

Branch Name	Master of Design (Fashion Design)
Branch Code	FD201
Course Name:	Advance Computer Aided Design
Course Code	2FD2010208
Pre-requisite Course:	-----

Course Objectives:

1. Develop advanced digital design skills using industry-standard CAD software for fashion illustration, technical drawing, pattern development, and presentation.
2. Create innovative fashion design solutions through digital visualization, rendering, and virtual prototyping techniques.
3. Apply CAD tools and technologies for pattern engineering, grading, marker planning, and production-oriented design processes.
4. Integrate digital design methodologies with creative and research-based approaches to develop professional fashion collections.

Teaching and Examination Scheme:

Teaching Scheme (Hours per week)				Evaluation Scheme (Marks)								Total (Marks)
Lecture (L)	Tutorial (T)	Practical (P)	Credit	Theory (Marks)				Practical (Marks)				
				University Assessment		Continuous Assessment		University Assessment		Continuous Assessment		
				Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	
-	-	8	4	-	-	-	-	20	50	20	50	100

Subject Content:

Sr.No	Topic	Total Hours	Weightage (%)
1	Advanced Digital Design Fundamentals • Evolution and applications of CAD in the fashion industry • Digital workflow in fashion design and product development • Advanced vector and raster graphic tools for fashion visualization • Digital sketching and illustration techniques • Color management systems and digital color forecasting • Development of technical flats and specification drawings	12	25%
2	Computer Aided Textile • Motif creation and development • Repeat pattern construction • Half-drop, brick, mirror, and border repeats • Geometric, floral, abstract, and ethnic pattern design.	12	25%
3	3D Fashion Visualization and Virtual Prototyping	12	25%

	• Introduction to 3D fashion design technologies • Applications of augmented reality (AR) and virtual reality (VR) in fashion design		
4	Digital Fashion Innovation and Industry Applications • Digital fashion collections and virtual fashion shows • Artificial Intelligence (AI) and emerging technologies in fashion design • Professional portfolio development using CAD outputs • Industry-oriented capstone project	12	25%

Reference Books:

S.No	Books
1	Adobe Creative Team, Adobe Photoshop 7.0 Classroom in a Book, 25 June 2002, 592 pages
2	Katrin Eismann, Photoshop Restoration Retouching, New Riders Publisher, 472 pages
3	Scott Kelby, The Adobe Photoshop CC Book for Digital Photographers, New Riders; 2017 ed. edition (8 December 2016), 360 pages

Course Learning Outcomes (CLO): On completion of this course, the students will be able to:

CLO	Description	Bloom Taxonomy Level
CLO1	Identify basic computer operations and CAD tools used in fashion design.	4,5 Evaluate, Analyse
CLO2	Use digital drawing tools to create simple fashion sketches.	3 Applying
CLO3	Develop basic textile motifs and repeat patterns digitally.	1 Remembering
CLO4	Create garment flats and simple technical illustrations.	2 Understanding
CLO5	Prepare digital presentation boards and design layouts.	3, 6 Applying, Creative

Mapping of CLOs with Pos & PSOs

Course	Program Outcomes (PO's)										Program Specific Outcomes (PSO)	
Learning Outcomes	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO 10	PSO 1	PSO 2
CLO 1	L			H							M	
CLO 2		M				L	L					
CLO 3			M		M					H		M
CLO 4	H							M			M	
CLO 5		M			L	M			L			L
CLO 6				H	H				H	M	H	

H: High, M: Medium, L: Low