KURUKSHETRA UNIVERSITY, KURUKSHETRA

Scheme of Examinations for Under-Graduate Programme Under multiple Entry-Exit, Internship & CBCS-LOCF-CCF in accordance to NEP 2020 w.e.f. 2025-26

 $Bachelor\ of\ Vocation\ in\ Textile\ \&\ Fashion\ Designing/\ Bachelor\ of\ Vocation\ in\ Fashion\ Technology/\ Bachelor\ of\ Vocation\ in\ Interior\ Designing\ /\ Bachelor\ of\ Science\ in\ Fashion\ Designing$

			SEM	ESTER V				
Course	Paper (s)	Nomenclature of Paper (s)	Credits	Hours/ Week	Internal Marks	External Marks	Total Marks	Exam Duration
CC-M5 (V) @4 Credits	B25-VOC-146	Advanced Software Designing Techniques –I	2	2	15	35	50	3 Hrs
		Advanced Software Designing Techniques –I -Practical	2	4	15	35	50	4 Hrs

Session: 2025-26					
	Part A - Introduction				
Subject	Bachelor of Vocation in Textile & Fashion Designing/ Bachelor of Vocation in Fashion Technology/ Bachelor of Vocation in Interior Designing / Bachelor of Science in Fashion Designing				
Semester		V			
Name of the Course	Advanced S	Software Designing Tech	hniques –I		
Course Code		B25-VOC-146			
Course Type: (CC/MCC/MDC/CC- M/DSEC/VOC/DSE/PC/AEC/VAC) Level of the course (As per Annexure-I	CC-M5 (V)				
Pre-requisite for the course (if any)		NA			
Course Learning Outcomes(CLOs):	2. To understand the structure of draw 3. To know grading different steps in 4. To understand the of Lumion sof 5*. To get practical known manipulation of child	sics of Tuka Design so orinciples of AutoCad. e tools of Tuka Design s ings in AutoCad , seam allowances, layor Sketch Up software. e darts, its types, pattern	oftware in pattern oftware & types & ut in Tuka Design and n manipulation & tools ern grading & pattern the block & modeling of		
Credits	Theory	Practical	Total		

	2	2	4
Contact Hours	2	4	6
Max. Marks:100		Time: 3hrs (T)	
Internal Assessment Marks:15(T)+15(End Term Exam Marks:35(T)+35(P)=		4hrs (P)	

Part B- Contents of the Course

<u>Instructions for Paper- Setter:</u> The examiner will set nine questions in all, selecting two questions from each unit and one compulsory objective type question.

<u>Instructions for the Candidate:</u> The candidates will attempt five questions in all, selecting at least one question from each unit as well as compulsory questions.

Unit	Topics	Contact Hours
I	Basics of Tuka Design software.	07
	Advantages of Tuka Design software	
	Pattern making through Tuka Design Software	
	Meaning , importance & types of AutoCad.	
	Basic principles & basic drawing tools in AutoCad	
	User interface in AutoCad, set up tips in AutoCad.	
II	Tuka Design Software tools and their uses.	08
	Symbols used in drafting, standard tool bar, traditional tool bar,	
	professional tool bar, piece tool bar, file menu, edit menu, piece menu,	
	view menu in Tuka Design software.	
	Types & structure of drawings, attaching image & adjusting scale	
	, modification of commands, changing the image of objects in	
	AutoCad,	
	Rendering environment and exposure palette, zooming & panning	
	around drawing, orthographic projections, products of AutoCad &	
	documentation.	

III	 Grading, seam allowances., layout and its types., summary card, layout of pattern for cutting and marker making for efficient fabric consumption in Tuka Design software. Meaning, significance, types, basic tools, concepts, dimensions and different steps in Sketch Up software. 	07
IV	 Darts and its types. Pattern manipulation – Shifting and relocating of darts, yoke manipulation- different styles- pivot, slash and measurement method. Fullness and its types. Meaning & significance of Lumion software . Basic principles & tools of Lumion. New rendering technologies in Lumion & Tips for effective rendering . 	08

V* 1) Drafting of following:	60
Basic pattern of lady's bodice block.	
Basic pattern of man's bodice block.	
Different styles of pockets.	
2) Grading of following pattern:	
• Lady's bodice block.	
 Man's bodice block. 	
Layout planning.	
3) Pattern Manipulation of	
• Lady's bodice block.	
 Man's bodice block. 	
4) Modeling of any project of student choice by using Sketch Up/	
Lumion software & making a project file.	
Suggested Evaluation Methods	

Internal Assessment:	End Term
> Theory	Examination:
• Class Participation: 04	35
• Seminar/presentation/assignment/quiz/class test etc.:04	
• Mid-Term Exam: 07	
> Practicum	
• Class Participation: 05	
 Seminar/Demonstration/Viva-voce/Lab records etc.:10 	
• Mid-Term Exam: NA	35

Part C-Learning Resources

Recommended Books/e-resources/LMS:

- Aldrich W- CAD in Clothing and Textiles, Blackwell Science, 1994.
- **Taylor P** Computers in Fashion Industry, Heinemann Pub,1990.
- Tuka Acadey of Pattern Engineering- Tuka Cad User Manual.
- **Veisinet DD** Computer Aided Drafting and Design Concept and Application, 1987.
 - James AL & Shawna L- AutoCAD 2025 Instructor, 2024.
 - Omura G. 2005, Mastering Auto CAD 2005 and Auto CAD LT 2005, BPB Publications, New Delhi.
 - Randy HS Tools for Design Using AutoCAD 2025 and Autodesk Inventor 2025, 2024.
 - Saxena S- A First Course in Computers, Vikas Publishing House, 2003.

^{*}Applicable for courses having practical component.

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	SEMESTER VI							
Course	Paper (s)	Nomenclature of Paper (s)	Credits	Hours/ Week	Internal Marks	External Marks	Total Marks	Exam Duration
CC-M7 (V) @4 Credits	B25-VOC-347	Advanced Software Designing Techniques - II	2	2	15	35	50	3 Hrs
		Advanced Software Designing Techniques - II -Practical	2	4	15	35	50	4 Hrs

Session: 2025-26					
Part A - Introduction					
Subject	Bachelor of Vocation in Textile & Fashion Designing/ Bachelor of Vocation in Fashion Technology/ Bachelor of Vocation in Interior Designing / Bachelor of Science in Fashion Designing				
Semester	VI				
Name of the Course	Advanced Software Designing Techniques - II				
Course Code	B25-VOC-347				
Course Type: (CC/MCC/MDC/CC- M/DSEC/VOC/DSE/PC/AEC/VAC)	CC-M7 (V)				
Level of the course (As per Annexure-I	<mark>300-399</mark>				
Pre-requisite for the course (if any)	NA				
Course Learning Outcomes(CLOs):	After completing this course, the learner will be able: 1. To understand benefits of Tuka Studio & meaning & significance of 3ds max. 2. To understand the colour separation, repeats, colour ways, story board, and fabric rendering in Tuka Studio and interface & files used in 3ds Max 3. To know the knits, jacquard and weaves and fundamentals of 3 D modeling. 4. To understand the graf card and its uses and estimation of costing & time in modeling interior of a building. 5*. To gain practical knowledge about creating different motifs and sheets in repeats, colour separate and colour ways, jacquard ,story board ,weaves, and knits by using Tuka Studio/Ned Graphics and about 3ds max with V-Ray. rendering.				

Credits	Theory	Practical	Total
	2	2	4
Contact Hours	2	4	6
Max. Marks:100		Time: 3hrs (T)	
Internal Assessment Marks:15(T)+1 End Term Exam Marks:35(T)+35(P)		4hrs (P)	

Part B- Contents of the Course

<u>Instructions for Paper- Setter:</u> The examiner will set nine questions in all, selecting two questions from eachunit and one compulsory objective type question.

<u>Instructions for the Candidate:</u> The candidates will attempt five questions in all, selecting at least one questionfrom each unit as well as compulsory questions.

Uni t	Topics	Contact Hours
I	 Meaning & Benefits of Tuka Studio in textile & fashion designing industry. Scope of Tuka Studio in textile & fashion designing industry. Tools of Tuka Studio & their uses. 	08
	 Meaning, significance, features, concepts, elements & tools of 3ds Max in interior designing. Types of modeling in 3ds Max. Basic steps in using 3ds Max. 	
П	 Introduction & uses of the colour separation, repeats, colour ways & story board. Interface, files used, fundamentals of 2 dimensional modeling & rendering of 2 dimensional shapes in 3ds Max . 	07
III	 Introduction and uses of knits, jacquard, weaves & fabric rendering. Fundamentals of 3 D modeling, rendering of 3 dimensional shapes, assigning materials and textures & rendering with V-Ray. 	08

IV	Introduction and uses of the graf card, colour palette, textures.	07	
	& print.		
	Estimation of costing & time in modeling (2 D & 3 D) interior of a		
	building, factors to be considered in estimating cost & time & tips for a more		
	precise estimation.		
V*	1) Study in detail about the different tools of Tuka Studio/NedGraphics.	60	
V	2) Design household linens using Tuka Studio /NedGraphics		
	3) Create different motifs and sheets of each of the following by using Tuka	ı	
	Studio/Ned Graphics:		
	i. Design repeats/checks.		
	ii. Colour separate and colour ways.		
	iii. Jacquard.		
	iv. Story board.		
	v. Weaves- Plain/ Twill/ Sateen.		
	vi. Knits.		
	4) Make any 3 projects with 3ds max with V-Ray rendering.		
	Suggested Evaluation Methods		
Interna	al Assessment:	End Term	
≻ Tł	heory	Examination:	
	Class Participation: 04	35	
	Mid-Term Exam: 07		
> Pr			
	Class Participation: 05		
	Seminar/Demonstration/Viva-voce/Lab records etc.:10		
	Mid-Term Exam: NA	35	
	Part C-Learning Resources	<u> </u>	

Recommended Books/e-resources/LMS:

- Aldrich W- CAD in Clothing and Textiles, Blackwell Science, 1994.
- Rao PN- CAD / CAM Principles & Applications, The McGraw Hill Companies.
- **Taylor P** Computers in Fashion Industry, Heinemann Pub,1990.
- **Veisinet DD** Computer Aided Drafting and Design Concept and Application, 1987.
- **Zeid I-** Mastering CAD / CAM, The Mc Graw Hall Companies, 2006.
 - Culbertson W 3ds Max Basics For Modeling Video Game Assets: Volume 1: Model A Complete Game Environment and Export to Unity or Other Game Engines 2019.
 - Murdock KL Autodesk 3ds Max 2025 Basics Guide, 2025.
 - **Sorthaw H** 3Ds Max Complete 2024 Guide For Beginners: Mastering 3D Art From Basics to Advanced Techniques, 2023.
 - Sunday S Complete Beginner to Master Step-by-Step Practical Guide for 3D Modeling, Animation and Visualization, 2023.

^{*}Applicable for courses having practical component.