examination**

**COURSE ASSESSMENT AND EVALUATION**

	What		To Whom	Frequency	Max. Marks	Evidence Collected	Course Outcomes
<b>DIRECT ASSESSMENT</b>		<b>IA Tests</b>	<b>Students</b>	<b>Two IA tests (Average marks of two IA tests are considered)</b>	<b>10</b>	<b>Blue Books</b>	<b>1 to 6</b>
		<b>Class room Assignments</b>		<b>Student Activity</b>	<b>10</b>	<b>Log of Activity</b>	<b>1 to 6</b>
				<b>Record/Log</b>	<b>05</b>		
				<b>TOTAL</b>	<b>25</b>		
	<b>SEE - SEMESTER END EXAMINATION</b>	<b>End Exam</b>		<b>End Of the Course</b>	<b>50</b>	<b>Answer Scripts</b>	<b>ALL CO's</b>
<b>INDIRECT ASSESSMENT METHODS</b>	<b>Student Feedback on course</b>		<b>Students</b>	<b>Middle Of The Course</b>	<b>Feed Back Forms</b>		
	<b>End of Course Survey</b>			<b>End Of The Course</b>	<b>Questionnaire</b>		<b>ALL CO's</b>

**Note:**

1. I.A. test shall be conducted as per SEE scheme of valuation. However obtained marks shall be reduced to 10 marks. Average marks of two tests shall be rounded off to the next higher digit.
2. Rubrics to be devised appropriately by the concerned faculty to assess Student activities.

- **MODEL OF RUBRICS FOR ASSESSING STUDENT ACTIVITY**

Dimension	Scale					Students Score				
	Needs Improvement 1	Developing 2	Satisfactory 3	Good 4	Exemplary 5	1	2	3	4	5
<b>1. Research &amp; gather information</b>	Does not collect any information relating to the topic	Collects very limited information; some relate to the topic	Collects some basic information; most refer to the topic	Collects a good information; all refer to the topic	Collects a excellent deal of information; all refer to the topic	Ex: 2				
<b>2. Fulfil team's roles &amp; duties</b>	Does not collect any information relating to the topic	Collects very limited information; some relate to the topic	Collects some basic information; most refer to the topic	Collects a good information all refer to the topic	Collects a excellent deal of information; all refer to the topic	3				
<b>3. Shares work equally</b>	Does not collect any information relating to the topic	Collects very limited information; some relate to the topic	Collects some basic information; most refer to the topic	Collects a good information all refer to the topic	Collects a excellent deal of information; all refer to the topic	4				
<b>4. Listen to other Team mates</b>	Does not collect any information relating to the topic	Collects very limited information; some relate to the topic	Collects some basic information; most refer to the topic	Collects a good information; all refer to the topic	Collects a excellent deal of information; all refer to the topic	5				
<b>Grand Average/Total=(2+3+4+5)=14/4=3.5=4</b>						4				

**Note: The above rubric is only an example. The concerned Course Coordinator may devise appropriate rubrics for the assigned activity**

# COMPUTER AIDED DESIGN

## SIXTH SEMESTER

### MODEL QUESTIONS

1. a Create a pattern of full arm shirt using pattern cad.  
b. Grade the above garment SML sizes  
c. Estimate using marker plan.
2. a Create a logo using any designing software  
b. Create any two motifs.  
c. Drape and design a kameez.
3. a Create a satin weave effect using Textile CAD  
b. Create any two repeats.  
c. Drape and Design a evening gown.

### SCHEME OF VALUATION

**Time:- 3 hours**

**Marks: 50**

Q. No	Marks
1	15 marks
2	15 marks
3	20 marks
<b>Total</b>	<b>50 Marks</b>