

**FFCBCS Structure of B. Design (Visual Graphics & Animation)
Applicable from 2021 -2025 Batch**

**DIT UNIVERSITY
Dehradun**



**Detailed Course Structure
of
B.Design (Visual Graphics & Animation)**

FFCBCS Structure of B. Design (Visual Graphics & Animation) Applicable from 2021 -2025 Batch

Structure of B.Des (Visual Graphics & Animation) FFCBCS Program

Basket/ Area	Minimum Credits to be taken	Credit per course	Courses
Language & Literature (LL) Core: Professional Communication Elective: Choose any 1 LL course	6	3	2
Discipline Core (DC)	92	-	31
Discipline Elective (DE) Core: None Elective: Choose any 6 DE courses	18	3	6
Skill Enhancement Courses (SEC) Core: None Elective: Choose any 4 SEC courses	8	2	4
Ability Enhancement Courses (AEC) Core: Entrepreneurship & start-ups Elective: Environmental Science, Indian Constitution, Aptitude & Soft Skills	8	2	4
Humanities & Liberal Arts (HL) Core: None Elective: Choose any 3 HL Courses	9	3	3
Free Electives (FE) Core: None Elective: Choose any 3 FE Courses	9	3	3
Total Credits	150		

DIT University B.Des (Visual Graphics & Animation) FFCBCS Program Structure

Basket/ Area	Credits	Weightage (%)
Language & Literature (LL)	6	4
Discipline Core (DC)	92	61
Discipline Elective (DE)	18	12
Skill Enhancement Courses (SEC)	8	5.5
Ability Enhancement Courses (AEC)	8	5.5
Humanities & Liberal Arts (HL)	9	6
Free Electives (FE)	9	6
Total	150	100

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Course Baskets (other than DC/DE) for B.Des (Visual Graphics & Animation) Program

Course Code	FFCBCS Baskets (Other than DC/DE)					
	Language & Literature (Min 6 credits to be taken)	Contact Hours				Credits
	Name of Courses	L	T	P	S	C
LAF181	Professional Communication	2	0	2	-	3
LAF182	Indian English Literature	3	0	0	-	3
LAF183	English Language Teaching	3	0	0	-	3

Course Code	Skill Enhancement (Minimum 8 Credits to be taken)					
	Name of Courses	Contact Hours				Credits
		L	T	P	S	C
CSFXXX	Technical Training 1	0	0	4	-	2
CSFXXX	Technical Training 2	0	0	4	-	2
CSFXXX	Value Added Training 1	0	0	4	-	2
CSFXXX	Value Added Training 2	0	0	4	-	2
DC	MOOCS Courses (as advised by the departments)	2	0	0	-	2

Course Code	Ability Enhancement (Minimum 8 Credits to be taken)					
	Name of Courses	Contact Hours				Credits
		L	T	P	S	C
CHF201	Environmental Science	2	0	0	-	2
LAF285	Indian Constitution	2	0	0	-	2
MEF483	Entrepreneurship & Start-ups	0	0	4	-	2
UCF201	Aptitude & Soft Skills	2	0	0	-	2

Course Code	Humanities & Liberal Arts (Minimum 9 Credits to be taken)					
	Name of Courses	Contact Hours				Credits
		L	T	P	S	C
LAF281	Introduction to Psychology	3	0	0	-	3
LAF381	Positive Psychology & Living	3	0	0	-	3
LAF481	Application of Psychology	3	0	0	-	3
LAF282	Human Values	3	0	0	-	3
LAF283	Literature, Language & Society	3	0	0	-	3
LAF284	Principles of Management	3	0	0	-	3
LAF482	Intellectual Property Rights	3	0	0	-	3
LAF382	Engineering Economics	3	0	0	-	3

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Course Code	Free Electives (Minimum 9 Credits to be taken)					
	Name of Courses	Contact Hours				Credits
		L	T	P	S	C
ECF481	Analogue Electronics (ECE)	2	0	2	-	3
ECF482	Cellular Communication Networks (ECE)	2	0	2	-	3
ECF381	Microcontroller (ECE)	2	0	2	-	3
ECF382	Bio Medical Instrumentation (ECE)	2	0	2	-	3
ECF483	Digital Image Processing (ECE)	2	0	2	-	3
CSF381	Software Project Management	3	0	0	-	3
CSF345	Introduction to Data Science	3	0	0	-	3
CSF482	Introduction to Cyber Security	3	0	0	-	3
MEF381	Composite Materials	3	0	0	-	3
MEF481	Total Quality Management	3	0	0	-	3
MEF482	Renewable Energy Sources	3	0	0	-	3
PEF381	Carbon Capture & Sequestration	3	0	0	-	3
PEF491	Polymer Technology	3	0	0	-	3
PEF492	Health, Safety & Environment in Industry	3	0	0	-	3
CEF281	Properties of Materials	3	0	0	-	3
CEF382	Disaster Preparedness, Planning & Management	3	0	0	-	3
CEF481	Environmental Management & Sustainability	3	0	0	-	3
CEF482	Natural Dynamics	3	0	0	-	3
CEF483	GIS	3	0	0	-	3
CEF484	Resource Dynamics & Economic Implications	3	0	0	-	3

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Discipline Core (92 Credits)							
	Name of Courses	Pre- requisite Courses	L	T	P	S	C
VGF101	History of Animation And Visual Effects		2	0	0	0	2
VGF102	Principles & Elements of Design		0	0	2	1	2
VGF103	Rudiments of Animation Drawing		0	0	4	1	3
VGF104	Visual Composition		0	0	4	1	3
VGF105	Introduction to Digital Design		0	0	4	0	2
VGF106	Raster & Vector Graphics		0	0	6	0	3
VGF107	Advertising Design		1	0	2	0	2
VGF201	Techniques of Photographic Composition		0	0	4	0	2
VGF202	Character Designing for Animation		0	0	4	1	3
VGF203	Basics of 3D Animation		0	0	6	0	3
VGF204	Classical Animation		0	0	6	0	3
VGF205	Basic Compositing and Visual Effects		0	0	6	0	3
VGF206	Planning for Animation		2	0	0	0	2
VGF207	Design for Web		0	0	4	0	2
VGF208	Communication		0	0	4	0	2
VGF209	Typography		0	0	2	1	2
VGF211	Interaction Design		0	0	4	0	2
VGF212	Publication Design		0	0	2	1	2
VGF301	Stop Motion Animation		2	0	2	0	3
VGF302	Advanced Cel Animation		0	0	4	1	3
VGF303	Techniques of 3D Animation		0	0	4	1	3
VGF304	Digital Illustration		0	0	2	1	2
VGF305	Advanced 3D Animation Techniques		0	0	6	0	3
VGF306	Video Editing		0	0	4	1	3
VGF307	Animation Effects		0	0	6	0	3
VGF308	Animation Project		0	0	8	0	4
VGF309	Package & Branding Design		1	0	4	0	3
VGF401	Environmental Graphics		0	0	2	1	2
VGF402	Ethics & Laws for Media		2	0	0	0	2
VGF403	Thesis Project		0	0	16	0	8
VGF405	Practical Training		-	-	-	-	10

Discipline Electives (Minimum 18 Credits to be taken)							
	Name of Courses	Pre- requisite Courses	L	T	P	S	C
VGF141	Introduction to Promotional Designs	None	2	0	4	0	3
VGF142	Introduction to UI Design	None	0	0	6	0	3
VGF143	Introduction to UX Design	None	3	0	0	0	3
VGF241	Painting with Pixels	None	0	0	6	0	3
VGF242	Programming for Designers	None	0	0	6	0	3
VGF243	Digital Cinematography	None	0	0	6	0	3
VGF244	Rigging	None	0	0	6	0	3

**FFCBCS Structure of B. Design (Visual Graphics & Animation)
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Detailed Syllabus**

Program/Branch: B. Design – Visual Graphics & Animation

Subject Code	VGF101	Subject Title	HISTORY OF ANIMATION & VISUAL EFFECTS						
LTPS	2,0,0,0	Credit	2	Subject Category	DC	Year	1 st	Semester	I

Course Objective:

UNIT I

Prehistoric visual representations -Paleolithic to the Neolithic Period-Lascaux, Altamira, Indian evidences. The earliest writing-Mesopotamian visual identification, Egyptian hieroglyphs, Chinese calligraphy, Pictographs to Alphabets.

UNIT II

Development of art from the time of Civilizations upto the age of enlightenment – Mesopotamian, Egyptian, Indian, Chinese, Greek & Roman civilizations, Byzantine, Gothic, Renaissance era and Baroque.

UNIT III

Development of the art of printing – the invention of paper and discovery of printing, the invention of movable type. Early European block printing, Copperplate engraving etc. Illuminated Manuscripts & German illustrated books. Graphic design of the Rococo Era. Development of art from imaginative to ideological – Romanticism, Impressionism, Expressionism and Cubism, Phobism, Fauvism

UNIT IV

Twentieth Century graphic design- Industrial Revolution-Impact of technology upon visual communication - revolution in printing-development of photography as a communication tool- Victorian era graphic design- development of Lithography.

UNIT V

Art and Craft movements - Art Nouveau, Modernism, Art Deco, Bauhaus, Organic design, Minimalism, Pop art, Postmodernism, American Kitsch, Conceptual art.

COURSE OUTCOME

To provide an historical overview of visual representations
To understand the development process of art and graphics
To gain knowledge about various art movements

REFERENCE BOOKS:

1. A Concise History of Art: G.Buzin
2. Encyclopedia of World Art (Vol.I&II): Mcgraw Hill Publication
3. Necessity of Art : Ernest Fisher
4. Meggs' History of Graphic Design : Philip B. Meggs, Alston W. Purvis
5. Graphic Design History: A Critical Guide :Johanna Drucker, Emily Mcvarish

FFCBCS Structure of B. Design (Visual Graphics & Animation) Applicable from 2021 -2025 Batch

Subject Code	VGF 102	Subject Title	PRINCIPLES & ELEMENTS OF DESIGN						
LTPS	0,0,2,1	Credit	2	Subject Category	DC	Year	1 st	Semester	I

OBJECTIVE: The course is intending to provide knowledge about principles and elements of design.

UNIT I

Introduction to basic elements of graphic design: Line– line direction and meanings-quality of lines implied, lines and line of forces, Shape- organic shape and geometric shapes-nonrepresentational shape and representational shape, Forms-relationship with 2d shape and 3d forms, Space –negative space and positive space-figure/ground relation, Color-subtractive and additive color-primary, secondary in both modes- Color wheel-what is hue, saturation and value- what is shade, tint and tones-color schemes – monochromatic, analogous, complementary, split complementary, triadic color, double complementary etc. - Color meaning in various context such as culture, religion, gender and emotional factor, texture – visual texture and tactile texture, texture and light value, pattern etc. Type: typeface, typeface family etc. Typeface as a graphical element- selection of a type family in design.

UNIT II

Basic principles of design: balance, proportion, rhythm, emphasis, unity etc. Laws of perception –Gestalt theory: similarity, proximity, continuity, closure etc. Scale and proportion in design-Mathematical ratios and proportional systems: Fibonacci numbers, The Golden Ratio.

UNIT III

Concepts of visual design: Design methodology, problem-solving -Visual structure and visual Interest, visual analysis and refinement of visual representations. Exercises on visual composition and layout: Hierarchy-Centre of visual Impact - How to read a page: active and Passive areas of design - How we view a screen: F Pattern - Inverted pyramid methods. The use of grids in graphics composition. Grid types – Symmetrical- Asymmetrical - Backwards movement - Formats - Margins –slug – Bleed - Columns –Gutters. The relationship of visual form to meaning – Type, Image, Shape relationships.

UNIT IV

Exercise based on nature study: Patterns, color schemes, shapes etc. from nature.

UNIT V

Brainstorming: How we can make a solution for creative problem-identifying needs and target - development of concept-Selection of elements- drafting ideas. Tessellation of shapes (geometric and organic) with various color schemes. Exercise on logo design: size matters, selection of colors, typographic selections etc.

Poster Design/ Advertisement design: design various type of posters- Propaganda posters, Event posters, campaign posters etc.- application of grid system in layout.

REFERENCE BOOKS:

1. The Elements of Graphic Design: Space, Unity, Page Architecture, and Type: Alexander W. White.
2. Exploring the Elements of Design: Mark A. Thomas, Poppy Evans

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Applicable from 2021 -2025 Batch

Subject Code	VGF 103	Subject Title	RUDIMENTS OF ANIMATION DRAWING						
LTPS	0,0,4,1	Credit	3	Subject Category	DC	Year	1 st	Semester	I

OBJECTIVE: The course should enable the student to understand the basics of drawings for animation

UNIT I

Introduction to Different Drawing Materials and Tools - Dry Media (Pencils, Charcoals, Chalks, Crayons, Pastels, Erasers, Smudging Tools) - Wet Media (Dip Pens, Disposable and Cartridge Pens – Brushes) – Inks (Water Based, Alcohol Based, Indian/Chinese Ink) – Paints (Water Based, Acrylic, Oil) - Drawing Surfaces – (Papers – Newsprint, Watercolor Paper, Charcoal Paper, Canvas) - Tools for Erasing and Sharpening – Palettes – Knives - Easels.

UNIT II

Doodling and Noodling (Drawing Straight Lines, Drawing Curved Lines, Free Hand Drawing) – Holding the Pencil – Angle and Direction of Lines (Drawing Lines, Circles, Ovals, Scribbles, Patterns Etc.) - Shapes and Forms – Memory and Imagination Drawing - Drawing with Grids.

UNIT III

Drawing from Observation –Still-life Drawing – Use of Basic Shapes and Forms – Sketching Poses – Study of Live Models - Rapid Sketching from Live Models - Attitude - Gestures - Line Drawing - Quick Sketches - Thumbnails - Stick Figures - Line of Action – Balance – Rhythm – Positive and Negative Spaces - Silhouettes - Caricaturing Fundamentals – Exaggeration

UNIT IV

Perspective Drawing – Vanishing Points – Orthogonal Lines – Horizon –Eye Level – One Point Perspective – Two Point Perspective - Three Point Perspective – Multi- Point Perspective - Overlapping and Intersection of Shapes in One Point, Two Point and Three Point Perspective Views – Foreshortening Isometric, axonometric.

UNIT V

Tones - Lighting and Shading – Basic 3Dimensional Light Set Up – Several Types of Shadows – Cast Shadow – Contact Shadow – Contour Shadow – Reflected Light – Overhang Shadow – Highlight – Core Shadow – Objects and Shapes in Perspective with Light and Shade.

REFERENCE BOOKS:

1. Exploring the Elements of Design : Mark A. Thomas, Poppy Evans
2. The Art of Composition : Michael Jacobs
3. The Art of Pictorial Composition : Wolehonok
4. Complete Books of Artist Techniques : Dr. Kurt Herbers

FFCBCS Structure of B. Design (Visual Graphics & Animation)

Applicable from 2021 -2025 Batch

Subject Code	VGF 104	Subject Title	VISUAL COMPOSITION						
LTPS	0,0,4,1	Credit	3	Subject Category	DC	Year	1 st	Semester	II

OBJECTIVE: To develop an understanding of the basic elements of compositions that merge to form the language of visual communication.

Unit I

Visual Perception: The Psychology of Visual Perception, Human eye and vision, Perceiving Objects, Colour, Depth and movement. Spatial Vision, Colour Spectrum and Psychology of Colour

Unit II

Visual Components: Art and Science of Imaging: Human eye and Camera, Composition and Framing & Image Lay out, Basic features and operation of Camera, Image Formation – Aperture, Shutter speed, Depth of Field and Depth of Focus, Basic techniques for Composition - Principles and Rules

Unit III

Elements of Visual composition: Space – Line – Shape –Form, Horizontal and vertical compositions, Golden ratio-1/3 rule, Movement – Rhythm, Pattern etc.

Unit IV

Developing Visual Grammar: Imaging Techniques – Image size, Angle etc. View Points – Moving shots – Camera Movement – Subject Movement – Combined Movement, Simple Editing Principles - Cut, fade, Dissolves etc. Scenes and Sequences and visual narratives

Unit V

Creating a Visual Structure: Narrative art forms- Types and characteristics, Art of Film Making – Stages in Brief, Elements of a Story-Plot, Character, plot structures, Development of a Story Board from a story, Analyzing the visual structure of different visual story telling aids

COURSE OUTCOME

The students will be able to:

- Become aware of the principles and elements of visual design and an understanding of the grammar of visual narratives.
- Gain the ability to compose visuals and visual narratives
- Develop creative problem solving skills used in communicating visually as an artist.

REFERENCE

- Film and the Director : Don Livingston
- Film Technique and Film Acting : V.I. Pudovkin
- Technique of Film : SpottisWoode
- Film Form : S.Eisenstein
- Art of Pictorial Composition : Wolohomok

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Subject Code	VGF 105	Subject Title	INTRODUCTION TO DIGITAL DESIGN						
LTPS	0,0,4,0	Credit	2	Subject Category	DC	Year	1 st	Semester	II

OBJECTIVE: The course should enable the student to work with digital design tools

UNIT I

Photoshop fundamentals: Introduction of interface, menu and tool box, layers and blending options, gradient, color correction, retouching images, masking, filters. Image making and manipulation, paint with brush tool, save file, export file.

UNIT II

Digitization of Design ideas- Application in Design projects.

REFERENCE BOOKS:

1. Fundamentals of Computers- V. Rajaraman
2. Adobe Illustrator CS5 One-on-One by Deke McClelland
3. Adobe Photoshop Bible
4. The Adobe Photoshop CS6 Book for Digital Photographers by Scott Kelby

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Subject Code	VGF 106	Subject Title	RASTOR & VECTOR GRAPHICS						
LTPS	0,0,6,0	Credit	3	Subject Category	DC	Year	1 st	Semester	II

UNIT I

Digital Image- Pixels – Bit Depth – DPI – LPI - Resolution - File Formats (Print and screen media Formats - GIF, JPEG, TIFF, etc.) - Compression: Lossy - Lossless - Colour: Colour Coding - Process colour (CMYK) – RGB - Spot Colour - Colour systems. Duotones - Tritones – Quadratonnes etc. Selection Tools, Retouching Tools, Path Making Tools, Image Adjustment Options. Processing Camera RAW Layer, Channel, Mask, Path, Layer Comp, Paragraph & Character, Swatches, Adjustment Layers.

UNIT II

Preference Settings, Color Settings, Assign Profile Automate, Script. Proof Setup, Gamut Warning, Bit Preview, Screen Mode Show, Pixel Aspect Ratio. Saving with Clipping Path and alpha Channel, PSD, PDF, EPS, TIFF, JPEG. Camera RAW.

UNIT III

What is the use of blend modes? How to apply blend modes? Different types of blend modes – Normal modes - Darken modes, Lighten modes, Contrast modes, Comparative modes and Color modes. Application of blend modes - Creating custom textures for 3D models, Blending modes for compositing etc.

UNIT IV

Introduction- What is Vector? Technical Differences of Vector& Raster Imaging, Adobe Illustrator/ Ink scape, Document Profile, Art boards, File Size, Page Orientation, Units, Bleed, Color Mode, Raster Effects Resolution. Tools: Stroke & Fills, Basic Shape Tools, Pen Tool, Transformation, Rotation, Perspective, Grid, Guides. Type Tool: Character & Paragraphs, Type Controls, Path & Area Typing, Paragraph Styles. Glyphs.

UNIT V

Panels: Work Space, Tools & Control, Align & Pathfinder, Appearance, Art boards, Brushes, Color, Color Guide, Radiant, Layers, Links, Stroke Options, Symbols Transparency. Advanced Options & Settings: Preference Settings, Color Settings, assign Profiles Expand, Envelop Distort, Color Guide, Perspective Grid Smart Guide, Live Paint, Image Trace, Wrap, Clipping Mask, Path. Preview: Outline, Over Print, Pixel Preview, Proof Setup. Export: AI, EPS, PDF, SVG, SVGZ & Other Raster Formats

UNIT VI

Design Exercises: Logo or corporate identity design
 Designs based on typography
 Symbols or Icons Designs

REFERENCE BOOKS:

1. Adobe Illustrator Classroom in a Book: Adobe Creative Team
2. The Book of Inkscape - The Definitive Guide to the Free Graphics Editor: Dmitry Kirsanov

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Subject Code	VGF 107	Subject Title	ADVERTISING DESIGN						
LTPS	1,0,2,0	Credit	2	Subject Category	DC	Year	1 st	Semester	II

UNIT I

Evolution of Modern Advertising - Definitions – Scope and present status- - Industrial Revolution - Advertising in the 20th Century. Types of Advertising: Classified - Display -Campaign ads - public service ads etc. Advertisers and Advertising Agencies - organizational structure of advertising agency.

UNIT II

Persuasive forms of Communication – what is persuasive communication. Advertising Theories: Hierarchical Effects Theory-Audience Resistance, Resilience and Selectivity-Marketing Mix -Brand Management and Market Segmentation - Brand Positioning: Strategies for competitive advantages - product class – consumer segmentation. Advertising and Media- Media Planning: Research, Frequency and Continuity, media plan frame work-reach and frequency and GRP goals - creativity in media planning. Ethics in advertising and other commercial art forms.

UNIT III

Copy writing: Headline, sub-headlines, body, logo, copy style. Slogans or taglines- Writing for print creative, strategy for print media-newspaper, magazine etc.

UNIT IV

Lay-out and Design, Lay-out stages – Thumb-nail sketches - rough sketch - comprehensive layout – application of principles of design - balance - contrast - unity - harmony -proportion - eye movement and emphasis - Art works – photographs, Illustration, typography etc.

UNIT V

Design Project

REFERENCE BOOK:

1. The Advertising Concept Book: Pete Barry
2. Brand Thinking and Other Noble Pursuits: Debbie Millman
3. The Art of Looking Sideways: Alan Fletcher
4. Tested Advertising Methods: John Caples, Fred Hah

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Subject Code	VGF 201	Subject Title	TECHNIQUES OF PHOTOGRAPHIC COMPOSITION						
LTPS	0,0,4,0	Credit	2	Subject Category	DC	Year	2nd	Semester	III

Course Objective:

UNIT I

The Psychology of Visual Perception – Visual Aesthetics – Art of Film Making – Stages in Brief.

UNIT II

Photography as communication tool – Basics of visual composition – Visuals – Image Sizes – Camera Angles – Elements and Principles of picture composition – Balance and Structure –composing movement, rule of space – rule of odd – rule of third – golden triangle etc – Perspective and depth of field – foreshortening.

UNIT III

Basic features of DSLR camera – human eye and camera – Principles of Image formation – Properties of light and its control – Shutter – Lenses and exposure controls – Aperture, focus and depth of field, depth of focus. Color Temperature, Direction, and Quality of Light Etc. Measurement of light – light meters. Histogram – understanding basics of the histogram.

UNIT IV

Grammar for motion picture: Camera Movements – Principle of continuity – action, look, movement, tonal, emotion etc. – Imaginary line concept-crossing the line – 30 0 rule – 180 0 rule etc. – meaning and aesthetic aspects of angle selection.

UNIT V

Exercise: Project work based on the syllabus and parameters of the course under the guidance of supervising faculty.

REFERENCE BOOKS:

1. Basic Principles of Photography : Gerald Millerson
2. Grammar of Shot (Second edition) :Roy Thompson (Focal Press)
3. How to read a film : James Monaco
4. The T.V. Production :Hand Book- Zetti Herbert
5. Elements of film: Lee.R. Bobker
6. The Art of Pictorial Composition :Wolohomok

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Subject Code	VGF 202	Subject Title	CHARACTER DESIGNING FOR ANIMATION						
LTPS	0,0,4,1	Credit	3	Subject Category	DC	Year	2nd	Semester	III

Course Objective:

UNIT I

Human Anatomy – Anatomy of Different Age Groups (Babies, Kids, Teens, Young Adults, Aged) - Basic

Proportions – Basic Understanding of the Skeletal and Muscle System – Human Forms in Perspective.

UNIT II

Male and Female Anatomy - Body Structure, Proportion and Construction of Body Parts (Torso, Face, Eyes, Nose, Ears, Mouth, Hand, Feet Etc.) – Motion Analysis - Study of Poses.

UNIT III

Anatomy of Animals, Birds, Reptiles: Body Structure - Basic Forms, Proportion and Construction of Body

Parts, Head, Legs, Tails - Use of Perspectives While Drawing Animals, Birds, Reptiles and Insects. - Understanding Motion and Grace.

UNIT IV

Cartoon Characters -Understanding Cartoon Characters - Cartoon Constructions – Character Development - Drawing from Basic Shapes - Distortion of Proportions - Cartoon Faces, Eyes, Mouths, Hairs, Nose, Hands, Feet - Facial Expressions.

UNIT V

Classic Cartoon Characters (Humans, Animals, Birds, Reptiles –Cute, Screwball, Goofy, Heavy, Pugnacious –Fairy Tale Characters, Gnomes, Elves, Dwarfs, Witches) - Manga Style

REFERENCE BOOKS:

1. How to Draw What You See: Rudy De Reyna
2. Figure Study Made Easy: Aditya Chari
3. Figure Drawing Without a Model: Ron Tiner
4. Classic Human Anatomy: The Artist's Guide to Form, Function, and Movement: Valerie L. Winslow
5. Anatomy for the Artist: Sarah Simblet
6. The Art of Animal Drawing: Construction, Action, Analysis, Caricature: Ken Hultgen
7. Animal Drawing: Anatomy and Action for Artists: Charles R. Knight
8. Animal Anatomy for Artists: Eliot Goldfinger
9. Bird Anatomy for Artists: Natalia Balo
10. Cartoon Animation: Preston Blair
11. Disney Animation - The Illusion of Life: Frank Thomas and Ollie Johnston
12. How to Draw Animation - Learn the Art of Animation from Character Design to Storyboards and Layouts: Christopher Hart

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Subject Code	VGF 203	Subject Title	BASICS OF 3D ANIMATION						
LTPS	0,0,6,0	Credit	3	Subject Category	DC	Year	2nd	Semester	III

Course Objective:

UNIT I

Introduction to 3D animation, its uses and scope, 3D production pipeline, various 3D soft wares - Different file types used in 3D animation and their applications- Basic skills for handling the selected software like transforming objects, object properties, hierarchies, pivots, etc.

UNIT II

Modeling techniques like Spline, NURBS, Polygon and Sub D- Various tools and their applications, Detailed modeling of furniture, instruments, character props, etc.

UNIT III

Shaders and Materials, 2D and 3D textures, Texturing with HDR images, Different Types of Material Creation, Normal and Artificial Lighting – 1 Point, 2 Point, 3 Point Lighting In 3D Space, Common Light Attributes, Shadows and its attributes.

UNIT IV

Introduction to Animation, Key frame creation, Animation curves - Animating through paths, Application of basic animation principles: Squash & Stretch – Timing & Spacing – Anticipation – Slow-In & Slow-Out. 3D Cameras, Creating Camera movements.

UNIT V

Exterior Modeling: - Environments- Buildings, Hills, City Etc. - Interior Modeling: - Architectural / Industrial Structures - Exterior Lighting – Interior Lighting, Rendering basics, Global illumination, Final gather.

REFERENCE BOOKS:

1. The Art of 3D Computer Animation and Effects: Isaac Kerlow
2. Autodesk 3ds Max 2014 Essentials: Randi L .Derakhshani, DariushDerakhshani
3. Autodesk Maya 2014 Essentials: Paul Naas
4. Blender Master Class - A Hands-On Guide to Modeling, Sculpting, Materials, and Rendering: Ben Simonds
5. Blender Studio Projects: Digital Movie Making: Tony Mullen, Claudio Andaur
6. Digital Animation Bible - Creating Professional Animation With 3ds Max, Lightwave, And Maya: George Avgerakis
7. 3D Automotive Modeling: An Insider's Guide to 3D Car Modeling and Design: Andrew Gahan

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Subject Code	VGF 204	Subject Title	CLASSICAL ANIMATION						
LTPS	0,0,6,0	Credit	3	Subject Category	DC	Year	2nd	Semester	III

Course Objective:

UNIT I

Animation Equipment – Cels - Light Box– Peg Holes and Peg Bars – Line/Pencil Tests - Field Charts - Rostrum Camera - The Exposure Sheet (X Sheet) – Concepts Of: -Soundtrack, Track Breakdown, Key Frames, In-Betweens, Clean-Up etc.

UNIT II

Line of Action - Path of Action – Maintaining Volume - Key Drawings – Extremes and Breakdowns - In-Between – Timing Ladder and Numbering of Animation Drawings – Flipping Key Drawings - Animation

Methods: - Straight Ahead, Pose to Pose, Combination of Both.

UNIT III

Acting for Animators – Character Acting - Difference between Acting for Drama and Acting for Animation

Studies from movies - Motion Analysis - Basics of Animation Acting - Posing, Timing, Staging - Voice Acting –Facial Expressions - Body Language.

UNIT IV

Experiments with Basic Principles of Animation (Squash and Stretch, Anticipation, Staging, Straight Ahead and Pose to Pose Animation, Follow Through and Overlapping Action, Slow Out and Slow In, Arcs,

Secondary Action, Timing, Exaggeration, Solid Drawing, Appeal).

UNIT V

Animating Walks – Normal and Stylized Walks – Walks of Different Types of Human Characters - Runs -

Different Types of Runs – Runs of Different Types of Human Characters - Jumps – Skips – Leaps – Takes and Double Takes – Anticipation – Overlapping Actions – Mass and Weight.

REFERENCE BOOKS:

1. The Illusion of Life: Disney Animation: Ollie Johnston, Frank Thomas
2. The Animator's Survival Kit: Richard Williams
3. Cartoon Animation: Preston Blair
4. Timing for Animation: Harold Whitaker and John Halas
5. How to Make Animated Films: Tony White
6. Animation from Pencils to Pixels: Classical Techniques for the Digital Animator: Tony White
7. The Animator's Workbook: Step-By-Step Techniques of Drawn Animation: Tony White
8. The Male and Female Figure in Motion: Eadweard Muybridge

FFCBCS Structure of B. Design (Visual Graphics & Animation)

Applicable from 2021 -2025 Batch

Subject Code	VGF 205	Subject Title	BASIC COMPOSITING & VISUAL EFFECTS						
LTPS	0,0,6,0	Credit	3	Subject Category	DC	Year	2nd	Semester	III

Course Objective:

UNIT I

What is Compositing? Introduction to After Effects Interface Create a new composition, Timeline panels, Adding footage, Resolution, Quality.

UNIT II

Adjustment layers, Solid layers, Pre-Composition, Layers, Basic Animation Rotation, Scale, Transform, Anchor point, Key frames, Text animation, Easy Ease.

UNIT III

Layer Management Selecting - Moving layers, Trim in and out points, Motion blur, Masking Create Masks - Transforming masks, Mask points, Feather - Animating masks, Blending modes, Track mattes luma, Alpha matte, Animated mattes.

UNIT IV

Effects and Presets Applying effects, Effects and preset panel, Garbage mattes to support keying, Chroma Keying, Color correction.

UNIT V

Tracking Motion tracking, Motion stabilization, Time warp, creating a VFX Demo Reel.

REFERENCE BOOKS:

1. Compositing Visual effects: Steve Wright
2. The art and science of Digital Compositing : Ron Brinkmaan
3. Digital Compositing in Depth: Doug Kelley.
4. Motion Graphics: Graphic Design For Broad cast and Film: Steve Curran
5. How did they do that: Motion Graphics: David Green
6. Creating Motion Graphics with AE: Trish Meyel.

FFCBCS Structure of B. Design (Visual Graphics & Animation)

Applicable from 2021 -2025 Batch

Subject Code	VGF 206	Subject Title	PLANNING FOR ANIMATION						
LTPS	2,0,0,0	Credit	2	Subject Category	DC	Year	2nd	Semester	III

Course Objective:

UNIT-1

Techniques of Animation – Different Types of Animation - Workflows of Different Types of Animation - Preproduction, Production and Post-Production Stages - Types of Animation - Experimental Animations.

UNIT-II

Developing Idea/ Concept - Story - Basic Elements of a Story – Types of Stories - Creating Story Ideas - Sources of Story Line - Adaption - Character Roles - Characterization– Dialogues – Basic Structure Of A Story – Old and Modern Structures – Concept of Acts –Theme – Subplots – Tone – Genre - Writing for Different Types and Groups of Audience – Animation Script - Animation Script Vs. Live Action Movie Script– Shot – Scene – Sequence – Screenplay Format – Elements of Screenplay Format –Montage

UNIT-III

Character Designing - Features of a Character – Types/Kinds of Characters – Designing Props and Assets of Character – Creating Turn Arounds / Character Model Sheets – Blueprints - Character Size Comparison
Charts – Character Attitude Poses

UNIT-IV

Story Board - Definition - Importance of Story Boarding - Different Types of Story Boards - Story Board Formats - Elements of Storyboarding (Design, Color, Light and Shadow, Perspective, Staging, Composition Rules) - Concept of Panels and Its Usages- Floor Plans - Storyboarding Movements - Illustrating Camera Techniques in a Story Board - Visual Continuity – Transitions - Digital Storyboarding

UNIT-V

Introduction to the creation of Animatic – Scanning Storyboard panels and Synchronizing it with the sound tracks.

REFERENCE BOOKS:

1. The Encyclopedia of Animation Techniques: A Comprehensive Step-By-Step Directory of Techniques, with an Inspirational Gallery of Finished Works: Richard Taylor
2. How to Write for Animation: Jeffrey Scott
3. Writing for Animation, Comics and Games: Christy Marx
4. Animation Writing and Development: From Script Development to Pitch: Jean Ann Wright
5. How to Draw Animation - Learn the Art of Animation from Character Design to Storyboards and Layouts: Christopher Hart
6. The Art of the Storyboard - Storyboarding for Film, TV, and Animation: John Hart
7. Exploring Storyboarding: Wendy Tumminello
8. Don Bluth's Art of Storyboard: Don Bluth

FFCBCS Structure of B. Design (Visual Graphics & Animation)

Applicable from 2021 -2025 Batch

Subject Code	VGF 207	Subject Title	DESIGN FOR WEB						
LTPS	0,0,4,0	Credit	2	Subject Category	DC	Year	2nd	Semester	IV

Course Objective:

UNIT I

Study of how an interactive system to be used to form an effective User interface and user Experience Design. Interaction Design Principle.

UNIT II

Utilization of Design concepts, Colors, Typography, Layout & Digital Imaging to form an affective interface system for Internet Media. Using Photoshop make it possible to form an aesthetic Layout.

UNIT III

Introduction to HTML, a language which is used to display & information from the World Wide Web through a browser. Introduction to Notepad++ (An application professionally used to code or script web based content widely)

UNIT IV

Advanced web coding using HTML5 & CSS3 in Dreamweaver. Intro to animation, transition, font & -webkit- techniques in the advanced version of HTML.

UNIT V

Introduction to Responsive Webpage Design (RWD) Layout in connection with 960GS (Grid System) which is used to access the information from web through different devices. Explore the unique layouts in accordance with content, purpose, device, user etc.

REFERENCE BOOKS:

1. Interactive Design for New Media and the Web: Nicholas V. Iuppa
2. Principles of Interactive Design: Lisa Graham
3. The Design of Everyday Things: Donald A. Norman

**FFCBCS Structure of B. Design (Visual Graphics & Animation)
Applicable from 2021 -2025 Batch**

Subject Code	VGF 208	Subject Title	COMMUNICATION						
LTPS	0,0,4,0	Credit	2	Subject Category	DC	Year	2nd	Semester	IV

Course Objective:

UNIT I

Concepts of Communication, Communication Process.

UNIT II

Barriers to Communication, Written Communication – Formal Reports, Technical Reports, Business Correspondence, Notices, Research Paper.

UNIT III

Oral Communication – Dyadic Communication, Meetings, Seminars & Conferences, G. D. Audio Visual Aids. Non Verbal Communication – Personal Appearance Postures, Gestures, Facial Expressions, Eye Contact.

REFERENCE BOOKS:

Business Communication – Lesikar & Pettit

FFCBCS Structure of B. Design (Visual Graphics & Animation)

Applicable from 2021 -2025 Batch

Subject Code	VGF 209	Subject Title	TYPOGRAPHY						
LTPS	0,0,2,1	Credit	2	Subject Category	DC	Year	2nd	Semester	IV

Course Objective:

UNIT I

Art of Writing: Calligraphy: basic tools and instruments: dip pens, brushes, nibs etc. Application of calligraphy in designs: Logo designs, announcements, thematic posters etc. Understanding difference between Calligraphy and Typography.

UNIT II

Understanding typeface: Typefaces and fonts, Anatomy: Apex, Beak, Arm, tail, serif, X height etc. Measurements: relative and absolute, point, pica etc. Em space and En space. Majuscule and minuscule display type and text types.

UNIT III

Classification of type - old style, transitional period, modern, slab serif, sans serif, script, decorative etc.

UNIT IV

Selection of a type face in design: point size, line length, leading, tracking, and kerning. Readability and legibility, integration with visuals, concept, theme etc. 3D type – application of perceptives etc.

UNIT V

Express the meaning or idea of a word by use of size, spacing or placement of letters. Pattern poems or Concrete poetry, Typo grams, Calligramme etc.

REFERENCE BOOKS:

1. Thinking with Type, 2nd revised and expanded edition: Ellen Lupton
2. Hand-Lettering Ledger: Mary Kate McDevitt Publisher: Chronicle Books
3. The Typographic Universe: Letterforms Found in Nature, the Built World and Human Imagination: Steven Heller & Gail Anderson
4. Shadow Type: Classic Three-Dimensional Lettering: Steven Heller & Louise Fili
5. Drawing Type: An Introduction to Illustrating Letter forms: Alex Fowkes.

FFCBCS Structure of B. Design (Visual Graphics & Animation)

Applicable from 2021 -2025 Batch

Subject Code	VGF 211	Subject Title	INTERACTION DESIGN						
LTPS	0,0,4,0	Credit	2	Subject Category	DC	Year	2nd	Semester	IV

Course Objective:

UNIT I

Explore the internet terms like web hosting, web server, client server, domain registration etc. Explain the difference between static and dynamic Web Sites.

UNIT II

Client Side Scripting Language - Java Script: Creating User Logins and Form validation using J Script. Introduction to DOM (Document Object Model) concept.

UNIT III

Server Side Scripting Language - PHP: Explain how the form data are being sent to the server and retrieve it from the server to the browser window.

UNIT IV

Database Management System (DBMS) - Intro to SQL or MySQL which is used to create, read, write, delete and update records / data to/from a database from a PHP file.

UNIT V

Project: Hosting of the student's Portfolio Site or Creating a Blog which showcase their skillset to the realm of multimedia for the job hunting purpose.

REFERENCE BOOK:

1. Adobe Flash Professional CC Classroom in a Book: By Adobe Creative Team Publisher - Adobe Press.
2. Adobe Flash Professional CC: A Tutorial Approach: (Revised and Updated Version) Prof. Sham Tickoo
3. Learning ActionScript 3.0 (A Beginner's Guide): Rich Shupe, Zevan Rosser.
4. Fundamentals of ActionScript 3.0: Develop and Design: Doug Winnie

FFCBCS Structure of B. Design (Visual Graphics & Animation)

Applicable from 2021 -2025 Batch

Subject Code	VGF 212	Subject Title	PUBLICATION DESIGN						
LTPS	0,0,2,1	Credit	2	Subject Category	DC	Year	2nd	Semester	IV

Course Objective:

UNIT I

Layout Design: Directing the Eye, Backwards Movement, Application of Design Principles in Lay Out, Free Style Lay Out, Grid Design etc. understanding of Formats, Margins, Columns and Gutters. Visualization of various layouts- magazine, newspaper, books, screen media etc. Creating a Suitable Grid, Title and Cover Policies. Selecting and Using Type family, White Space, Color, Headlines, The Masthead etc.

UNIT II

Introduction to Adobe InDesign / scribes: Various tools and panels-Character formatting options and paragraph formatting. Colour and swatches palette, understanding of swatches exporting. Objects and its treatments: Shapes, Path – corner options, pathfinder etc. Clipping path and image masking. Page Panel, Insert Page, Concept of master page- apply Master to Page, Override master Item. Number & Section Option, Table of Content, Bullets & Numbering etc. Proof setup: - Pre-flight options, separations preview etc. Exporting of documents, Print booklet options etc.

UNIT III

Book Design: Effective Grid design for the book, Typography, Margins in page design, Layout text and images. Consistency in design: Creating style guides and printing instructions.

UNIT IV

Multipage publication design exercises: Visualization for various Formats: Magazine, Newspaper, books etc. Electronic Publishing: Interactive PDF and Other E-Pub Formats, Interaction Between Movies, Sound Clips URL's And Other E-Books, E-Publication for Various Platforms.

REFERENCE

1. The Big Book of Layouts: David E. Carter
2. Layout Essentials -100 Design Principles for Using Grids: Beth Tondreau
3. Best of Newspaper Design: Society of News Design
4. Designing for Newspapers and Magazines: Chris Frost
5. Layout Workbook: Kristin Cullen
6. Designing Books: Practice and Theory: JostHochuli and Robin Kinross
7. Building Your Book for Kindle: Kindle Direct Publishing

FFCBCS Structure of B. Design (Visual Graphics & Animation)

Applicable from 2021 -2025 Batch

Subject Code	VGF 301	Subject Title	STOP MOTION ANIMATION						
LTPS	2,0,2,0	Credit	3	Subject Category	DC	Year	3 rd	Semester	V

Course Objective:

UNIT I

Difference between Time-Lapse and Stop Motion Animation Techniques – Time Lapse Animation Set Ups
– Creation of Time-Lapse Animations.

UNIT II

Brief History of Stop Motion Photography - General Workflow of Stop Motion Animations – Procedures and Techniques: – Choosing Camera, Tripods, Lights, Software Etc. – Preparation Of: - Script, Storyboard,
Character Designs Etc. - Character and Props Creation for Stop Motion Animation – Set Designing for Stop Motion Animation – Lighting - Post Production.

UNIT III

Cutout Animation Project - Preparation of Characters/ Models – Finding Suitable Materials for Making Characters – Different Medium for Adding Details on a Model - Set Designing – Lighting.

UNIT IV

Puppet Animation /Clay Animation Project – Types of Puppets: –Simple Clay Models, Toys, Maquette, Armature, Simple Wire and Plasticine Puppets, Clothed Puppets - Preparation of Models – Coloring – Costumes - (Clay Modeling) – Set design for animation.

UNIT V

Pixilation Project - Preparation Of: - Script, Storyboard, Models Etc. - Set Designing - Lighting - Animation -Post Production, Sand Animation.

REFERENCE BOOKS:

1. The Animation Book: Kit Laybourne
2. The Encyclopedia of Animation Techniques: A Comprehensive Step-By-Step Directory of Techniques, with an Inspirational Gallery of Finished Works: Richard Taylor
3. Stop Motion - Craft skills for model animation: Susannah Shaw
4. Stop Motion Passion, Process and Performance: Barry J C Purves
5. The Animator's Survival Kit: Richard Williams

FFCBCS Structure of B. Design (Visual Graphics & Animation)

Applicable from 2021 -2025 Batch

Subject Code	VGF 302	Subject Title	ADVANCED CELL ANIMATION						
LTPS	0,0,4,1	Credit	3	Subject Category	DC	Year	3 rd	Semester	V

Course Objective:

UNIT I

Animation of Four Legged and Two Legged Animals - Normal and Stylized Movements of animals

UNIT II

Bird Flight / Movements in Different Stages - Movements of Reptiles - Animating Insects and Fishes.

UNIT III

Phonetics – Standard Mouth Shapes - Dialogue Animation – The Sound Track - Phrasing – Accents – Attitudes – Recoding of Dialogues and Voice-Over –Marking in X Sheets – Synchronizing Sound. - Dialogue Animation of Humanoid Characters.

UNIT IV

Animating Special Effects: - Cloth, Sky, Lightening, Rainfall, Snow, Water Drops, Water Ripples, Waves, Smokes, Fire, Explosions Etc.

UNIT V

Project: Creation of a digital 2D animation short film with proper use of (digital) ink and paint, sound Synchronization etc.

REFERENCE BOOKS:

1. The Animator's Survival Kit: Richard Williams
2. Cartoon Animation: Preston Blair
3. Timing for Animation: Harold Whitaker and John Halas
4. How to Make Animated Films: Tony White
5. Character Animation-2D Skills for Better 3D: Steve Roberts
6. Horses and Other Animals in Motion: Eadweard Muybridge
7. The Illusion of Life: Disney Animation: Ollie Johnston, Frank Thomas
8. Animation from Pencils to Pixels: Classical Techniques for the Digital Animator: Tony White
9. The Animator's Workbook: Step-By-Step Techniques of Drawn Animation: Tony White

FFCBCS Structure of B. Design (Visual Graphics & Animation) Applicable from 2021 -2025 Batch

Subject Code	VGF 303	Subject Title	TECHNIQUES OF 3D ANIMATION						
LTPS	0,0,4,1	Credit	3	Subject Category	DC	Year	3 rd	Semester	V

Course Objective:

UNIT I

Modeling Automobiles - Modeling of Human Body Parts (Head, Ear, Mouth, Limbs, Torso, Etc.), Creation of Blend Shapes, Creating good mesh topology, Mesh Clean-Up.

UNIT II

Materials Through Nodes – Material Utilities – Applying UV Coordinates for Texturing, various techniques of Editing UV Layouts, Importing 3D Objects Directly into Texture Painting Soft wares – Painting UV Map –Application of the Texture - Procedural Texturing.

UNIT III

Study of skeleton Setups – Skeleton Creation – IK and FK –Attribute Controls – Expressions and basic Scripting for Rig –Rig Controls. Constraints – Locking and Hiding Animation Channels – Custom Attributes
– Driven Keys, Creating Rigs for Props and two legged characters.

UNIT IV

Deformers, Skinning, Controlling Skin Weights – Painting skin Weights, Use of Blend Shapes.
MODULE5 Editing Curves, Animation Layering, Animation constrains – Pose creation – linear and Non-linear animation techniques –Modifiers and Controllers. Planning and Blocking Animations, Break downs. Cyclic, animation: Walk, Run, Jump.

REFERENCE BOOKS:

1. Character Development in Blender 2.5: Jonathan Williamson
2. Autodesk 3ds Max 2014 Essentials: Randi L. Derakhshani, DariushDerakhshani
3. Autodesk Maya 2014 Essentials: Paul Naas
4. Blender Master Class - A Hands-On Guide to Modeling, Sculpting, Materials, and Rendering: Ben Simonds
5. 3D Human Modeling and Animation: Peter Ratner
6. Digital Animation Bible - Creating Professional Animation With 3ds Max, Lightwave, And Maya: George Avgerakis
7. Animation Methods - Rigging Made Easy: Rig Your First 3D Character in Maya: David Rodriguez
8. Blender Studio Projects: Digital Movie Making: Tony Mullen, Claudio Andaur

FFCBCS Structure of B. Design (Visual Graphics & Animation)

Applicable from 2021 -2025 Batch

Subject Code	VGF 304	Subject Title	DIGITAL ILLUSTRATION						
LTPS	0,0,2,1	Credit	2	Subject Category	DC	Year	3 rd	Semester	V

Course Objective:

UNIT I

Introduction Digital illustration applications - Creating brush presets - Creating patterns for color mixing, Using pen stroke paths. Digital painting techniques – Using blending modes, Opacity.

UNIT II

Concept Art: Character, Costume, Product, Equipment, Background concepts, Speed painting, Creature Concepts, Flora and Fauna, Comic Book layout & Illustration.

UNIT III

Basics of Information Design visualization – translating data into visuals. Designing statistical information graphics, Semiotics: The representation of objects – the process of simplification.

UNIT IV

Visualizing complex data – process of converting data into useful information using graphics, Recreating events in space and time.

UNIT V

Design Project.

REFERENCE BOOK:

1. Digital painting techniques: Practical Techniques of Digital Art Masters
2. The Visual Display of Quantitative Information: Edward R. Tufte
3. The Skillfull Huntsman: Visual Development of a Grimm Tale (Concept Art)
4. Complete Digital Illustration: A Master Class in Image-Making - Lawrence Zeegen
5. The Complete Guide to Digital Illustration: Steve Caplin, Adam Banks, Nigel Holmes
6. Information Design: Robert Jacobson
7. Envisioning Information: Edward R. Tufte

FFCBCS Structure of B. Design (Visual Graphics & Animation)

Applicable from 2021 -2025 Batch

Subject Code	VGF 305	Subject Title	ADVANCED 3D ANIMATION TECHNIQUES						
LTPS	0,0,6,0	Credit	3	Subject Category	DC	Year	3 rd	Semester	V

Course Objective:

UNIT I

Modeling Different Types of Human Characters (Real, Stylized, Comic, Characters of Different Age Group Etc.). Modeling Animals and Birds - Basic Proportions, Modeling of Body Parts (Head, Ear, Horns, Mouth, Limbs, Torso, Tail, Wings Etc.)

UNIT II

Animating Different Types of Characters - Applying Principles of Animation - Body Language – Posing – Action – Reaction – Push and Pull – Lift – Throw – Staging. Animation of Camera and Light – Animating to Music and Dialogues - Lip Sync – Facial Expressions – Graph Editor - Dope Sheet - Blend Shapes – Basics of Motion Capture. Linear and Non-linear Animation Techniques.

UNIT III

Creating rigs for four legged characters.

UNIT IV

Lighting a Character - Lighting a Scene to Matching the Environment - Exterior Lighting – Interior Lighting. Camera matching techniques.

UNIT V

Ray Tracing - Final Gathering – Global Illumination and Caustic Effects - Render Setups (Single Frame Rendering, Batch Rendering, And Different Rendering Formats) – Motion Blur – Applying Render Passes for Compositing - Image Based Lighting and HDRI Rendering.

REFERENCE BOOK:

1. Autodesk 3ds Max 2014 Essentials: Randi L. Derakhshani, DariushDerakhshani
2. Autodesk Maya 2014 Essentials: Paul Naas
3. Character Animation-2D Skills for Better 3D: Steve Roberts
4. The Animator's Survival Kit: Richard Williams
5. Timing for Animation: Harold Whitaker and John Halas
6. Digital Animation Bible - Creating Professional Animation With 3ds Max, Lightwave, And Maya: George Avgerakis
7. Digital Lighting and Rendering: Jeremy Birn
8. Mastering Mental Ray: Rendering Techniques For 3D And CAD Professionals: Jennifer O'Conner
9. Blender Studio Projects: Digital Movie Making: Tony Mullen, Claudio Andaur
10. Blender Master Class - A Hands-On Guide to Modeling, Sculpting, Materials, And Rendering: Ben Simonds

FFCBCS Structure of B. Design (Visual Graphics & Animation)

Applicable from 2021 -2025 Batch

Subject Code	VGF 306	Subject Title	VIDEO EDITING						
LTPS	0,0,4,1	Credit	3	Subject Category	DC	Year	3 rd	Semester	VI

Course Objective:

UNIT I

How films are made? Persistence of vision, Fragmentation of action, Image sizes LS, MS, Close Up, Shot,

Scene, Sequence. Linear Editing, Nonlinear Editing, Selecting Good shots- stages of editing.

UNIT II

Different Types of cables and connectors- Fire wire, HDMI, SDI, AV, Thunderbolts. Different Media formats- Film, VHS, DV, HD DVD, CD Blue Ray.

UNIT III

Introducing a Non-Linear Editing Software- Project setting- Introducing interface, different windows, Monitors - timeline, tools – Working with Bins, importing footage, Drag and drop editing, three-point editing JKL, time line trimming, rearranging clips in time line.

UNIT IV

Continuity Editing-Match cut, cross cut, jump cut, Dialogue overlapping, L-Cut, J-Cut, Slow motion Fast motion, Synchronizing and mixing Video and Audio.

UNIT V

Working with effects, adding different transitions and effects to Video- Working with Key frames, Compositing, Color Correction, Titling, Exporting to different Video formats.

REFERENCE BOOK:

1. Nonlinear Editing: Bryce Button (Focal Press)
2. Notes on Digital Film Editing: Gerhard Schumm (Digital Publish)
3. Grammar of edit (Second edition): Roy Thompson (Focal Press)
4. Make the cut: Lori Jane Coleman A.C.E & Diana Friedberg. (Focal Press)
5. Grammar of Shot (Second edition): Roy Thompson (Focal Press)

FFCBCS Structure of B. Design (Visual Graphics & Animation)

Applicable from 2021 -2025 Batch

Subject Code	VGF 307	Subject Title	ANIMATION EFFECTS						
LTPS	0,0,6,0	Credit	3	Subject Category	DC	Year	3 rd	Semester	VI

Course Objective:

UNIT I

Visual Effects- Description- Types- Particles – Analysis- Size- Sand Effects – Smoke Effects- Fire Effects – Cloud Effects – Snow Effects.

UNIT II

Fluid Effects-Coloring- designing Clouds Background – Designing Fog Effects – Explosion Effects– Fire Effects with flames - Space Effects and designs- Designing Thick Smoke.

UNIT III

Designing Paint Effects – Coloring paints- Designing Trees and green effects – Designing Weather and seasons –Effects on seasons- Designing Glass image – Designing Different glass reflection- Designing Glow Effects – Liquid Effects and Reflection design.

UNIT IV

Designing Special Effects – Designing effects of Hair and shape – Designing Fur Effects- Designing Clothes and effects.

UNIT V

Visual Effects Tool and advanced functions– Converting images from 2D to 3D Pictures - Creating 3D Effects- Differentiation 2D effects and 3D effects.

REFERENCE BOOKS:

1. The Invisible Art: Mark Cotta Vaz
2. Visual Effects Cinematography: Zoran Perisic
3. Industrial Light & Magic: The Art of Special Effects: Thomas G. Smith
4. The Art and Science of Digital Compositing (The Morgan Kaufmann Series in Computer Graphics) : Ron Brinkmann
5. The Language of Visual Effects: Micheal J. McAlister
6. Special Effects: The History and Technique: Richard Rickitt

FFCBCS Structure of B. Design (Visual Graphics & Animation)

Applicable from 2021 -2025 Batch

Subject Code	VGF 308	Subject Title	ANIMATION PROJECT						
LTPS	0,0,8,0	Credit	4	Subject Category	DC	Year	3 rd	Semester	VI

Course Objective:

Students should create an animation not less than three minutes excluding titles using any of the following methods for their animation project,

- Full 2D Animation
- Full 3D Animation
- Full Stop-motion Animation
- 2D Animation + 3D Animation
- 3D Animation + Stop-motion Animation
- 2D Animation + Stop-motion Animation
- 2D Animation + Visual Effects
- 3D Animation + Visual Effects
- Stop-motion Animation + Visual Effects
- 2D Animation + 3D Animation + Visual Effects
- 3D Animation + Stop-motion Animation + Visual Effects
- 2D Animation + Stop-motion Animation + Visual Effects
- Live Action + Animation
-

Project should be worked out through various production stages after the final approval by the supervising faculty. Students have to complete the final project within the given time period. Student should keep all the important paper works (script, storyboard and character designs) along with them. Viva Voce is part of the examination.

FFCBCS Structure of B. Design (Visual Graphics & Animation)

Applicable from 2021 -2025 Batch

Subject Code	VGF 309	Subject Title	PACKAGE & BRANDING DESIGN						
LTPS	1,0,4,0	Credit	3	Subject Category	DC	Year	3 rd	Semester	VI

Course Objective:

UNIT I

The role of Packaging, An historical perspective, Marketing Considerations, Measuring package design's success. Packaging dynamics.

UNIT II

Anatomy of Packages, Structural designs, Cartons, Bottles, Tubes, Cans, Tubs and Jars, Multi-packs, Clamshells and blister packs.

UNIT III

CDs, Gift Packs, Innovative formats, Materials, Surface graphics, Branding, Typography, Information layout and hierarchy, Back of packs, Photography, Illustration, Color, Symbols and icons, Weights, Measures and bar-codes.

UNIT IV

Study of various package designs in the market, Study of famous packaging portfolios.

UNIT V

Branding a Product with Creative Package Design.

REFERENCE

1. Packaging Design: Successful Product
Branding from Concept to Shelf: Marianne R. Klimchuk and Sandra A. Krasovec
2. Package Design Now: Sue Jenkins
3. Structural Package Designs: Pepin Press
4. Package Design: Daab
5. The Packaging Designer's Book of Patterns: László Roth and George L. Wybenga
6. Special Packaging Designs: The Pepin Press

FFCBCS Structure of B. Design (Visual Graphics & Animation)

Applicable from 2021 -2025 Batch

Subject Code	VGF 401	Subject Title	ENVIRONMENTAL GRAPHICS						
LTPS	0,0,2,1	Credit	2	Subject Category	DC	Year	4 th	Semester	VII

Course Objective:

UNIT I

Understand the different areas of environmental graphic design and it relates to other design disciplines including graphic design, information design, architecture and interior design.

UNIT II

Different types of Environmental art: Site specific art, Green art, Sustainable art and Environmental architecture to develop design concepts.

UNIT III

Develop strategies and design goals that translate into usual communication pieces that connect people to places through Way finding systems, Place making and identity, Exhibition design, Public installations, Branded environments and themed environments.

UNIT IV

Apply principles of color theory, design systems, narrative, legibility, usability and accessibility to articulate visual messages in the environment.

UNIT V

Research and understand the main fabrication processes, technologies and materials involved in the implementation of environmental design projects.

REFERENCE BOOKS:

1. Land & Environmental Art : Jeffrey Kastner
2. Signage & Way finding designs : Chris Calori
3. Environmental Graphics- Project & Process : Wayne Hunt
4. You are Here: Graphics that direct, explain
And Entertain. : Gail Deibler Finke
5. Way finding Pictographic Systems:
Non verbal Universal. : Paul Arthur & Branimir Zlamalik

FFCBCS Structure of B. Design (Visual Graphics & Animation)

Applicable from 2021 -2025 Batch

Subject Code	VGF 402	Subject Title	ETHICS & LAWS FOR MEDIA						
LTPS	2,0,0,0	Credit	2	Subject Category	DC	Year	4 th	Semester	VII

Course Objective:

UNIT I - INTRODUCTION TO INDIAN CONSTITUTION

- A brief introduction to Indian Constitution-Salient features,
- 1.2 Fundamental Rights, Freedom of Press
- Concept of Freedom of Speech & Expression
- Democracy & Media as Fourth estate,
- Press Council of India- Its organizational structure, functions, history and rationale behind its establishment, its powers; Code of conduct for journalists

UNIT II- MEDIA REGULATIONS IN INDIA

- History of Laws regulating the media in India:
- Defamation clauses, Right to privacy, Right to Know, Laws related to Sedition, Obscenity
- Contempt of Court Act 1971, Information Technology Act 2000 and the amendment Act of 2008, Right to Information Act 2005, Contempt of Parliament, Working Journalists Act, Cyber Laws etc.
- Laws related to Broadcasting media, Advertising, Advertising Council of India
- Copyright Act 1957, International Copyright laws, Concept of authorship

UNIT III - MORAL ETHICS AND MEDIA

- An Introduction to the Terms and Concepts of Ethics: Definition of Ethics and its branches, stages of ethical development
- Major theories in Ethics
- Role of conscience in ethical decision making; code of ethics
- Moral relativism and ethno centrism
- Principles of Ethical journalism
- Public relations and Ethics

UNIT IV - ETHICS IN MEDIA

- Media ethics as applied ethics; ethics in changing media environment.
- Media Ethics: Why Ethics Matters in the Field of Media, Ethical perspectives of print, audio and visual media; ethical values
- Ethical issues in the field of Advertisements
- Advertorials, Paid News, and News as a product
- Social Media and Fake news

UNIT V- MEDIA AND SOCIETY

- Mass Media as the Mirror of society and Promoter of Social Change: Mass media and its impact on society
- Transmission of culture and values through media; media and public opinion; media and family; social media addiction
- Media as a business enterprise with profit motives
- Merger of news and entertainment □

REFERENCE BOOKS:

1. Introduction to the Constitution of India : Durga Das Basu
2. Press Laws and Ethics of Journalism : P.K. Ravindranath
3. Introduction to Media Laws and Ethics : Juhi P Pathak
4. Mass Media and the Moral Imagination : Philip J Rossi
5. Media Education in India : Jacob Srambickal
6. Media Ethics : Bart Pattyn
7. Digital Media Ethics : Charles Ess
8. The Ethical Journalist : Gene Foreman

FFCBCS Structure of B. Design (Visual Graphics & Animation)

Applicable from 2021 -2025 Batch

Subject Code	VGF 403	Subject Title	THESIS PROJECT						
LTPS	0,0,16,0	Credit	8	Subject Category	DC	Year	4 th	Semester	VII

Course Objective:

Final project comprises of following assignments:

A DESIGN PROJECT

Students should work individually to achieve the production goal within the prescribed time period under the guidance of a supervising faculty. Develop an innovative and theoretically informed body of work which proves their creativity, aesthetic sense and technical skill. Students should submit the design along with the comprehensive report to the concerned faculty.

PRESENTATION

Select a subject for the project, whether it is a Service or Product based design and prepare a detail research report and conduct individual presentation as per the schedule.

FINAL PRESENTATION

The final presentation will be in Print, Web and Interactive media.

FFCBCS Structure of B. Design (Visual Graphics & Animation) Applicable from 2021 -2025 Batch

Subject Code	VGF 403	Subject Title	PRACTICAL TRAINING						
LTPS	0,0,0,0	Credit	10	Subject Category	DC	Year	4 th	Semester	VIII

Course Objective:

Practical Training is on the job training to assimilate the professionalism in a career. Internships offer students a period of practical experience in the industry relating to their field of study.

The students should have to undergo an Internship at a Graphic Design Studio for one month at the beginning of the 4th semester. A faculty member should monitor the students during the internship.

The students would prepare individual reports after the Internship and the same should be attested by the organization under which the student did the internship. The students' comprehensive report should be submitted to the HOD/Guide for evaluation along with a certificate from the organization.