



**KALINGA
UNIVERSITY**

SCHEME & SYLLABUS FOR

Bachelor of Vocational Studies (B.Voc.)

Design

(W.e.f. 2025 – 2026)



Kalinga University, Naya Raipur, Chhattisgarh

B.VOC IN DESIGN

Semester-01								
Course Code	Course Title	Credits	L	T	P	Internal Marks	End Semester Exam Marks	Total Marks
BVD101	Communication Skills	3	3	0	0	30	70	100
BVD102	Design Thinking	3	3	0	0	30	70	100
BVD103	History of Design - I	3	3	0	0	30	70	100
BVD104	Drawing & Illustration	3	2	0	2	30	70	100
BVD105	Elements & Principles of Design	4	4	0	0	30	70	100
BVD106P	Digital Tools - I (Photoshop, Illustrator)	4	2	0	4	30	70	100
BVD107P	Design Process - I	10	0	0	20	50	150	200
Total		30	17	0	26	230	570	800

Semester-02								
Course Code	Course Title	Credits	L	T	P	Internal Marks	End Semester Exam Marks	Total Marks
BVD201	History of Design - II	4	4	0	0	30	70	100
BVD202	Materials & Textures in Design	4	4	0	0	30	70	100
BVD203	Photography & Visual Narratives	3	3	0	0	30	70	100
BVD204	Introduction to Fashion, Interior & Graphic Design	4	4	0	0	30	70	100
BVD205P	3D Form Studies & Model Making	2	0	0	4	20	30	50
BVD206P	Digital Tools - II (AutoCAD, Adobe Substance 3D, Blender)	3	1	0	4	30	70	100
BVD207P	Design Process - II	10	0	0	20	50	150	200
Total		30	16	0	28	220	530	750

Semester-03								
Course Code	Course Title	Credits	L	T	P	Internal Marks	End Semester Exam Marks	Total Marks
BVD301	Typography & Layout Design	3	3	0	0	30	70	100
BVD302	Spatial Design & Planning	3	3	0	0	30	70	100
BVD303	Fashion Visualisation & technical Drawing	3	3	0	0	30	70	100
BVD304P	Photography for Product & Space	3	1	0	4	30	70	100
BVD305P	Textile Studies & Surface Exploration	4	1	0	6	30	70	100
BVD306P	Digital Tools - III (Adobe Premiere, Sketch up, Autodesk Sketchbook)	4	1	0	6	30	70	100
BVD307P	Studio Project - I	10	0	0	20	50	150	200
Total		30	12	0	36	230	570	800

Semester-04								
Course Code	Course Title	Credits	L	T	P	Internal Marks	End Semester Exam Marks	Total Marks
BVD401	Environmental Studies	3	3	0	0	30	70	100
BVD402P	Sustainable Design & Packaging	4	2	0	4	30	70	100
BVD403P	Motion Graphics	3	2	0	2	30	70	100
BVD404P	Building Services	3	2	0	2	30	70	100
BVD405P	Pattern making, Drafting and Construction	3	2	0	2	30	70	100
BVD406P	Digital Tools - IV (Lumion, V- Ray, Autodesk Maya, Arnold)	4	1	0	6	30	70	100
BVD407P	Studio Project - II	10	0	0	20	50	150	200
Total		30	12	0	36	230	570	800

Semester-05								
Course Code	Course Title	Credits	L	T	P	Internal Marks	End Semester Exam Marks	Total Marks
BVD501	Design Research & Methods	5	5	0	0	30	70	100
BVD502	Entrepreneurship & Design Management	5	5	0	0	30	70	100
Specialisation Elective (Choose One)								
BVD503A	Advanced Fashion Collection Development	6	1	0	10	30	70	100
BVD503B	Space Planning & Human Factors							
BVD503C	Advanced Branding & Motion Graphics							
BVD504	Professional Ethics & Intellectual Property	4	4	0	0	30	70	100
BVD505P	Studio Project - III	10	0	0	20	50	150	200
Total		30	15	0	30	170	430	600

Semester-06								
Course Code	Course Title	Credits	L	T	P	Internal Marks	End Semester Exam Marks	Total Marks
BVD601P	Capstone Project	10	0	0	20	50	150	200
BVD602P	Internship	10	0	0	20	50	150	200
BVD603P	Portfolio Development & Jury	10	0	0	20	50	150	200
Total		30	0	0	60	150	450	600

SEMESTER-01

COMMUNICATION SKILLS

BVD101

Course Objective:

- To enhance students verbal, written and professional communication skills required for academic success and professional practice in the design industry.

Course Outcomes:

After successful completion of the course, the student will be able to:

- CO1: Understand fundamentals of communication processes
- CO2: Demonstrate effective verbal and non-verbal communication
- CO3: Develop professional writing skills
- CO4: Perform effectively in interviews and group discussions
- CO5: Communicate design ideas confidently to clients and teams

Unit 1:

06

- **Fundamentals of Communication:**

- Meaning, process and types of communication
- Elements of communication
- Barriers to communication
- Listening skills and feedback
- Interpersonal communication

Unit 2:

06

- **Verbal and Non-Verbal Communication:**

- Public speaking techniques
- Group discussion skills
- Body language and gestures
- Voice modulation
- Presentation skills

Unit 3:

06

- **Written Communication:**

- Business letter writing
- Email writing etiquette
- Report writing
- Resume and cover letter preparation
- Technical writing basics

Unit 4:

06

- **Professional Communication:**
 - Interview skills
 - Workplace communication
 - Conflict resolution
 - Team communication
 - Communication ethics

Unit 5:

06

- **Communication for Design Professionals:**
 - Client interaction and briefing
 - Design proposal writing
 - Portfolio presentation
 - Visual storytelling
 - Presentation of creative ideas

References:

- Raman, M., & Sharma, S., Technical Communication, Oxford University Press
- Meenakshi Raman & Sangeeta Sharma, Communication Skills, OUP
- Murphy, H., Hildebrandt, H., & Thomas, J., Effective Business Communication, McGraw Hill
- Rizvi, M. Ashraf, Effective Technical Communication, Tata McGraw Hill

DESIGN THINKING

BVD102

Course Objective:

- To introduce students to the principles of design thinking and develop problem-solving skills through a human-centered design approach.

Course Outcomes:

After successful completion of the course, the student will be able to:

- CO1: Understand the concept and importance of design thinking
- CO2: Apply design thinking stages to real-life problems
- CO3: Develop creative and innovative solutions
- CO4: Conduct basic user research and analysis
- CO5: Implement design thinking in product and service design

Unit 1:

06

Introduction to Design Thinking:

- Definition and scope of design thinking
- Evolution of design thinking
- Design thinking as a problem-solving methodology
- Human-centered design concepts

Unit 2:

06

Stages of Design Thinking:

- Empathy and user understanding
- Problem definition and framing
- Ideation techniques
- Prototyping methods
- Testing and iteration

Unit 3:

06

Creativity and Innovation:

- Creative thinking processes
- Lateral and divergent thinking
- Innovation in design practices
- Barriers to creativity

Unit 4:

06

Design Research Methods:

- Qualitative and quantitative research
- User interviews and observation
- Data collection and analysis
- Case study approach

Unit 5:

Applications of Design Thinking:

- Product and service design
- Social and sustainable design
- Design thinking in industry
- Contemporary case studies

References:

- Brown, T., Change by Design, Harper Business
- Liedtka, J., Design Thinking for the Greater Good, Columbia University Press
- Kelley, T., The Art of Innovation, Currency
- IDEO.org, The Field Guide to Human-Centered Design

HISTORY OF DESIGN – I

BVD103

Course Objective:

- To provide an understanding of the historical evolution of design from ancient to industrial periods.

Course Outcomes:

- CO1: Understand the evolution of design through history
- CO2: Identify major design styles and movements
- CO3: Analyze the influence of culture on design
- CO4: Relate historical design developments to modern design
- CO5: Develop visual and critical appreciation of design history

Unit 1:

06

Introduction to Design History:

- Meaning and significance of design history
- Relationship between art, craft, and design
- Design as a cultural expression

Unit 2:

06

Ancient and Classical Design:

- Design in ancient civilizations
- Egyptian, Greek, and Roman design
- Materials, techniques, and symbolism

Unit 3:

06

Medieval Design:

- Romanesque and Gothic styles
- Architecture, manuscripts, and decorative arts
- Role of guilds

Unit 4:

06

Renaissance Design:

- Humanism and proportion
- Developments in art and architecture
- Influence on modern design

Unit 5:

06

Industrial Revolution:

- Mechanization and mass production
- New materials and technologies
- Impact on design practice

References:

- Meggs, P. B., History of Graphic Design, Wiley
- Heskett, J., Design: A Very Short Introduction, Oxford
- Fiell, C. & P., Design of the 20th Century, Taschen
- Sparke, P., An Introduction to Design and Culture, Routledge

DRAWING & ILLUSTRATION

BVD104

Course Objective:

- To develop observational drawing skills and introduce illustration techniques for visual communication.

Course Outcomes:

- CO1: Demonstrate basic drawing skills
- CO2: Apply perspective and proportion in drawings
- CO3: Render light, shade, and texture effectively
- CO4: Illustrate objects and figures accurately
- CO5: Create expressive illustrations for visual communication

Unit 1: 06

Fundamentals of Drawing:

- Drawing tools and materials
- Line, shape, and form
- Observational drawing

Unit 2: 06

Technical Drawing:

- One-point, Two-point and Three-point Perspective
- Orthographic and Isometric Projections
- Spatial visualization

Unit 3: 06

Light, Shade, and Texture:

- Tonal values
- Shading techniques
- Texture rendering

Unit 4: 06

Object and Figure Drawing:

- Still life drawing
- Basic human proportions
- Gesture drawing

Unit 5: 06

Illustration Techniques:

- Conceptual illustration
- Narrative illustration
- Mixed media techniques

References:

- Edwards, B., Drawing on the Right Side of the Brain, Penguin
- Goldstein, N., Figure Drawing, Pearson
- Hodgson, B., Sketching for Designers, Thames & Hudson

ELEMENTS & PRINCIPLES OF DESIGN

BVD105

Course Objective:

- To familiarise students with the basic elements and principles of design and their application in visual composition.

Course Outcomes:

- CO1: Identify elements and principles of design
- CO2: Apply color theory in design compositions
- CO3: Create balanced and harmonious designs
- CO4: Analyze visual compositions critically
- CO5: Produce effective design layouts

Unit 1:

06

Elements of Design:

- Dot, Line
- Shape and Form
- Texture and Colour

Unit 2:

06

Color Theory and Application:

- Color wheel
- Color Harmony & Schemes
- Psychological & Cultural Meaning of Color
- Color in Design Disciplines

Unit 3:

06

Principles of Design:

- Balance (symmetrical, asymmetrical, radial)
- Rhythm and Movement
- Emphasis and Hierarchy
- Pattern and Variety
- Proportion and Scale

Unit 4:

06

Composition & Visual Organization:

- Visual weight
- Alignment
- Framing
- Grid systems (introductory)

Unit 5:

Visual Perception & Aesthetics:

- Gestalt principles
- Figure–ground relationship
- Visual harmony and contrast

References:

- Wong, W., Principles of Form and Design, Wiley
- Lauer, D., Design Basics, Cengage
- Zelanski, P., Color, Prentice Hall

DIGITAL TOOLS - I (PHOTOSHOP, ILLUSTRATOR)

BVD106P

Course Objective:

- To introduce students to digital design tools for image editing and vector graphics.

Course Outcomes:

- CO1: Understand fundamentals of digital design
- CO2: Use Photoshop for image editing
- CO3: Create vector graphics using Illustrator
- CO4: Apply digital tools in design projects
- CO5: Produce basic digital design outputs

Unit 1:

Introduction to Digital Design:

- Digital imaging basics
- Raster and vector graphics

Unit 2:

Adobe Photoshop:

- Interface and tools
- Image editing and manipulation
- Layers and masks

Unit 3:

Adobe Illustrator:

- Vector drawing tools
- Paths and shapes
- Basic typography

Unit 4:

Image Composition:

- Photo manipulation techniques
- Color correction
- Visual effects

Unit 5:

Practical Applications:

- Poster and logo design
- Basic branding exercises

References:

- Adobe Creative Team, Adobe Photoshop Classroom in a Book
- Adobe Creative Team, Adobe Illustrator Classroom in a Book
- Shoup, K., Photoshop & Illustrator Essentials, Wiley

DESIGN PROCESS – I

BVD107P

Course Objective:

- To introduce students to the fundamental stages of the design process through practical exploration.

Course Outcomes:

- CO1: Identify and define design problems
- CO2: Generate and develop design concepts
- CO3: Apply visualization and prototyping techniques
- CO4: Execute design projects systematically
- CO5: Present and document design work professionally

Unit 1:

Introduction to Design Process:

- Understanding design problems
- Research and inspiration

Unit 2:

Concept Development:

- Idea generation techniques
- Mood boards and sketches

Unit 3:

Visualization Techniques:

- Concept sketching
- Design refinement

Unit 4:

Prototyping:

- Model making techniques
- Material exploration

Unit 5:

Design Presentation:

- Documentation and presentation
- Evaluation and feedback

References:

- Ambrose, G., Design Thinking, AVA Publishing
- Baxter, M., Product Design, CRC Press
- Ulrich, K., Product Design and Development, McGraw Hill

SEMESTER-02

HISTORY OF DESIGN – II

BVD201

Course Objective:

- To study the evolution of modern and contemporary design movements.

Course Outcomes:

After successful completion of the course, the student will be able to:

- CO1: Understand major modern design movements
- CO2: Identify characteristics of historical design styles
- CO3: Analyze the influence of socio-cultural factors on design
- CO4: Relate historical movements to contemporary design
- CO5: Critically evaluate modern and post-modern design trends

Unit 1:

06

Arts and Crafts Movement:

- William Morris
- Ideology and influence

Unit 2:

06

Art Nouveau:

- Characteristics and style
- European examples

Unit 3:

06

Modernism:

- Bauhaus movement
- Functionalism

Unit 4:

06

Art Deco:

- Design features
- Architecture and graphics

Unit 5:

06

Contemporary Design:

- Postmodernism
- Global design trends

References:

- Sparke, P., An Introduction to Design and Culture, Routledge
- Meggs, P. B., History of Graphic Design, Wiley
- Fiell, C. & P., Design of the 20th Century, Taschen
- Heskett, J., Design, Oxford University Press

MATERIALS & TEXTURES IN DESIGN

BVD202

Course Objective:

- To introduce students to various materials and surface textures used in design.

Course Outcomes:

- CO1: Classify materials used in design
- CO2: Understand properties of traditional materials
- CO3: Analyze modern and industrial materials
- CO4: Apply texture concepts in design projects
- CO5: Select sustainable materials for design applications

Unit 1:

06

Introduction to Materials:

- Classification of materials
- Material properties

Unit 2:

06

Traditional Materials:

- Wood, clay, and stone
- Craft applications

Unit 3:

06

Modern Materials:

- Plastics, glass, and metals
- Industrial applications

Unit 4:

06

Textures in Design:

- Visual and tactile textures
- Texture creation techniques

Unit 5:

06

Sustainable Materials:

- Eco-friendly materials
- Recycling and sustainability

References:

- Ashby, M., Materials and Design, Butterworth-Heinemann
- Lefteri, C., Materials for Design, Laurence King
- Budinski, K., Engineering Materials, Prentice Hall

PHOTOGRAPHY & VISUAL NARRATIVES

BVD203

Course Objective:

- To develop photographic skills and visual storytelling abilities.

Course Outcomes:

- CO1: Understand camera functions and exposure
- CO2: Apply lighting techniques in photography
- CO3: Create visual narratives through images
- CO4: Edit and enhance photographs digitally
- CO5: Produce applied photography projects

Unit 1:

06

Fundamentals of Photography:

- Camera types and functions
- Exposure and composition

Unit 2:

06

Lighting Techniques:

- Natural and artificial lighting
- Light control

Unit 3:

06

Visual Narratives:

- Storytelling through images
- Sequencing and framing

Unit 4:

06

Image Editing:

- Basic photo editing
- Image enhancement

Unit 5:

06

Applied Photography:

- Product and conceptual photography

References:

- Freeman, M., The Photographer's Eye, Focal Press
- London, B., Photography, Pearson
- Peterson, B., Understanding Exposure, Amphoto

INTRODUCTION TO FASHION, INTERIOR & GRAPHIC DESIGN

BVD204

Course Objective:

- To provide a basic understanding of major design disciplines.

Course Outcomes:

- CO1: Understand fundamentals of fashion design
- CO2: Identify basic interior design principles
- CO3: Apply graphic design fundamentals
- CO4: Explore various design specializations
- CO5: Integrate multiple design disciplines

Unit 1:	06
Fashion Design:	
• Elements and principles of fashion	
• Apparel categories	
Unit 2:	06
Interior Design:	
• Space planning	
• Furniture and lighting	
Unit 3:	06
Graphic Design:	
• Visual communication	
• Typography basics	
Unit 4:	06
Design Specializations:	
• Career opportunities	
• Industry overview	
Unit 5:	06
Interdisciplinary Design:	
• Integration of design disciplines	
• Case studies	

References:

- Jones, S. J., Fashion Design, Laurence King
- Ching, F. D. K., Interior Design Illustrated, Wiley
- Samara, T., Design Elements, Rockport

3D FORM STUDIES & MODEL MAKING

BVD205P

Course Objective:

- To develop understanding of three-dimensional forms through hands-on model making.

Course Outcomes:

- CO1: Understand principles of three-dimensional form
- CO2: Use tools and materials for model making
- CO3: Construct structurally stable models
- CO4: Develop scale and conceptual models
- CO5: Translate design ideas into 3D forms

Unit 1:

Fundamentals of 3D Forms:

- Geometric and organic forms
- Volume and mass

Unit 2:

Tools and Techniques:

- Model making tools
- Safety practices

Unit 3:

Materials for Models:

- Paper, board, and clay
- Material properties

Unit 4:

Structural Models:

- Balance and stability
- Scale models

Unit 5:

Conceptual Models:

- Experimental forms
- Creative exploration

References:

- Mills, C., Designing with Models, Routledge
- Knoll, W., Model Making, Birkhäuser
- Yee, R., Architectural Model Making, Wiley

DIGITAL TOOLS - II (AUTOCAD, ADOBE SUBSTANCE 3D, BLENDER) BVD206P

Course Objective:

- To introduce advanced digital tools for drafting, modeling, and visualization.

Course Outcomes:

- CO1: Use AutoCAD for 2D drafting
- CO2: Create basic 3D models using Blender
- CO3: Apply materials and textures using Substance 3D
- CO4: Produce rendered visual outputs
- CO5: Integrate digital tools into design workflow

Unit 1:

AutoCAD Fundamentals:

- 2D drafting
- Dimensions and layouts

Unit 2:

3D Modeling:

- Introduction to Blender
- Basic modeling techniques

Unit 3:

Adobe Substance 3D:

- Material creation
- Texturing workflows

Unit 4:

Rendering and Visualization:

- Lighting and camera setup
- Rendering techniques

Unit 5:

Digital Workflow:

- Software integration
- Final output preparation

References:

- Auto Desk, AutoCAD and AutoCAD LT Essentials
- Giambruno, M., Blender 3D by Example, Packt
- Adobe Creative Team, Substance 3D Guide, Adobe Press

DESIGN PROCESS – II

BVD207P

Course Objectives:

- To develop advanced design skills through research, execution, and presentation.

Course Outcomes:

- CO1: Conduct advanced design research including user–space activity analysis.
- CO2: Develop systematic design concepts using structured design processes.
- CO3: Execute comprehensive design solutions incorporating zoning and circulation.
- CO4: Evaluate and refine designs based on user feedback and spatial performance.
- CO5: Prepare professional project documentation and portfolios.

Unit 1:

Design Research:

- User-centered research
- Design brief preparation
- User–space relationship analysis
- Activity mapping and frequency studies
- Site/context analysis
- Case studies

Unit 2:

Concept Development:

- Advanced ideation techniques
- Design strategy
- Design process frameworks
- Translating research into concepts
- Space requirement analysis
- Initial zoning concepts

Unit 3:

Design Execution:

- Detailed drawings
- Prototyping
- Zoning and circulation planning
- Furniture layouts and spatial organization
- Development of design proposals
- Material and finish exploration

Unit 4:

Testing and Evaluation:

- User feedback
- Design refinement
- Evaluation of spatial efficiency
- Circulation and usability testing
- Iterative design improvements

Unit 5:

Final Project and Portfolio:

- Project documentation
- Final presentation
- Portfolio development
- Design process documentation
- Reflective evaluation

References:

- Ambrose, G., Design Process, AVA Publishing
- Baxter, M., Product Design, CRC Press
- Cross, N., Design Thinking, Bloomsbury

SEMESTER-03

TYPOGRAPHY & LAYOUT DESIGN

BVD301

Course Outcomes:

- CO1: Understand typographic fundamentals
- CO2: Apply typography principles effectively
- CO3: Create structured layouts
- CO4: Analyze typographic compositions
- CO5: Design communication materials using typography

Unit 1:

06

Introduction to Typography:

- History of typography
- Anatomy of type
- Typeface classification

Unit 2:

06

Typography Principles:

- Legibility and readability
- Spacing and alignment
- Hierarchy

Unit 3:

06

Layout Design Basics:

- Grid systems
- Page composition
- Visual balance

Unit 4:

06

Typography for Communication:

- Editorial design
- Advertising typography

Unit 5:

06

Applied Typography & Layout:

- Poster and publication design
- Digital and print layouts

References:

- Lupton, E., Thinking with Type, Princeton
- Samara, T., Typography Workbook, Rockport
- Bringhurst, R., The Elements of Typographic Style, Hartley & Marks

SPATIAL DESIGN & PLANNING

BVD302

Course Outcomes:

After completing the course, students will be able to:

- CO1: Understand spatial design concepts including scale and dimensions
- CO2: Analyze human interaction with space and furniture
- CO3: Apply zoning and space planning principles to layouts
- CO4: Visualize spatial forms effectively with proper dimensioning
- CO5: Design functional, ergonomic, and aesthetically coherent spaces

Unit 1:

06

Introduction to Spatial Design:

- Space and form
- Human scale and proportion
- Scale and dimensions in spatial design
- Anthropometrics and ergonomics

Unit 2:

06

Spatial Elements:

- Planes, volumes, and circulation
- Enclosure and openness
- Furniture as spatial element
- Relationship between furniture and built space
- Spatial hierarchy through elements

Unit 3:

06

Design Principles in Space:

- Balance, rhythm, hierarchy
- Spatial organization
- Zoning principles (functional and activity-based zoning)
- Public, semi-public, and private spatial divisions
- Visual and physical connectivity

Unit 4:

06

Spatial Visualization:

- Orthographic drawings (plans, sections, elevations)
- 3D visualization
- Dimensioning techniques in drawings
- Furniture layouts in plans
- Scaled representation of space

Unit 5:

Applied Spatial Design:

- Interior and exhibition spaces
- Conceptual spatial projects
- Space planning methodologies
- Furniture layout planning
- Circulation efficiency and user movement
- Functional zoning in interior projects

References:

- Ching, F. D. K., Architecture: Form, Space and Order, Wiley
- Lawson, B., The Language of Space, Architectural Press
- Unwin, S., Analysing Architecture, Routledge

FASHION VISUALISATION & TECHNICAL DRAWING

BVD303

Course Outcomes:

- CO1: Draw fashion figures accurately
- CO2: Visualize garments effectively
- CO3: Prepare technical fashion drawings
- CO4: Present fashion concepts professionally
- CO5: Develop fashion illustration portfolios

Unit 1:

06

Fashion Illustration Basics:

- Fashion figure proportions
- Croquis development

Unit 2:

06

Garment Visualization:

- Clothing details
- Fabric rendering

Unit 3:

06

Technical Drawing:

- Flat sketches
- Garment construction details

Unit 4:

06

Presentation Techniques:

- Coloring and textures
- Fashion boards

Unit 5:

06

Applied Fashion Drawing:

- Collection visualization
- Portfolio work

References:

- McKelvey, K., Fashion Drawing, Wiley
- Bina Abling, Fashion Sketchbook, Fairchild
- Jenkyn Jones, S., Fashion Design, Laurence King

PHOTOGRAPHY FOR PRODUCT & SPACE

BVD304P

Course Outcomes:

- CO1: Understand product and spatial photography
- CO2: Apply lighting techniques effectively
- CO3: Style products and spaces for photography
- CO4: Edit photographs professionally
- CO5: Create photography portfolios

Unit 1:

Product & Space Photography Basics:

- Camera settings
- Composition

Unit 2:

Lighting for Products & Interiors:

- Studio lighting
- Natural lighting

Unit 3:

Styling & Composition:

- Product styling
- Spatial framing

Unit 4:

Post-Processing:

- Image correction
- Enhancement techniques

Unit 5:

Applied Photography:

- Portfolio shoots
- Commercial photography

References:

- Hunter, F., Light: Science and Magic, Focal Press
- Freeman, M., The Photographer's Eye, Focal Press
- London, B., Photography, Pearson

TEXTILE STUDIES & SURFACE EXPLORATION

BVD305P

Course Outcomes:

- CO1: Understand textile materials and structures
- CO2: Analyze fabric construction techniques
- CO3: Create surface designs using various techniques
- CO4: Explore textures and patterns creatively
- CO5: Apply textile concepts in design projects

Unit 1:

Introduction to Textiles:

- Classification of textiles
- Natural and man-made fibers
- Basic textile terminology

Unit 2:

Yarn & Fabric Construction:

- Yarn types and properties
- Weaving, knitting, and non-woven fabrics

Unit 3:

Surface Design Techniques:

- Printing techniques
- Dyeing methods
- Surface embellishment

Unit 4:

Texture & Pattern Exploration:

- Visual and tactile textures
- Pattern development
- Motif creation

Unit 5:

Applied Textile Design:

- Textile applications in fashion and interiors
- Experimental surface exploration

References:

- Kadohph, S., Textiles, Pearson
- Briggs-Goode, A., Fashion Textiles, Laurence King
- Seivewright, S., Basics Fashion Design: Textile Design, AVA

DIGITAL TOOLS - III (ADOBE PREMIERE, SKETCH UP, AUTODESK SKETCHBOOK)

BVD306P

Course Outcomes:

- CO1: Understand digital media workflows
- CO2: Edit videos using Premiere
- CO3: Create 3D models using SketchUp
- CO4: Develop digital sketches
- CO5: Integrate tools for design communication

Unit 1:

Introduction to Digital Media:

- Video and spatial software overview

Unit 2:

Adobe Premiere:

- Video editing tools
- Timeline and effects

Unit 3:

SketchUp:

- 3D modeling basics
- Spatial modeling

Unit 4:

Autodesk Sketchbook:

- Digital sketching
- Concept visualization

Unit 5:

Integrated Applications:

- Digital storytelling
- Design presentations

References:

- Adobe Creative Team, Premiere Pro Classroom in a Book
- Daniel Tal, SketchUp for Interior Design, Wiley
- Autodesk, Sketchbook Documentation

STUDIO PROJECT – I

BVD307P

Course Outcomes:

- CO1: Conduct structured design research
- CO2: Develop innovative design concepts
- CO3: Execute studio projects professionally
- CO4: Apply interdisciplinary design skills
- CO5: Present design solutions effectively

Unit 1:

Project Brief & Research:

- Problem identification
- User and market research

Unit 2:

Concept Development:

- Ideation
- Concept refinement

Unit 3:

Design Development:

- Visual and material exploration

Unit 4:

Prototyping & Execution:

- Model making / digital output

Unit 5:

Final Presentation:

- Documentation
- Jury presentation

References:

- Cross, N., Design Thinking, Bloomsbury
- Ambrose, G., Design Process, AVA
- Baxter, M., Product Design, CRC Press

SEMESTER-04

ENVIRONMENTAL STUDIES

BVD401

Course Objective:

- To develop awareness about environmental issues, sustainable development and ecological responsibility, and to enable students to integrate sustainability principles into design practice.

Course Outcomes:

After successful completion of the course, the student will be able to:

- CO1: Understand environmental concepts and ecosystem functioning
- CO2: Identify environmental issues related to design practice
- CO3: Apply sustainability principles in resource usage
- CO4: Understand environmental laws and ethical responsibilities
- CO5: Integrate sustainable practices into professional design work

Unit 1:

06

- **Introduction to Environmental Studies:**
 - Definition, scope and importance
 - Ecosystem structure and function
 - Food chain and food web
 - Biodiversity and conservation
 - Environmental challenges

Unit 2:

06

- **Natural Resources and Sustainability:**
 - Renewable and non-renewable resources
 - Water and forest resources
 - Energy resources
 - Sustainable development goals
 - Circular economy

Unit 3:

06

- **Environmental Pollution and Waste Management:**
 - Air, water and soil pollution
 - Noise pollution
 - Solid waste management
 - E-waste management
 - Recycling and upcycling

Unit 4:

06

- **Environmental Laws and Climate Change:**
 - Environmental Protection Act
 - Wildlife Protection Act
 - Climate change and global warming
 - Environmental Impact Assessment (EIA)
 - Corporate Social Responsibility (CSR)

Unit 5:

- **Sustainable Design Practices:**

- Principles of sustainable design
- Green materials and eco-friendly production
- Life cycle assessment (LCA)
- Carbon footprint in design
- Case studies of sustainable brands

References:

- Bharucha, E., Environmental Studies, Universities Press
- Kaushik, A., & Kaushik, C.P., Environmental Studies, New Age International
- Cunningham, W., & Cunningham, M., Principles of Environmental Science, McGraw Hill
- UNEP Reports on Sustainable Development

SUSTAINABLE DESIGN & PACKAGING

BVD402P

Course Outcomes:

- CO1: Understand sustainability principles
- CO2: Analyze environmental impact of packaging
- CO3: Design sustainable packaging solutions
- CO4: Apply eco-design strategies
- CO5: Evaluate sustainable design case studies

Unit 1:

Sustainability in Design:

- Sustainable development concepts
- Environmental impact of design

Unit 2:

Materials & Packaging:

- Packaging materials
- Life cycle analysis

Unit 3:

Sustainable Packaging Design:

- Eco-friendly packaging
- Structural packaging design

Unit 4:

Regulations & Standards:

- Environmental policies
- Packaging standards

Unit 5:

Applied Sustainable Design:

- Case studies
- Packaging design projects

References:

- Papanek, V., Design for the Real World, Thames & Hudson
- Sherin, A., Sustainable Design, Bloomsbury
- Twede, D., Packaging Design, Wiley

MOTION GRAPHICS

BVD403P

Course Outcomes:

- CO1: Understand motion design principles
- CO2: Create basic animations
- CO3: Apply motion tools effectively
- CO4: Integrate sound and visuals
- CO5: Produce motion graphic outputs

Unit 1:

Introduction to Motion Graphics:

- Principles of motion
- Visual storytelling

Unit 2:

Animation Basics:

- Timing and spacing
- Keyframes

Unit 3:

Motion Design Tools:

- Interface and workflow

Unit 4:

Audio & Visual Sync:

- Sound integration
- Transitions

Unit 5:

Applied Motion Projects:

- Short animations
- Motion graphics projects

References:

- Krasner, J., Motion Graphic Design, Focal Press
- Williams, R., The Animator's Survival Kit, Faber & Faber
- Purves, B., Stop Motion, Focal Press

BUILDING SERVICES

BVD404P

Course Outcomes:

After completing the course, students will be able to:

- CO1: Understand building service systems and construction components.
- CO2: Apply plumbing, electrical, HVAC, ceiling, and acoustic concepts in design.
- CO3: Identify service layouts and structural/service coordination.
- CO4: Integrate services with spatial and interior design.
- CO5: Comply with building regulations and fire safety norms.

Unit 1:

Introduction to Building Services:

- Role of services in buildings
- Integration of services with architectural design
- Overview of building construction components
- Basic construction technology: walls, floors, openings, staircases, and structural detailing

Unit 2:

Water Supply & Sanitation:

- Plumbing systems
- Water supply methods
- Drainage systems
- Sanitary fittings and layouts
- Service shafts and coordination with structure

Unit 3:

Electrical Services & Lighting:

- Lighting systems
- Power distribution systems
- Electrical layouts and safety measures
- Switchgear, wiring systems, and conduit planning
- Coordination of electrical services with ceilings and interiors

Unit 4:

HVAC, Ceiling & Acoustics:

- Heating, ventilation, and air conditioning
- Types of HVAC systems
- Ceiling systems (false ceilings, service ceilings)
- Acoustic principles in buildings
- Sound control methods and acoustic materials
- Integration of HVAC, lighting, and acoustics in ceiling design

Unit 5:

Fire Safety, Building Codes & Service Integration:

- Fire protection systems
- Building regulations and codes
- Service layouts and coordination
- Integration of services with spatial design
- Construction detailing for service accommodation

References:

- Rangwala, S., Building Construction, Charotar
- Arora & Bindra, Building Services, Dhanpat Rai
- Chudley, R., Building Construction Handbook, Routledge

PATTERN MAKING, DRAFTING AND CONSTRUCTION BVD405P

Course Outcomes:

- CO1: Understand pattern making principles
- CO2: Draft basic garment patterns
- CO3: Develop garment designs
- CO4: Construct garments accurately
- CO5: Evaluate fit and finish

Unit 1:

Introduction to Pattern Making:

- Pattern terminology
- Tools and measurements

Unit 2:

Basic Blocks:

- Bodice, skirt, sleeve blocks

Unit 3:

Pattern Development:

- Dart manipulation
- Style variations

Unit 4:

Garment Construction:

- Sewing techniques
- Finishes

Unit 5:

Applied Garment Projects:

- Sample garments
- Fit analysis

References:

- Aldrich, W., Metric Pattern Cutting, Wiley
- Cooklin, G., Pattern Grading, Blackwell
- Armstrong, H., Patternmaking for Fashion Design, Pearson

DIGITAL TOOLS - IV (LUMION, V- RAY, AUTODESK MAYA, ARNOLD) BVD406P

Course Outcomes:

- CO1: Understand complete rendering workflows using multiple software tools.
- CO2: Produce realistic architectural visualizations.
- CO3: Apply advanced lighting techniques using V-Ray and Arnold.
- CO4: Create 3D models and basic animations in Maya.
- CO5: Integrate Lumion, V-Ray, Maya, and Arnold into professional visualization projects.

Unit 1:

06

Rendering Fundamentals:

- Visualization principles
- Basics of photorealistic rendering
- Camera composition and framing
- Introduction to render pipelines

Unit 2:

06

Lumion:

- Real-time rendering
- Importing models and scene setup
- Landscape creation and environment settings
- Lighting presets and effects
- Walkthroughs and basic animations

Unit 3:

06

V-Ray:

- Materials and lighting
- Global illumination concepts
- Texture mapping
- Interior and exterior lighting setups
- Final render output settings

Unit 4:

06

Autodesk Maya + Arnold:

- 3D modeling fundamentals
- Asset creation and scene organization
- Introduction to Arnold renderer
- Arnold materials (AI Standard Surface)
- Lighting with Arnold (area, sky dome, physical lights)
- Camera settings and test renders
- Basic animation workflows
- Arnold render passes and output management

Unit 5:

Integrated Rendering Workflow:

- Interoperability between Maya, Arnold, V-Ray, and Lumion
- Professional visualization projects
- Advanced lighting and material coordination
- Still renders and short animations
- Portfolio-ready visualization output

References:

- Vaughan, W., Digital Modeling, New Riders
- Keller, E., Maya Visual Effects, Focal Press
- Chaos Group, V-Ray Documentation

STUDIO PROJECT – II

BVD407P

Course Outcomes:

- CO1: Execute advanced design projects
- CO2: Integrate multidisciplinary knowledge
- CO3: Develop professional design solutions
- CO4: Evaluate and refine outcomes
- CO5: Present industry-ready portfolios

Unit 1:

- **Advanced Research & Brief**

Unit 2:

- **Concept & Design Strategy**

Unit 3:

- **Design Development**

Unit 4:

- **Prototyping & Execution**

Unit 5:

- **Final Jury & Portfolio**

References:

- Baxter, M., Product Design, CRC Press
- Cross, N., Designerly Ways of Knowing, Springer
- Ambrose, G., Design Thinking, AVA

SEMESTER-05

DESIGN RESEARCH & METHODS

BVD501

Course Outcomes:

- CO1: Understand research methodologies in design
- CO2: Conduct systematic design research
- CO3: Analyze and interpret research data
- CO4: Apply research findings to design projects
- CO5: Document and present research effectively

Unit 1:

06

Introduction to Design Research:

- Meaning and scope of design research
- Types of research in design
- Role of research in design process

Unit 2:

06

Research Methodologies:

- Qualitative and quantitative research
- Primary and secondary data
- Research ethics

Unit 3:

06

Data Collection Tools:

- Surveys and questionnaires
- Interviews and observation
- Case studies

Unit 4:

06

Data Analysis & Interpretation:

- Analysis techniques
- Visual representation of data
- Drawing inferences

Unit 5:

06

Research Documentation:

- Research report writing
- Design thesis basics
- Presentation of findings

References:

- Creswell, J., Research Design, Sage
- Kumar, R., Research Methodology, Sage
- Martin, B., Universal Methods of Design, Rockport

ENTREPRENEURSHIP & DESIGN MANAGEMENT

BVD502

Course Outcomes:

- CO1: Understand entrepreneurial principles
- CO2: Apply design management strategies
- CO3: Develop viable business models
- CO4: Market design products and services
- CO5: Manage design enterprises effectively

Unit 1:	06
Entrepreneurship Fundamentals:	
• Entrepreneurial mindset	
• Role of entrepreneurship in design	
Unit 2:	06
Design Management:	
• Managing creative teams	
• Design strategy	
Unit 3:	06
Business Models for Designers:	
• Value proposition	
• Pricing and costing	
Unit 4:	06
Marketing & Branding:	
• Brand development	
• Marketing strategies for design	
Unit 5:	06
Legal & Financial Aspects:	
• Funding and budgeting	
• Risk management	

References:

- Drucker, P., Innovation and Entrepreneurship, Harper
- Best, K., Design Management, Bloomsbury
- Osterwalder, A., Business Model Generation, Wiley

ADVANCED FASHION COLLECTION DEVELOPMENT BVD503A

Course Outcomes:

- CO1: Develop concept-driven fashion collections
- CO2: Translate concepts into garments
- CO3: Apply advanced pattern and construction skills
- CO4: Execute professional fashion collections
- CO5: Present fashion work effectively

Unit 1:

06

Collection Research & Theme Development:

- Trend analysis
- Concept boards

Unit 2:

06

Design Development:

- Silhouettes and detailing
- Fabric selection

Unit 3:

06

Technical Development:

- Pattern development
- Garment specifications

Unit 4:

06

Collection Execution:

- Sample development
- Quality control

Unit 5:

06

Final Presentation:

- Line sheets
- Fashion portfolio

References:

- Jones, S. J., Fashion Design, Laurence King
- Seivewright, S., Fashion Design Research, AVA
- Aldrich, W., Metric Pattern Cutting, Wiley

SPACE PLANNING & HUMAN FACTORS

BVD503B

Course Outcomes:

- CO1: Understand human factors in space design
- CO2: Apply ergonomic principles
- CO3: Design functional spatial layouts
- CO4: Integrate user needs in space planning
- CO5: Prepare professional space design documentation

Unit 1:	06
Human Factors in Design:	
• Ergonomics	
• Anthropometrics	
Unit 2:	06
Space Planning Principles:	
• Zoning	
• Circulation	
Unit 3:	06
User-Centered Space Design:	
• Behavioral studies	
• Accessibility	
Unit 4:	06
Applied Space Planning:	
• Residential spaces	
• Commercial spaces	
Unit 5:	06
Design Documentation:	
• Space planning drawings	
• Design presentations	

References:

- Panero, J., Human Dimension & Interior Space, Watson-Guptill
- Ching, F., Interior Design Illustrated, Wiley
- Lawson, B., The Language of Space, Architectural Press

ADVANCED BRANDING & MOTION GRAPHICS

BVD503C

Course Outcomes:

Students will be able to:

- CO1: Develop advanced branding strategies
- CO2: Design comprehensive brand identity systems
- CO3: Apply motion graphics techniques to branding
- CO4: Produce professional brand-based motion content
- CO5: Execute and present integrated branding projects

Unit 1:

06

Brand Strategy & Motion Graphics Fundamentals:

- **Brand Strategy**
 - Brand identity systems
 - Brand positioning
 - Branding frameworks
- **Motion Graphics Basics**
 - Interface and workflow
 - Keyframes and Graph Editor
 - Shape layers
 - Text animation (presets and manual methods)

Unit 2:

06

Visual Branding & Compositing Techniques:

- **Visual Branding**
 - Logo systems
 - Brand guidelines
- **Compositing & Effects**
 - Green screen removal (Keylight)
 - Masking and rotoscoping
 - Tracking (point and planar)
 - Expressions (introduction)
 - CGI integration basics

Unit 3:

06

Motion Branding & Advanced Motion Graphics:

- **Motion Branding**
 - Motion identity systems
 - Animated logos
 - Brand-based motion content

- **Advanced Motion Techniques**

- Lighting
- Null objects and parenting
- Advanced typography animation
- Infographics and UI animation
- Particle effects and simulations
- Plugins overview (Element 3D, Saber, Trapcode)

Unit 4:

06

Color, Audio & Rendering Workflow:

- Color grading techniques
- Alpha channel and transparency export
- Media Encoder workflow
- Export settings for web, broadcast, and film
- Sound integration
- Audio editing and lip-sync basics
- Camera motion and scene transitions

Unit 5:

06

Integrated Brand Campaign Project:

- Integrated branding project
- Advertisement / short VFX motion piece
- Title design for films and ads
- Final execution and professional presentation

References:

- Wheeler, A., Designing Brand Identity, Wiley
- Krasner, J., Motion Graphic Design, Focal Press
- Lupton, E., Graphic Design Thinking, Princeton

PROFESSIONAL ETHICS & INTELLECTUAL PROPERTY

BVD504

Course Outcomes:

- CO1: Understand professional ethics
- CO2: Identify intellectual property rights
- CO3: Apply legal knowledge in design practice
- CO4: Protect creative work
- CO5: Practice ethical decision-making

Unit 1:

06

Professional Ethics:

- Ethical principles in design
- Professional responsibility

Unit 2:

06

Intellectual Property Rights:

- Copyrights
- Patents and trademarks

Unit 3:

06

Design Law:

- Design registration
- Licensing

Unit 4:

06

Contracts & Practice:

- Client contracts
- Consultancy ethics

Unit 5:

06

Case Studies:

- Ethical dilemmas
- IP infringement cases

References:

- WIPO, Intellectual Property Handbook
- Bainbridge, D., Intellectual Property, Pearson
- Papanek, V., Design for the Real World, Thames & Hudson

STUDIO PROJECT – III

BVD505P

Course Outcomes:

- CO1: Execute advanced studio projects
- CO2: Integrate research into design
- CO3: Produce professional design solutions
- CO4: Demonstrate technical competence
- CO5: Present industry-ready outcomes

Unit 1:

- **Research & Brief Development**

Unit 2:

- **Concept & Ideation**

Unit 3:

- **Design Development**

Unit 4:

- **Execution & Prototyping**

Unit 5:

- **Final Jury & Documentation**

References:

- Cross, N., Design Thinking, Bloomsbury
- Baxter, M., Product Design, CRC Press
- Ambrose, G., Design Process, AVA

SEMESTER-06

CAPSTONE PROJECT

BVD601P

Course Outcomes:

- CO1: Conduct independent design research
- CO2: Develop innovative design solutions
- CO3: Execute professional capstone projects
- CO4: Evaluate and refine outcomes
- CO5: Demonstrate readiness for professional practice

Unit 1:

- **Project Proposal & Research**

Unit 2:

- **Concept Development**

Unit 3:

- **Design Execution**

Unit 4:

- **Testing & Refinement**

Unit 5:

- **Final Presentation & Documentation**

References:

- Baxter, M., Product Design, CRC Press
- Cross, N., Designerly Ways of Knowing, Springer
- Ambrose, G., Design Thinking, AVA

INTERNSHIP

BVD602P

Course Outcomes:

- CO1: Gain industry exposure
- CO2: Apply academic knowledge in practice
- CO3: Develop professional skills
- CO4: Understand workplace ethics
- CO5: Prepare for employment or entrepreneurship

Course Structures:

- Industry placement
- Professional training
- Supervisor evaluation

PORTFOLIO DEVELOPMENT & JURY

BVD603P

Course Outcomes:

- CO1: Compile professional design portfolios
- CO2: Present work confidently
- CO3: Demonstrate creative identity
- CO4: Communicate design process clearly
- CO5: Achieve industry readiness

Course Structures:

- Portfolio curation
- Design documentation
- External jury evaluation



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