

BOARD OF STUDIES
Journalism and Mass Communication
(FOR ANIMATION AND DESIGN)
Kumaun University, Nainital
(11.06.2025)

SYLLABUS APPROVED

Integrated FYUP in Animation and Design
(Course Curriculum Design as per NEP 2020)

(Semester I to VI)

List of Papers Semester Wise						
Year	Semester	Course	Paper Title	Theory/ Practical	Credits	
FIRST YEAR	I	DSC	Fundamentals of Design	Theory	4	
		DSC	Drawing & Sketching – I	Practical	4	
		DSC	Computer Graphics – I	Theory + Practical	2+2	
		GE	Computer Graphics – I <i>(For the Students of other Department/Course)</i> Animation Students will choose GE subject from a Pool of GE Courses provided by University	Theory + Practical	2+2	
		AEC	Will be opted from Pool of AEC Courses provided by University	Theory/Practi cal	2	
		SEC	Experimental Animation-I	Practical	2	
		VAC	Will be opted from Pool of VACCourses provided by University	Theory/Practi cal	2	
		TOTAL CREDIT				
	II	DSC	Introduction to Animation	Theory	4	
		DSC	Drawing & Sketching – II	Practical	4	
		DSC	Computer Graphics – II	Theory + Practical	2+2	

		GE	Computer Graphics - II <i>(For the Students of other Department/Course)</i> Animation Students will choose GE subject from a Pool of GE Courses provided by University	Theory + Practical	2+2
		AEC	Will be opted from Pool of AEC Courses provided by University	Theory/Practical	2
		SEC	Experimental Animation-II	Practical	2
		VAC	Will be opted from Pool of VAC Courses provided by University	Theory/Practical	2
TOTAL CREDIT					22

Students on exit shall be awarded Undergraduate Certificate in Animation & Design after securing the requisite 44 credits

SECOND YEAR	III	DSC	Photography	Theory + Practical	2+2	
		DSC	Character Designing	Practical	4	
		DSC	2D Animation Techniques	Theory + Practical	2+2	
		DSE/GE	3D Modeling Techniques	Practical	4	
		DSE/GE	Design Thinking			Theory
		AEC	Will be opted from Pool of AEC Courses provided by University	Theory/Practical	2	
		SEC	UI/UX Designing	Practical	2	
		VAC	Will be opted from Pool of VAC Courses provided by University	Theory/Practical	2	
		TOTAL CREDIT				
	IV	DSC	Digital Video Editing	Theory + Practical	2+2	
		DSC	Concept Art	Practical	4	
		DSC	Fundamentals of 3D Animation, Particle, Simulation	Theory + Practical	2+2	
		DSE/GE	Fundamentals of Film Making	Theory	4	
		DSE/GE	Advanced UI/UX Designing			Practical
		AEC	Will be opted from Pool of AEC Courses provided by University	Theory/Practical	2	

		SEC	Digital Marketing		Practical	2	
		VAC	Will be opted from Pool of VAC Courses provided by University		Theory/Practical	2	
		TOTAL CREDIT					22
Students on exit shall be awarded Undergraduate Diploma in Animation & Design after securing the requisite 88 credit on completing of Semester IV							
THIRD YEAR	V	DSC	Game Design I		Theory + Practical	2+2	
		DSC	3D Modeling, Texturing & Lighting		Practical	4	
		DSC	Motion Graphics & Virtual Communication		Practical	4	
		DSE	3D Modeling with Blender	<i>Animation Students will choose any One from these DSE Courses.</i>	Practical	4	
		DSE	Principal of Advertising		Theory		
		GE	Motion Graphics & Virtual Communication <i>(For the Students of other Department/Course)</i> <i>Animation Students will choose GE subject from the pool of GE Courses provided by University.</i>		Practical	4	
		IAPC	Academic Project		Project	2	
		TOTAL CREDIT					
	VI	DSC	Game Design II		Theory + Practical	2+2	
		DSC	3D Rigging, Dynamics Basics, Animation		Practical	4	
		DSC	Principal of Composition		Practical	4	
		DSE	VFX	<i>Animation Students will choose any One from these DSE Course</i>	Practical	4	
		DSE	Broadcast Design		Theory		
		GE	Principal of Composition <i>(For the Students of other Department/Course)</i> <i>Animation Students will choose GE subject from the pool of GE Courses provided by University.</i>		Practical	4	
		IAPC	Internship		Internship	2	
		TOTAL CREDIT					

Students on exit shall be awarded Bachelor of Animation & Design after securing the requisite 132 credit on completing of Semester VI.

Semester-I

Undergraduate Certificate in Animation and Design

DISCIPLIN SPECIFIC COURSE (DSC)- FUNDAMENTAL OF DESIGN (THEORY)

No. of Hours-60

CREDIT DISTRIBUTION, ELIGIBILITY AND PRE-REQUISITES OF THE COURSE

Course Title	Credits	Credit distribution of the Course			Eligibility criteria	Prerequisite of the course (if any)
		Lecture	Tutorial	Practical/Practice		
DSC: Fundamental of Design	4	4	0	0	Passed Class XII	Nil

UNDERGRADUATE CERTIFICATE IN ANIMATION & DESIGN

Programme: *Undergraduate Certificate in Animation and Design*

Year: I

Semester: I
Paper: DSC

Subject: Animation & Design

Course: DSC Fundamental of Design (Theory)

Course Outcomes:

After studying this course, the students will be able to:

- To Learn Fundamental principles and elements of design, providing a solid foundation for further exploration in various design disciplines.
- Through lectures, discussions, and hands-on projects, students will develop an understanding of design concepts and their application in different contexts.

Credits: 4

Discipline Specific Course

Max. Marks: As per Univ. rules

Min. Passing Marks: As per Univ. rules

Unit	Topic	No. of Hours
Unit I	Introduction to Design <ul style="list-style-type: none"> • Overview of design disciplines • Historical perspectives on design • Understanding design thinking • Role of design in society 	12

Unit II	Elements & Principles of Design <ul style="list-style-type: none"> • Line: Types, qualities, and applications • Shape and form: Geometric and organic forms, negative space • Color theory: Color wheel, harmony, contrast, and symbolism • Texture: Visual and tactile texture, applications in design • Balance: Symmetry, asymmetry, and radial balance • Proportion and scale: Golden ratio, human scale • Emphasis and focal points: Creating hierarchy and visual interest • Unity and harmony: Cohesive design compositions 	24
Unit III	<ul style="list-style-type: none"> • Composition and Layout • Grid systems: Principles and applications in layout design • Typography: Typeface selection, hierarchy, and legibility • Image composition: Rule of thirds, framing, and cropping • Gestalt principles: Closure, proximity, similarity, and continuity 	12
Unit IV	Application of Design Principles <ul style="list-style-type: none"> • Graphic design: Branding, advertising, and publication design • User interface (UI) design: Website and app design principles • Environmental design: Signage, wayfinding, and spatial design • Product design: Ergonomics, materials, and aesthetics 	12

Recommended Readings:

- *“Design Basics”* by David A. Lauer and Stephen Pentak

Suggested Continuous Evaluation Methods: Seminar/ Presentation on any topic related to syllabus, Examination/Practical/ Internal/External Test with MCQs/short & long questions, attendance and participation in the class.

Semester-I

Undergraduate Certificate in Animation and Design

DISCIPLINE SPECIFIC COURSE (DSC)- DRAWING&SKETCHING - I (Practical)

No. of Hours-120

CREDIT DISTRIBUTION, ELIGIBILITY AND PRE-REQUISITES OF THE COURSE

Course Title	Credits	Credit distribution of the Course			Eligibility criteria	Prerequisite of the course(if any)
		Lecture	Tutorial	Practical/Practice		

DSC: Drawing & Sketching - I	4	0	0	4	Passed Class XII	Nil
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UNDERGRADUATE CERTIFICATE IN ANIMATION & DESIGN

Programme: <i>Undergraduate Certificate in Animation and Design</i>	Year: I	Semester: I Paper: DSC
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Subject: Animation & Design

Course: DSC	Drawing & Sketching - I (Practical)
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Course Outcomes:

After studying this course, the students will be able to:

- Develop eye hand coordination, development of vision and motor skills.
- Develop expertise in life-drawing and related techniques.
- Improve observational skills through drawing and sketching.
- Understand how to render object in light and shadow.

Credits: 4	Discipline Specific Course
Max. Marks: As per Univ. rules	Min. Passing Marks: As per Univ. rules

Unit	Topic	No. of Hours
Unit I	Introduction to Drawing <ul style="list-style-type: none"> • Overview of drawing materials and tools. • Basic techniques: line, shape, form, texture, value, and space. • Understanding proportions and perspective. • Drawing exercises focusing on observation and replication of simple objects and still life arrangements. • Introduction to shading techniques: hatching, cross-hatching, stippling, and blending. 	30
Unit II	Figure Drawing <ul style="list-style-type: none"> • Anatomy basics: proportions of the human body, skeletal structure, and muscle groups. • Gesture drawing: capturing the essence and movement of the human figure with quick sketches. • Detailed figure drawing: studying individual body parts, proportions, and foreshortening. 	30
Unit III	Portrait Drawing <ul style="list-style-type: none"> • Facial anatomy: proportions, features, and expressions. • Understanding light and shadow in portrait drawing. • Techniques for capturing likeness and personality in portraits. • Portrait drawing from live models and photographs. 	30

Unit IV	Still Life Drawing <ul style="list-style-type: none"> • Setting up and composing still life arrangements. • Techniques for capturing light and shadow on different objects. • Experimentation with different drawing materials and textures. • Understanding the importance of negative space in still life compositions. • Developing observational skills through detailed still life studies. 	30
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Recommended Readings:

- *The Urban Sketching Handbook Understanding Perspective: Easy Techniques for Mastering Perspective Drawing*, Author- Stephanie Bower, Publisher – Quarrt Books

Suggested Continuous Evaluation Methods: Seminar/ Presentation on any topic related to syllabus, Examination/Practical/ Internal/External Test with MCQs/short & long questions, attendance and participation in the class.

Semester-I

Undergraduate Certificate in Animation and Design

DISCIPLINE SPECIFIC COURSE (DSC)- Computer Graphics - I (Theory)

No. of Hours- 30

CREDIT DISTRIBUTION, ELIGIBILITY AND PRE-REQUISITES OF THE COURSE

Course Title	Credits	Credit distribution of the Course			Eligibility criteria	Prerequisite of the course(if any)
		Lecture	Tutorial	Practical/Practice		
DSC: Computer Graphics - I	2	2	0	0	Passed Class XII	Nil

UNDERGRADUATE CERTIFICATE IN ANIMATION & DESIGN

Programme: Undergraduate Certificate in Animation and Design		Year: I	Semester: I
Subject: Animation& Design			
Course: DSC	Computer Graphics - I (Theory)		

Course Outcomes:

After studying this course, the students will be able to:

- Learn about Photoshop as design software.
- Software interface, tools, matte painting, digital & print media graphics and photo editing.
- Demonstrate critical thinking and problem-solving skills for project planning, *design*, and creation. Communicate clearly in *visual*, verbal, and written forms.

Credits: 2		Discipline Specific Course
Max. Marks: As per Univ. rules		Min. Passing Marks: As per Univ. rules
Unit	Topic	No. of Hours
Unit I	Introduction to digital image editing <ul style="list-style-type: none"> • Raster Image • Vector Image • Image File Formats 	6
Unit II	Photoshop Workspace, Menu, Tools & Preferences <ul style="list-style-type: none"> • Interface Basic • Palettes and Menus • Toolbar – Selection Tools, painting tools, Editing and retouching tools • Text tools. • Ruler, Guides and Grids 	6
Unit III	Color, Types of Masking <ul style="list-style-type: none"> • Color Mode • Color Correction • Levels and Curves 	6
Unit IV	Layers, Advanced options & Filters <ul style="list-style-type: none"> • Layer concept • Selecting, Grouping and linking layers • Layer Effects • Layer Mask • Applying filters • Digital painting techniques • Automating tasks – creating actions • Experimental Learning: Digital Painting 	12

Recommended Readings:

- *Adobe Photoshop Classroom in a Book 2023 1st Edition*, Author- Conrad Chavez, Publisher- Adobe Press

Suggested Continuous Evaluation Methods: Seminar/ Presentation on any topic related to syllabus, Examination/Practical/ Internal/External Test with MCQs/short & long questions, attendance and participation in the class.

Semester-I

Undergraduate Certificate in Animation and Design

DISCIPLINE SPECIFIC COURSE (DSC)- Computer Graphics - I (Practical)

No. of Hours-60

CREDIT DISTRIBUTION, ELIGIBILITY AND PRE-REQUISITES OF THE COURSE

Course Title	Credits	Credit distribution of the Course			Eligibility criteria	Prerequisite of the course(if any)
		Lecture	Tutorial	Practical/Practice		
DSC: Computer Graphics - I	2	0	0	2	Passed Class XII	Nil

UNDERGRADUATE CERTIFICATE IN ANIMATION & DESIGN

Programme: *Undergraduate Certificate in Animation and Design*

Year: I

Semester: I
Paper: DSC

Subject: Animation & Design

Course: DSC Computer Graphics - I (Practical)

Course Outcomes:

After studying this course, the students will be able to:

- Learn about Photoshop as design software.
- Software interface, tools, matte painting, digital & print media graphics and photo editing.
- Demonstrate critical thinking and problem-solving skills for project planning, *design*, and creation. Communicate clearly in *visual*, verbal, and written forms.

Credits: 2

Discipline Specific Course

Max. Marks: As per Univ. rules

Min. Passing Marks: As per Univ. rules

Unit	Topic	No. of Hours
Unit I	Damage to Repair, Black & White to Color	12
Unit II	Photo Manipulation, Photo Composition	12
Unit III	Digital Painting, Matt Painting	12
Unit IV	Digital advertisement, layer + Clipping Masking	24

Recommended Readings:

- *Adobe Photoshop Classroom in a Book 2023 1st Edition*, Author- Conrad Chavez, Publisher- Adobe Press

Suggested Continuous Evaluation Methods: Seminar/ Presentation on any topic related to syllabus, Examination/Practical/ Internal/External Test with MCQs/short & long questions, attendance and participation in the class.

Semester-I

Undergraduate Certificate in Animation and Design

SKILL ENHANCEMENT COURSE (SEC)- Experimental Animation - I (Flip book / Cell Animation) (Practical)

No. of Hours-60

CREDIT DISTRIBUTION, ELIGIBILITY AND PRE-REQUISITES OF THE COURSE

Course Title	Credits	Credit distribution of the Course			Eligibility criteria	Prerequisite of the course(if any)
		Lecture	Tutorial	Practical/Practice		
SEC: Experimental Animation-I (Flip book / Cell Animation)	2	0	0	2	Passed Class XII	Nil

UNDERGRADUATE CERTIFICATE IN ANIMATION & DESIGN

Programme: *Undergraduate Certificate in Animation and Design*

Year: I

Semester: I
Paper: SEC

Subject: Animation & Design

Course: SEC

Experimental Animation - I (Flip book / Cell Animation)

Course Outcomes:

After studying this course, the students will be able to:

- Learn about Flip book or Cell Animation.
- Learn how to create story board with comprehensive details like camera angles, movements, dialogues, music etc.

Credits: 2

Skill Enhancement Course (SEC)

Max. Marks: As per Univ. rules

Min. Passing Marks: As per Univ. rules

Unit	Topic	No. of Hours
Unit I	Introduction to Animation and Flip Books <ul style="list-style-type: none"> • Overview of animation: definition, history, and significance • Introduction to flip book animation • Understanding the basic principles of animation (e.g., timing, spacing, squash and stretch) • Materials and tools required for creating flip books 	15
Unit II	Principles of Movement and Timing <ul style="list-style-type: none"> • Exploring the principles of movement in animation • Understanding timing and spacing in animation • Practice exercises to develop a sense of timing and movement • Analysis of existing flip book animations for timing and movement techniques 	15
Unit III	Advanced Flip Book Techniques <ul style="list-style-type: none"> • Introduction to advanced flip book techniques 	15

	<ul style="list-style-type: none"> • Creating illusions of depth and perspective in flip book animations • Exploring techniques for character animation in flip books • Understanding the use of keyframes and breakdowns in flip book animation 	
Unit IV	Introduction to Cell Animation <ul style="list-style-type: none"> • Overview of cell animation: definition, history, and techniques • Understanding the anatomy of a cell animation setup • Materials and tools required for cell animation • Project Submission - Making of a Flip book or Cell Animation 	15

Recommended Readings:

- *Prepare to Board! Creating Story and Characters for Animated Features and Shorts* by Nancy Beiman, Publisher- Adobe Press

Suggested Continuous Evaluation Methods: Seminar/ Presentation on any topic related to syllabus, Examination/Practical/ Internal/External Test with MCQs/short & long questions, attendance and participation in the class.

Semester-II

Undergraduate Certificate in Animation and Design

DISCIPLINE SPECIFIC COURSE (DSC)- INTRODUCTION TO ANIMATION (THEORY)

No. of Hours-60

CREDIT DISTRIBUTION, ELIGIBILITY AND PRE-REQUISITES OF THE COURSE

Course Title	Credits	Credit distribution of the Course			Eligibility criteria	Pre-requisite of the course(if any)
		Lecture	Tutorial	Practical/Practice		
DSC: Introduction to Animation	4	4	0	0	Passed Class XII	Nil

UNDERGRADUATE CERTIFICATE IN ANIMATION & DESIGN

Programme: Undergraduate <i>Certificate in Animation and Design</i>		Year: I	Semester: I
Subject: Animation & Design		Paper: DSC	
Course: DSC	Course Title: Introduction to Animation (Theory)		

Course Outcomes:

After studying this course, the students will be able to:

- Understand the Element and Principles of Animation
- Understand the multimedia and its work in Animation
- Develop different types of Animation
- Develop competencies and skills needed for becoming an effective Animator

Credits: 4		Discipline Specific Course
Max. Marks: As per Univ. rules		Min. Passing Marks: As per Univ. rules
Unit	Topic	No. of Hours
Unit I	Animation: Most common uses of animation: Cartoons, simulations, scientific visualization, analysis, understanding, teaching. The Past: Cave Paintings, Egyptian murals, the magic lanterns, flipbooks, History of animation: Victorian Parlor toys, Techniques of animation, other animation styles, Analysing Animated Cartoons and their Evolution: History, Silent era, Feature films, commercial animation.	15
Unit II	Editorial cartoons: History and origin, Computer animation: Its history and animation methods, Computer animation in Film and TV, Limited animation: History and techniques, Motion capture: Advantages and disadvantages, Introduction to Multimedia and Animation, Introduction to Computer graphics and animation	15
Unit III	Different types of animation: 2D animation, 3D animation, Stop Motion animation, sand animation, pixilation, paint on glass animation, clay animation, puppet animation, object animation, cut out animation, Time lapse animation, Kinaesthetic and collage.	15
Unit IV	Studies on the films of: Walt Disney, MGM cartoon studios, Warner Bros Studios, Pixar Studio, Studio Ghibli	15

Recommended Readings

- *Dr. Jiang Tan, Aspects of animation, steps to learn animated cartoon, Serials Publications Pvt. Ltd, 2016*
- *Richard Williams, Animation Survival Kit revised edition, Faber; Main - Revised edition 2009*
- *Kit Laybourne and John Canemaker, The Animation book: A complete guide to animated film making, Three Rivers Press, 1998*
- *Charles Solomon, Enchanted Drawings: The history of animation, 1994*
- *Bob Thomas, The Art of Animation, 1995*

Suggested Continuous Evaluation Methods: Seminar/ Presentation on any topic related to syllabus, Examination/Practical/ Internal/External Test with MCQs/short & long questions, attendance and participation in the class.

Semester-II

Undergraduate Certificate in Animation and Design

DISCIPLIN SPECIFIC COURSE (DSC)- DRAWING AND SKETCHING – II (PRACTICAL)

No. of Hours- 120

CREDIT DISTRIBUTION, ELIGIBILITY AND PRE-REQUISITES OF THE COURSE

Course Title	Credits	Credit distribution of the Course			Eligibility criteria	Prerequisite of the course(if any)
		Lecture	Tutorial	Practical/Practice		
DSC: Drawing and Sketching - II	4	0	0	4	Passed Class XII	Nil

UNDERGRADUATE CERTIFICATE IN ANIMATION & DESIGN

Programme: *Undergraduate Certificate in Animation and Design*

Year: I

Semester: II
Paper: DSC

Subject: Animation & Design

Course: DSC Drawing and Sketching – II (Practical)

Course Outcomes:

After studying this course, the students will be able to:

- Develop eye to hand coordination, development of vision and motor skills.
- Improve observational skills through drawing and sketchbook practice.
- Able to effectively describe figures, objects, and environment using line, value and pattern.
- Understand how to render objects in light and shadow.

Credits: 4

Discipline Specific Course

Max. Marks: As per Univ. rules

Min. Passing Marks: As per Univ. rules

Unit	Topic	No. of Hours
Unit I	Color Theory <ul style="list-style-type: none"> • Color formation, • Color Spectrum • Visible light, Black & White, Value of a color 	30
Unit II	Advanced Types of Perspective <ul style="list-style-type: none"> • Linear perspective - One point • Two point 	30
Unit III	Study of Human Anatomy, Character Design <ul style="list-style-type: none"> • 8 head proportion • Blocking the body 	30

	<ul style="list-style-type: none"> Human Head 	
Unit IV	Color Theory in Still life drawing <ul style="list-style-type: none"> Object drawing in colour Object composition in colour (10 works each) 	30

Recommended Readings:

- The Urban Sketching Handbook Understanding Perspective: Easy Techniques for Mastering Perspective Drawing, Author Stephanie Bower, Publisher – Quarry Books
- Drawing: A Complete Guide (Art of Drawing), Author - Giovanni Civardi , Publisher – Search Press

Suggested Continuous Evaluation Methods: Seminar/ Presentation on any topic related to syllabus, Examination/Practical/ Internal/External Test with MCQs/short & long questions, attendance and participation in the class.

Semester-II

Undergraduate Certificate in Animation and Design

DISCIPLIN SPECIFIC COURSE (DSC)- COMPUTER GRAPHICS – II (THEORY)

No. of Hours- 30

CREDIT DISTRIBUTION, ELIGIBILITY AND PRE-REQUISITES OF THE COURSE

Course Title	Credits	Credit distribution of the Course			Eligibility criteria	Prerequisite of the course(if any)
		Lecture	Tutorial	Practical/Practice		
DSC: Computer Graphics - II (Theory)	2	2	0	0	Passed Class XII	Nil

UNDERGRADUATE CERTIFICATE IN ANIMATION & DESIGN

Programme: Undergraduate Certificate in Animation and Design		Year: I	Semester: II
			Paper: DSC
Subject: Animation & Design			
Course: DSC	Computer Graphics – II (Theory)		

Course Outcomes:

After studying this course, the students will be able to:

- Learn about Illustrator as design software.
- Software interface, tools, vector graphics, Clipping, Masking and creating 3D object.
- Able to produce logos, detailed illustrations, leaflets, web page designs and many more.

Credits: 2

Discipline Specific Course

Max. Marks: As per Univ. rules

Min. Passing Marks: As per Univ. rules

Unit	Topic	No. of Hours
Unit I	Introduction to Adobe Illustrator <ul style="list-style-type: none"> • Overview of Adobe Illustrator interface • Understanding vector graphics • Tools and their functions: Selection tools, drawing tools, shape tools, pen tool, etc. • Working with artboards and layers • Creating and managing documents • Introduction to basic drawing techniques 	6
Unit II	Drawing and Editing <ul style="list-style-type: none"> • Advanced drawing techniques: Curvature tool, Width tool, Shape Builder tool • Editing paths and shapes: Anchor points, handles, pathfinder operations • Working with text: Type tool, formatting text, text on a path • Using the Appearance panel: Adding fills, strokes, effects • Transforming objects: Scaling, rotating, skewing, mirroring 	6
Unit III	Working with Color and Effects <ul style="list-style-type: none"> • Understanding color modes: RGB, CMYK, Pantone • Applying color: Swatches panel, gradients, patterns • Using the Color Picker and Eyedropper tools • Creating and editing brushes: Scatter brushes, art brushes, pattern brushes • Applying effects: Drop shadows, blurs, warp effects 	12
Unit IV	Advanced Techniques and Output <ul style="list-style-type: none"> • Working with symbols and libraries • Introduction to 3D effects • Using the Perspective Grid • Exporting and saving artwork: File formats, resolution settings • Printing considerations: Bleed, trim marks, color management • Tips for efficient workflow and time-saving techniques 	6

Recommended Readings:

- *The ultimate guide to Adobe Illustrator*, Author–MohandesKahraba, Publisher – Adobe
- *Adobe Illustrator Classroom in a Book (2023 Release)*, Author - Brian Wood , Publisher – Adobe Press

Suggested Continuous Evaluation Methods: Seminar/ Presentation on any topic related to syllabus, Examination/Practical/ Internal/External Test with MCQs/short & long questions, attendance and participation in the class.

Semester-II

Undergraduate Certificate in Animation and Design

DISCIPLIN SPECIFIC COURSE (DSC)- COMPUTER GRAPHICS – II (PRACTICAL)

No. of Hours-60

CREDIT DISTRIBUTION, ELIGIBILITY AND PRE-REQUISITES OF THE COURSE

Course Title	Credits	Credit distribution of the Course			Eligibility criteria	Prerequisite of the course(if any)
		Lecture	Tutorial	Practical/Practice		
DSC: Computer Graphics - II (Practical)	2	0	0	2	Passed Class XII	Nil

UNDERGRADUATE CERTIFICATE IN ANIMATION & DESIGN

Programme: <i>Undergraduate Certificate in Animation and Design</i>		Year: I	Semester: II
			Paper: DSC
Subject: Animation & Design			
Course: DSC	Computer Graphics – II (Practical)		
Course Outcomes:			
After studying this course, the students will be able to:			
<ul style="list-style-type: none"> Learn about Illustrator as design software. Software interface, tools, vector graphics, Clipping, Masking and creating 3D object. Able to produce logos, detailed illustrations, leaflets, web page designs and many more. 			
Credits: 2		Discipline Specific Course	
Max. Marks: As per Univ. rules		Min. Passing Marks: As per Univ. rules	
Unit	Topic		No. of Hours
Unit I	Create Illustrator using basic shapes, shape composition		15
Unit II	Create product using pen tool, gradient & mesh tool, poster design		15
Unit III	Pattern, advertisement, branding		15
Unit IV	Vector art		15

Recommended Readings:

- The ultimate guide to Adobe Illustrator, Author–MohandesKahraba, Publisher – Adobe*
- Adobe Illustrator Classroom in a Book (2023 Release), Author - Brian Wood, Publisher – Adobe Press*

Suggested Continuous Evaluation Methods: Seminar/ Presentation on any topic related to syllabus, Examination/Practical/ Internal/External Test with MCQs/short & long questions, attendance and participation in the class.

Semester-II

Undergraduate Certificate in Animation and Design

SKILL ENHANCEMENT COURSE (SEC)- EXPERIMENTAL ANIMATION – II (PRACTICAL)

No. of Hours-60

CREDIT DISTRIBUTION, ELIGIBILITY AND PRE-REQUISITES OF THE COURSE

Course Title	Credits	Credit distribution of the Course			Eligibility criteria	Prerequisite of the course(if any)
		Lecture	Tutorial	Practical/Practice		
SEC: Experimental Animation – II (Practical)	2	0	0	2	Passed Class XII	Nil

UNDERGRADUATE CERTIFICATE IN ANIMATION & DESIGN

Programme: <i>Undergraduate Certificate in Animation and Design</i>			Year: I	Semester: II
			Paper: SEC	
Subject: Animation & Design				
Course: SEC	Experimental Animation – II (Practical)			
Course Outcomes:				
After studying this course, the students will be able to:				
<ul style="list-style-type: none"> Create a Stop Motion or Claymation Video which includes - Compositions and its rules, Develop Background and elements, Prop designing 				
Credits: 2			Skill Enhancement Course	
Max. Marks: As per Univ. rules			Min. Passing Marks: As per Univ. rules	
Unit	Topic			No. of Hours
Unit I	Introduction to Stop Motion and Claymation <ul style="list-style-type: none"> Overview of stop motion animation and its history Introduction to Claymation Basic principles of animation Equipment and materials required for stop motion and Claymation			15
Unit II	Pre-production Planning <ul style="list-style-type: none"> Storytelling and scriptwriting for animation Character design and development Creating storyboards and animatics Set design and construction 			15

Unit III	Production Techniques <ul style="list-style-type: none"> • Stop motion animation techniques • Understanding frame rates and timing • Clay sculpting and character rigging • Lighting techniques for stop motion and Claymation 	15
Unit IV	Post-production and Presentation <ul style="list-style-type: none"> • Editing software for stop motion animation • Adding visual effects and enhancing footage • Voiceover recording and dialogue editing • Music selection and soundtrack creation 	15

Recommended Readings:

- *Drawing Nature for the Absolute Beginner: A Clear & Easy Guide to Drawing Landscapes & Nature*

Suggested Continuous Evaluation Methods: Seminar/ Presentation on any topic related to syllabus, Examination/Practical/ Internal/External Test with MCQs/short & long questions, attendance and participation in the class.

Semester-III

Undergraduate Diploma in Animation and Design

DISCIPLINE SPECIFIC COURSE (DSC)- PHOTOGRAPHY (THEORY)

No. of Hours- 30

CREDIT DISTRIBUTION, ELIGIBILITY AND PRE-REQUISITES OF THE COURSE

Course Title	Credits	Credit distribution of the Course			Eligibility criteria	Prerequisite of the course (if any)
		Lecture	Tutorial	Practical/Practice		
DSC: Photography (Theory)	2	2	0	0	Passed Certificate Course	Nil

UNDERGRADUATE DIPLOMA IN ANIMATION AND DESIGN

Programme: Undergraduate Diploma in Animation and Design		Year: II	Semester: III
Paper: DSC			
Subject: Animation & Design			
Course: DSC	Photography (Theory)		
Course Outcomes:			
After studying this course, the students will be able to:			
<ul style="list-style-type: none"> • Demonstrate an understanding of camera operations and basic photographic principles. • Apply basic and advanced lighting techniques in different photographic situations. • Analyze and critique photographic compositions. 			

- Utilize post-processing tools to enhance their photographs.
- Develop an understanding of specialized areas of photography such as portrait photography, landscape photography, and night photography.
- Create a portfolio of high-quality photographs that demonstrate their understanding of the course material.

Credits: 2		Skill Enhancement Course
Max. Marks: As per Univ. rules		Min. Passing Marks: As per Univ. rules
Unit	Topic	No. of Hours
Unit I	Introduction to Photography <ul style="list-style-type: none"> • The history and evolution of photography • The basic elements of a photograph The exposure triangle: aperture, shutter speed, and ISO	5
Unit II	Camera Operations <ul style="list-style-type: none"> • Camera types and features • Camera modes: auto, manual, aperture priority, shutter priority • Focusing techniques 	5
Unit III	Lighting Techniques <ul style="list-style-type: none"> • Types of lighting: natural, artificial • Controlling light: exposure compensation, white balance, flash • Light sources: direct, diffused, reflected 	10
Unit IV	Composition <ul style="list-style-type: none"> • The rule of thirds • Leading lines • Symmetry and asymmetry • Framing Post Processing • Introduction to post-processing tools • Basic adjustments: exposure, contrast, saturation • Advanced adjustments: selective adjustments, noise reduction, sharpening Portrait Photography <ul style="list-style-type: none"> • The fundamentals of portrait photography • Posing and directing subjects • Lighting techniques for portraits 	10

Recommended Readings:

- *Mastering Aperture, Shutter Speed, ISO and Exposure, (Author) Al Judge*
- *The Photographer's Eye" by Michael Freeman*

Suggested Continuous Evaluation Methods: Seminar/ Presentation on any topic related to syllabus, Examination/Practical/ Internal/External Test with MCQs/short & long questions, attendance and participation in the class.

Semester-III

Undergraduate Diploma in Animation and Design

DISCIPLINE SPECIFIC COURSE (DSC)- PHOTOGRAPHY (PRACTICAL)

No. of Hours-60

CREDIT DISTRIBUTION, ELIGIBILITY AND PRE-REQUISITES OF THE COURSE

Course Title	Credits	Credit distribution of the Course			Eligibility criteria	Prerequisite of the course (if any)
		Lecture	Tutorial	Practical/Practice		
DSC: Photography (Practical)	2	0	0	2	Passed Certificate Course	Nil

UNDERGRADUATE DIPLOMA IN ANIMATION AND DESIGN

Programme: <i>Undergraduate Diploma in Animation and Design</i>		Year: II	Semester: III
			Paper: DSC
Subject: Animation & Design			
Course: DSC	Photography (Practical)		
Course Outcomes: After studying this course, the students will be able to: <ul style="list-style-type: none">• Demonstrate an understanding of camera operations and basic photographic principles.• Apply basic and advanced lighting techniques in different photographic situations.• Analyze and critique photographic compositions.• Utilize post-processing tools to enhance their photographs.• Develop an understanding of specialized areas of photography such as portrait photography, landscape photography, and night photography.• Create a portfolio of high-quality photographs that demonstrate their understanding of the course material.			
Credits: 2		Discipline Specific Course	
Max. Marks: As per Univ. rules		Min. Passing Marks: As per Univ. rules	
Unit	Topic	No. of Hours	
Unit I	Portrait Photography (min 5)	15	
Unit II	Landscape photography (min 5)	15	
Unit III	Product Photography & cinematics (min 10)	15	
Unit IV	Subject Photography (min 5)	15	

Recommended Readings:

- *Mastering Aperture, Shutter Speed, ISO and Exposure, (Author) Al Judge*
- *The Photographer's Eye" by Michael Freeman*

Suggested Continuous Evaluation Methods: Seminar/ Presentation on any topic related to syllabus, Examination/Practical/ Internal/External Test with MCQs/short & long questions, attendance and participation in the class.

Semester-III

Undergraduate Diploma in Animation and Design

DISCIPLINE SPECIFIC COURSE (DSC)- CHARACTER DESIGN (PRACTICAL)

No. of Hours- 120

CREDIT DISTRIBUTION, ELIGIBILITY AND PRE-REQUISITES OF THE COURSE

Course Title	Credits	Credit distribution of the Course			Eligibility criteria	Prerequisite of the course (if any)
		Lecture	Tutorial	Practical/Practice		
DSC: Character Design (Practical)	4	0	0	4	Passed Certificate Course	Nil

UNDERGRADUATE DIPLOMA IN ANIMATION AND DESIGN

Programme: <i>Undergraduate Diploma in Animation and Design</i>		Year: II	Semester: III
Paper: DSC			
Subject: Animation & Design			
Course: DSC		Character Design (Practical)	
Course Outcomes:			
<p>After studying this course, the students will be able to:</p> <ul style="list-style-type: none"> Create a portfolio of drawn and painted character art in multiple styles and take their strongest designs from 2D to 3D Digital Models and Clay. 			
Credits: 4		Discipline Specific Course	
Max. Marks: As per Univ. rules		Min. Passing Marks: As per Univ. rules	
Unit	Topic		No. of Hours
Unit I	Introduction to Character Design <ul style="list-style-type: none"> Understanding the role and importance of character design in various media (animation, games, illustration, etc.). Exploring the elements of character design: silhouette, shape language, proportions, expressions, and gestures. Analyzing iconic characters from different mediums and identifying their design principles. Sketching exercises focusing on basic shapes and form exploration. 		30
Unit II	Character Development <ul style="list-style-type: none"> Developing a character's backstory, personality traits, and motivations. Techniques for brainstorming and generating character ideas. Incorporating symbolism and visual metaphors into character design. Creating character turnarounds and model sheets to ensure consistency. 		30

	<ul style="list-style-type: none"> • Critique sessions for peer feedback and refinement of character concepts. 	
Unit III	Visual Communication and Expression <ul style="list-style-type: none"> • Understanding the importance of body language, facial expressions, and posing in conveying character emotions. • Exploring different styles of character expression (cartoony, realistic, exaggerated, etc.). • Experimenting with color theory and palette selection to enhance character personality. • Incorporating props and accessories to further develop character identity. 	30
Unit IV	Advanced Techniques and Portfolio Development <ul style="list-style-type: none"> • Introduction to digital tools and software for character design (Photoshop, Illustrator, etc.). • Exploring advanced rendering techniques such as lighting, shading, and texture. • Integrating characters into scenes and environments for storytelling purposes. • Strategies for building a cohesive character design portfolio. 	30

Recommended Readings:

- *Character Desing from the Ground Up* by Kevin Crossley

Suggested Continuous Evaluation Methods: Seminar/ Presentation on any topic related to syllabus, Examination/Practical/ Internal/External Test with MCQs/short & long questions, attendance and participation in the class.

Semester-III

Undergraduate Diploma in Animation and Design

DISCIPLINE SPECIFIC COURSE (DSC)- 2D ANIMATION TECHNIQUES (THEORY)

No. of Hours- 30

CREDIT DISTRIBUTION, ELIGIBILITY AND PRE-REQUISITES OF THE COURSE

Course Title	Credits	Credit distribution of the Course			Eligibility criteria	Prerequisite of the course (if any)
		Lecture	Tutorial	Practical/Practice		
DSC: 2D Animation Techniques (Theory)	2	2	0	0	Passed Certificate Course	Nil

UNDERGRADUATE DIPLOMA IN ANIMATION AND DESIGN

Programme: <i>Undergraduate Diploma in Animation and Design</i>		Year: II	Semester: III
Subject: Animation & Design			
Course: DSC	2D Animation Techniques (Theory)		
Course Outcomes:			
After studying this course, the students will be able to:			
<ul style="list-style-type: none"> • In this course the student will advance his/her technique and follow through the course on a digital platform using 2D software. • Student will learn about 2D animation as the art of creating movement in a two-dimensional space. • This includes characters, creatures, FX, and backgrounds. • The illusion of movement is created when individual drawings are sequenced together over time. One second of time is usually divided into 24 frames. 			
Credits: 2		Discipline Specific Course	
Max. Marks: As per Univ. rules		Min. Passing Marks: As per Univ. rules	
Unit	Topic		No. of Hours
Unit I	Introduction to 2D Animation <ul style="list-style-type: none"> • Animation Concepts • Traditional Animation • Computer Based Animation 		8
Unit II	Overview of Animate <ul style="list-style-type: none"> • Animate Interface • Stage Setting • Frame Rate • Layers • Timeline • Properties • Flash Tools 		10
Unit III	Drawing in Animate & Symbol <ul style="list-style-type: none"> • Drawing Modes • Drawing Techniques • Text and Colors • Graphic Symbol • Button Symbol • Movie clip symbol 		10
Unit IV	Animation & Tweens <ul style="list-style-type: none"> • Frame and Key frame • Motion Guide • Key frame animation • Masking • Motion Tween • Classic Tween • shape Tween 		12

Recommended Readings:

- *Animation Unleashed: 100 Principles Every Animator, Comic Book Writer, Filmmaker, Video Artist 2008, Author -Bryce Hallett, Publisher – Michael Wiese Productions*
- *The Animator's Survival Kit: A Manual of Methods, Principles and Formulas for Classical, Computer, Games, Stop Motion and Internet Animators, Author - Richard Williams, Publisher – Farrar, Straus and Giroux*

Suggested Continuous Evaluation Methods: Seminar/ Presentation on any topic related to syllabus, Examination/Practical/ Internal/External Test with MCQs/short & long questions, attendance and participation in the class.

Suggested equivalent online courses:

- www.evl.uic.edu/datsoupi/251/docs/12AnimationPrinciples.pdf
- www.pdfdrive.com/the-animators-survival-kit-expanded-edition-a-manual-of-methods-principles-and-formulas-for-classical-computer-games-stop-motion-and-internet-animators-e156654527.html

Semester-III

Undergraduate Diploma in Animation and Design

DISCIPLINE SPECIFIC COURSE (DSC)- 2D ANIMATION TECHNIQUES (PRACTICAL)

No. of Hours-60

CREDIT DISTRIBUTION, ELIGIBILITY AND PRE-REQUISITES OF THE COURSE

Course Title	Credits	Credit distribution of the Course			Eligibility criteria	Prerequisite of the course (if any)
		Lecture	Tutorial	Practical/Practice		
DSC: 2D Animation Techniques (Practical)	2	0	0	2	Passed Certificate Course	Nil

UNDERGRADUATE DIPLOMA IN ANIMATION AND DESIGN

Programme: <i>Undergraduate Diploma in Animation and Design</i>		Year: II	Semester: III
			Paper: DSC
Subject: Animation & Design			
Course: DSC	2D Animation Techniques (Practical)		
Course Outcomes: After studying this course, the students will be able to: <ul style="list-style-type: none"> • In this course the student will advance his/her technique and follow through the course on a digital platform using 2D software. • Student will learn about 2D animation as the art of creating movement in a two-dimensional 			

space.

- This includes characters, creatures, FX, and backgrounds.
- The illusion of movement is created when individual drawings are sequenced together over time. One second of time is usually divided into 24 frames.

Credits: 2		Discipline Specific Course
Max. Marks: As per Univ. rules		Min. Passing Marks: As per Univ. rules
Unit	Topic	No. of Hours
Unit I	Bouncing Ball Animation	15
Unit II	Product Animation (Advertisement)	15
Unit III	Character Animation	15
Unit IV	Environment Design & Animation	15

Recommended Readings:

- *Animation Unleashed: 100 Principles Every Animator, Comic Book Writer, Filmmaker, Video Artist 2008, Author -Bryce Hallett, Publisher – Michael Wiese Productions*
- *The Animator's Survival Kit: A Manual of Methods, Principles and Formulas for Classical, Computer, Games, Stop Motion and Internet Animators, Author - Richard Williams, Publisher – Farrar, Straus and Giroux*

Suggested Continuous Evaluation Methods: Seminar/ Presentation on any topic related to syllabus, Examination/Practical/ Internal/External Test with MCQs/short & long questions, attendance and participation in the class.

Suggested equivalent online courses:

- www.evl.uic.edu/datsoupi/251/docs/12AnimationPrinciples.pdf
- www.pdfdrive.com/the-animators-survival-kit-expanded-edition-a-manual-of-methods-principles-and-formulas-for-classical-computer-games-stop-motion-and-internet-animators-e156654527.html

Semester-III

Undergraduate Diploma in Animation and Design

DISCIPLINE SPECIFIC COURSE / GENERIC ELECTIVE (DSC/GE)- 3D MODELING TECHNIQUES (PRACTICAL)

No. of Hours- 120

CREDIT DISTRIBUTION, ELIGIBILITY AND PRE-REQUISITES OF THE COURSE

Course Title	Credits	Credit distribution of the Course			Eligibility criteria	Prerequisite of the course (if any)
		Lecture	Tutorial	Practical/Practice		
DSC / GE: 3D Modeling Techniques (Practical)	4	0	0	4	Passed Certificate Course	Nil

UNDERGRADUATE DIPLOMA IN ANIMATION AND DESIGN			
Programme: <i>Undergraduate Diploma in Animation and Design</i>		Year: II	Semester: III Paper: DSC / GE
Subject: Animation & Design			
Course: DSC / GE	3D Modeling Techniques (Practical)		
Course Outcomes: After studying this course, the students will be able to: <ul style="list-style-type: none"> • Demonstrations, hands-on exercises, and projects to reinforce learning objectives. • Assessment methods may include quizzes, assignments, and a final project where students demonstrate their understanding of 3D modeling principles using 3ds Max. 			
Credits: 4		Discipline Specific Course / Generic Elective	
Max. Marks: As per Univ. rules		Min. Passing Marks: As per Univ. rules	
Unit	Topic		No. of Hours
Unit I	Introduction to 3D Modeling and 3ds Max <ul style="list-style-type: none"> • Overview of 3D modeling concepts and applications • Introduction to 3ds Max interface and navigation • Basic modeling tools and techniques (e.g., primitives, modifiers, transforms) • Hands-on exercises to create simple geometric shapes and objects 		30
Unit II	Intermediate Modeling Techniques <ul style="list-style-type: none"> • Advanced modeling tools and modifiers (e.g., extrude, bevel, Boolean operations) • Introduction to spline modeling and lofting • Creating organic shapes using sculpting tools and techniques • Texture mapping and UV unwrapping basics • Hands-on exercises to model complex objects such as furniture, vehicles, or characters 		30

Unit III	Advanced Modeling and Animation <ul style="list-style-type: none"> Advanced modeling techniques for architectural visualization (e.g., boolean operations, chamfering) Introduction to character modeling and rigging Basic animation principles and keyframing Creating simple animations (e.g., object animation, character walk cycle) Hands-on exercises to model and animate a simple scene 	30
Unit IV	Lighting, Rendering, and Scene Composition <ul style="list-style-type: none"> Introduction to lighting types and setups (e.g., standard, photometric, HDR) Applying materials and textures for realistic rendering Rendering settings and output options Scene composition and camera techniques Hands-on exercises to create a well-lit, textured, and rendered scene 	30

Recommended Readings:

- *Mastering Autodesk 3ds Max 2013* by Jeffrey M. Harper
- *3ds Max Speed Modeling for 3D Artists* by Mooney

Suggested Continuous Evaluation Methods: Seminar/ Presentation on any topic related to syllabus, Examination/Practical/ Internal/External Test with MCQs/short & long questions, attendance and participation in the class.

Suggested equivalent online courses:

- www.pdfdrive.com/3ds-max-speed-modeling-for-3d-artists

Semester-III

Undergraduate Diploma in Animation and Design

DISCIPLINE SPECIFIC COURSE / GENERIC ELECTIVE (DSC/GE)- DESIGN THINKING (THEORY)

No. of Hours-60

CREDIT DISTRIBUTION, ELIGIBILITY AND PRE-REQUISITES OF THE COURSE

Course Title	Credits	Credit distribution of the Course	Eligibility	Prerequisite
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		Lecture	Tutorial	Practical/Practice	criteria	of the course (if any)
DSC / GE: Design Thinking (Theory)	4	4	0	0	Passed Certificate Course	Nil

UNDERGRADUATE DIPLOMA IN ANIMATION AND DESIGN		
Programme: <i>Undergraduate Diploma in Animation and Design</i>		Year: II Semester: III Paper: DSC / GE
Subject: Animation & Design		
Course: DSC / GE	Design Thinking (Theory)	
Course Outcomes: After studying this course, the students will be able to: <ul style="list-style-type: none"> • By the end of the course, students will have developed a deep understanding of design thinking principles and methodologies. • Students will demonstrate proficiency in applying design thinking to solve complex problems and challenges. • Students will be able to effectively empathize with users, define problem statements, generate creative ideas, prototype solutions, test and iterate designs based on user feedback, and communicate their design process and solutions. 		
Credits: 4		Discipline Specific Course / Generic Elective
Max. Marks: As per Univ. rules		Min. Passing Marks: As per Univ. rules
Unit	Topic	No. of Hours
Unit I	Introduction to Design Thinking <ul style="list-style-type: none"> • Understanding the principles and history of design thinking. • Exploring the mindset and characteristics of a design thinker. • Introduction to the design thinking process: Empathize, Define, Ideate, Prototype, Test. • Case studies and examples of successful design thinking applications. 	15
Unit II	Empathize and Define <ul style="list-style-type: none"> • Techniques for empathizing with users and understanding their needs, desires, and challenges. • Methods for defining the problem statement based on user insights and constraints. • Tools and strategies for conducting user research, interviews, and observations. • Synthesizing research findings to identify patterns and insights. 	15
Unit III	Ideate and Prototype <ul style="list-style-type: none"> • Generating a wide range of creative ideas through brainstorming and other ideation techniques. • Techniques for prioritizing and selecting ideas for further development. • Developing low-fidelity prototypes to quickly test and iterate ideas. 	15

	<ul style="list-style-type: none"> Tools and methods for prototyping, including sketching, storyboarding, and rapid prototyping. 	
Unit IV	Test and Iterate <ul style="list-style-type: none"> Conducting usability testing and gathering feedback from users on prototypes. Analyzing feedback and refining prototypes based on user insights. Strategies for iterating and refining designs based on testing results. Communicating design iterations and rationale effectively. 	15

Recommended Readings:

- "Design Thinking: Understanding How Designers Think and Work" by Nigel Cross.
- "Change by Design: How Design Thinking Transforms Organizations and Inspires Innovation" by Tim Brown.
- "The Design of Everyday Things" by Don Norman.

Suggested Continuous Evaluation Methods: Seminar/ Presentation on any topic related to syllabus, Examination/Practical/ Internal/External Test with MCQs/short & long questions, attendance and participation in the class.

Semester-III

Undergraduate Diploma in Animation and Design

SKILL ENHANCEMENT COURSE (SEC)- UI/UX DESIGNING (PRACTICAL)

No. of Hours-60

CREDIT DISTRIBUTION, ELIGIBILITY AND PRE-REQUISITES OF THE COURSE

Course Title	Credits	Credit distribution of the Course			Eligibility criteria	Prerequisite of the course (if any)
		Lecture	Tutorial	Practical/Practice		
SEC: UI/UX Designing (Practical)	2	0	0	2	Passed Certificate Course	Nil

UNDERGRADUATE DIPLOMA IN ANIMATION AND DESIGN

Programme: <i>Undergraduate Diploma in Animation and Design</i>		Year: II	Semester: III
Subject: Animation & Design			
Course: SEC	UI/UX Designing (Practical)		

Course Outcomes:

After studying this course, the students will be able to:

- Understand the principles and importance of UI/UX design in software development and product design.
- Conduct user research using various methodologies and analyze research data to inform design decisions.
- Apply fundamental UI design principles to create visually appealing and user-friendly interfaces.
- Use prototyping tools to create interactive prototypes and conduct usability tests.
- Evaluate and iterate on UI/UX designs based on user feedback and usability testing results.
- Develop a portfolio showcasing their understanding and application of UI/UX design principles through real-world projects and case studies., test and iterate designs based on user feedback, and communicate their design process and solutions.

Credits: 2

Skill Enhancement Course

Max. Marks: As per Univ. rules

Min. Passing Marks: As per Univ. rules

Unit	Topic	No. of Hours
Unit I	Introduction to UI/UX Design <ul style="list-style-type: none"> • Understanding User Interface (UI) and User Experience (UX) • Importance of UI/UX in software development and product design • Historical overview and evolution of UI/UX design • Principles of good UI/UX design: usability, consistency, accessibility, and aesthetics • Case studies of successful UI/UX designs 	6
Unit II	User Research and Analysis <ul style="list-style-type: none"> • Introduction to user research methodologies (surveys, interviews, observations, etc.) • Creating user personas and scenarios • Conducting usability tests and gathering feedback • Analyzing and interpreting user research data • Introduction to information architecture and content strategy 	6
Unit III	UI Design Principles and Prototyping <ul style="list-style-type: none"> • Fundamentals of UI design: visual hierarchy, layout, typography, color theory • UI design tools and software (e.g., Sketch, Adobe XD, Figma) • Wireframing and prototyping techniques • Responsive design principles • Interaction design basics: affordances, signifiers, feedback 	6
Unit IV	UX Design Process and Evaluation <ul style="list-style-type: none"> • Adobe XD • Understanding the UX design process: research, design, prototype, test • Interaction design principles: navigation, information architecture, and micro-interactions • Accessibility and inclusive design considerations 	12

Recommended Readings:

- "The Elements of User Experience" by Jesse James Garrett
- "Lean UX: Designing Great Products with Agile Teams" by Jeff Gothelf and Josh Seiden
- "Quantifying the User Experience" by Jeff Sauro and James R. Lewis

Suggested Continuous Evaluation Methods: Seminar/ Presentation on any topic related to syllabus, Examination/Practical/ Internal/External Test with MCQs/short & long questions, attendance and participation in the class.

Suggested equivalent online courses:

- www.pdfdrive.com/ux-fundamentals-for-non-ux-professionals-user-experience-principles-for-managers-writers-designers-and-developers

Semester-IV

Undergraduate Diploma in Animation and Design

DISCIPLINE SPECIFIC COURSE (DSC) - DIGITAL VIDEO EDITING (THEORY)

No. of Hours- 30

CREDIT DISTRIBUTION, ELIGIBILITY AND PRE-REQUISITES OF THE COURSE

Course Title	Credits	Credit distribution of the Course			Eligibility criteria	Prerequisite of the course (if any)
		Lecture	Tutorial	Practical/Practice		
DSC: Digital Video editing (Theory)	2	2	0	0	Passed Certificate Course	Nil

UNDERGRADUATE DIPLOMA IN ANIMATION AND DESIGN

Programme: <i>Undergraduate Diploma in Animation and Design</i>		Year: II	Semester: IV Paper: DSC
Subject: Animation & Design			
Course: DSC	Digital Video Editing (Theory)		
Course Outcomes: After studying this course, the students will be able to: <ul style="list-style-type: none"> • Students will gain proficiency in digital video editing using Adobe Premiere Pro software. • Able to apply fundamental editing techniques, manipulate video and audio elements effectively. • Able to produce polished video projects suitable for various platforms. 			
Credits: 2		Discipline Specific Course	

Max. Marks: As per Univ. rules		Min. Passing Marks: As per Univ. rules
Unit	Topic	No. of Hours
Unit I	Introduction to Adobe Premiere Pro <ul style="list-style-type: none"> • Overview of Adobe Premiere Pro interface • Importing and organizing media assets • Basic editing techniques: cutting, trimming, and arranging clips • Introduction to transitions and effects • Exporting projects for various platforms 	10
Unit II	Advanced Editing Techniques <ul style="list-style-type: none"> • Working with multiple video and audio tracks • Utilizing advanced editing tools: ripple edit, roll edit, slip edit, and slide edit • Applying keyframes for animation and effects • Color correction and grading • Audio editing and mixing techniques 	8
Unit III	Motion Graphics and Effects <ul style="list-style-type: none"> • Introduction to motion graphics and titles • Working with text layers and presets • Incorporating graphics and logos into video projects • Using effects and presets to enhance visual appeal • Introduction to compositing techniques 	10
Unit IV	Project Development and Finalization <ul style="list-style-type: none"> • Planning and organizing a video project • Collaboration and workflow management in Premiere Pro • Integrating external assets: audio, images, and graphics • Review and feedback processes • Finalizing projects: adding finishing touches, exporting in various formats, and sharing online 	12

Recommended Readings:

- *"Adobe Premiere Pro Classroom in a Book"* by Maxim Jago
- *"The Cool Stuff in Premiere Pro: Learn advanced editing techniques to dramatically speed up your workflow"* by Jarle Leirpoll
- *"Edit Better: Hollywood-Tested Strategies for Powerful Video Editing"* by Jeff Bartsch
- *"The Filmmaker's Handbook: A Comprehensive Guide for the Digital Age"* by Steven Ascher and Edward Pincus

Suggested Continuous Evaluation Methods: Seminar/ Presentation on any topic related to syllabus, Examination/Practical/ Internal/External Test with MCQs/short & long questions, attendance and participation in the class.

Suggested equivalent online courses:

- <https://helpx.adobe.com/premiere-pro/user-guide.html>

Semester-IV

Undergraduate Diploma in Animation and Design

DISCIPLINE SPECIFIC COURSE (DSC) - DIGITAL VIDEO EDITING (PRACTICAL)

No. of Hours-60

CREDIT DISTRIBUTION, ELIGIBILITY AND PRE-REQUISITES OF THE COURSE

Course Title	Credits	Credit distribution of the Course			Eligibility criteria	Prerequisite of the course (if any)
		Lecture	Tutorial	Practical/Practice		
DSC: Digital Video editing (Practical)	2	0	0	2	Passed Certificate Course	Nil

UNDERGRADUATE DIPLOMA IN ANIMATION AND DESIGN		
Programme: <i>Undergraduate Diploma in Animation and Design</i>	Year: II	Semester: IV Paper: DSC
Subject: Animation & Design		
Course: DSC	Digital Video Editing (Practical)	
Course Outcomes: After studying this course, the students will be able to: <ul style="list-style-type: none"> • Students will gain proficiency in digital video editing using Adobe Premiere Pro software. • Able to apply fundamental editing techniques, manipulate video and audio elements effectively. • Able to produce polished video projects suitable for various platforms. 		
Credits: 2		Discipline Specific Course
Max. Marks: As per Univ. rules		Min. Passing Marks: As per Univ. rules
Unit	Topic	No. of Hours
Unit I	Video editing – create trailer of 2 min	15
Unit II	Edit video according to the sound	15
Unit III	Create motion graphics typography	15
Unit IV	Apply transition in-between videos	15

Recommended Readings:

- "Adobe Premiere Pro Classroom in a Book" by Maxim Jago
- "The Cool Stuff in Premiere Pro: Learn advanced editing techniques to dramatically speed up your workflow" by Jarle Leirpoll
- "Edit Better: Hollywood-Tested Strategies for Powerful Video Editing" by Jeff Bartsch
- "The Filmmaker's Handbook: A Comprehensive Guide for the Digital Age" by Steven Ascher and Edward Pincus

Suggested Continuous Evaluation Methods: Seminar/ Presentation on any topic related to syllabus, Examination/Practical/ Internal/External Test with MCQs/short & long questions, attendance and participation in the class.

Suggested equivalent online courses: <https://helpx.adobe.com/premiere-pro/user-guide.html>

Semester-IV

Undergraduate Diploma in Animation and Design

DISCIPLINE SPECIFIC COURSE (DSC) – CONCEPT ART (PRACTICAL)

No. of Hours-120

CREDIT DISTRIBUTION, ELIGIBILITY AND PRE-REQUISITES OF THE COURSE

Course Title	Credits	Credit distribution of the Course			Eligibility criteria	Prerequisite of the course (if any)
		Lecture	Tutorial	Practical/Practice		
DSC: Concept Art (Practical)	4	0	0	4	Passed Certificate Course	Nil

UNDERGRADUATE DIPLOMA IN ANIMATION AND DESIGN

Programme: <i>Undergraduate Diploma in Animation and Design</i>		Year: II	Semester: IV Paper: DSC
Subject: Animation & Design			
Course: DSC	Concept Art (Practical)		
Course Outcomes:			
After studying this course, the students will be able to:			
<ul style="list-style-type: none"> Create a portfolio of drawn and painted Conceptual art from imagination. 			
Credits: 4		Discipline Specific Course	
Max. Marks: As per Univ. rules		Min. Passing Marks: As per Univ. rules	
Unit	Topic		No. of Hours
Unit I	Introduction to Concept Art in Game Design <ul style="list-style-type: none"> Overview of concept art: definition, purpose, and importance in game development. Historical context: evolution of concept art in the gaming industry. Roles and responsibilities of concept artists in game development teams. 		30
Unit II	Fundamentals of Concept Art <ul style="list-style-type: none"> Principles of design: composition, color theory, lighting, perspective, and anatomy. Introduction to digital art tools and software commonly used in concept art creation (e.g., Adobe Photoshop, Procreate). Sketching techniques and thumbnailing for ideation and 		30

	concept exploration.	
Unit III	Character and Creature Design <ul style="list-style-type: none"> Anatomy and proportion fundamentals for character and creature design. Developing character backstories and personalities to inform design choices. Iterative design processes: sketching, refining, and finalizing character concepts. 	30
Unit IV	Environment and Prop Design <ul style="list-style-type: none"> Principles of environmental design: establishing mood, atmosphere, and storytelling through environments. Conceptualizing and designing architectural structures, landscapes, and natural settings. Prop design: creating objects, weapons, vehicles, and other interactive elements. 	30

Recommended Readings:

- "Imaginative Realism: How to Paint What Doesn't Exist"* by James Gurney
- "The Art of Pixar: The Complete Color Scripts and Select Art from 25 Years of Animation"* by Amid Amidi
- "The Art of Moana"* by Jessica Julius and Maggie Malone

Suggested Continuous Evaluation Methods: Seminar/ Presentation on any topic related to syllabus, Examination/Practical/ Internal/External Test with MCQs/short & long questions, attendance and participation in the class.

Suggested equivalent online courses:

- www.pdfdrive.com/drawing-basics-and-video-game-art-classic-to-cutting-edge-art-techniques-for-winning-video-game-design

Semester-IV

Undergraduate Diploma in Animation and Design

DISCIPLINE SPECIFIC COURSE (DSC)- FUNDAMENTAL OF 3D ANIMATION, PARTICLE, SIMULATION (THEORY)

No. of Hours- 30

CREDIT DISTRIBUTION, ELIGIBILITY AND PRE-REQUISITES OF THE COURSE

Course Title	Credits	Credit distribution of the Course			Eligibility criteria	Prerequisite of the course (if any)
		Lecture	Tutorial	Practical/Practice		

DSC: Fundamental of 3D Animation, Particle, Simulation (Theory)	2	2	0	0	Passed Certificate Course	Nil
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UNDERGRADUATE DIPLOMA IN ANIMATION AND DESIGN			
Programme: <i>Undergraduate Diploma in Animation and Design</i>		Year: II	Semester: IV Paper: DSC
Subject: Animation & Design			
Course: DSC	Fundamental of 3D Animation, Particle, Simulation (Theory)		
Course Outcomes: After studying this course, the students will be able to: <ul style="list-style-type: none"> • Understand the basic principles of 3D animation and its applications. • Create and manipulate 3D models using Autodesk 3ds Max software. • Apply particle effects to simulate natural phenomena and dynamic environments. • Perform simulations for various scenarios, such as fluid dynamics and rigid body physics. • Produce high-quality animations integrating 3D models, particle effects, and simulations 			
Credits: 2		Discipline Specific Course	
Max. Marks: As per Univ. rules		Min. Passing Marks: As per Univ. rules	
Unit	Topic	No. of Hours	
Unit I	Introduction to 3D Animation and 3ds Max <ul style="list-style-type: none"> • Overview of 3D animation principles • Introduction to Autodesk 3ds Max interface and workflow • Basic modeling techniques: primitive objects, modifiers, and editing tools • Understanding key frame animation and timeline manipulation 	15	
Unit II	Particle Effects in 3ds Max <ul style="list-style-type: none"> • Introduction to particle systems • Understanding particle properties: birth, motion, shape, and collision • Creating particle effects for natural phenomena (fire, smoke, water) • Particle animation and behavior controls • 	15	
Unit III	Simulation Techniques in 3ds Max <ul style="list-style-type: none"> • Overview of simulation types: rigid body dynamics, soft body dynamics, and fluid dynamics • Introduction to MassFX physics engine in 3ds Max • Setting up simulations for different scenarios (e.g., falling objects, cloth simulation, liquid simulation) 	15	
Unit IV	Advanced Techniques and Integration <ul style="list-style-type: none"> • Advanced animation techniques: character rigging, skinning, and animation controllers • Integrating particle effects and simulations into animation projects 	15	

	<ul style="list-style-type: none"> • Rendering and post-production techniques for polished final output 	
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Recommended Readings:

- *3ds Max 2020 Essentials* by Dariush Derakhshani
- *"Mastering Autodesk 3ds Max 2020"* by Kelly L. Murdock

Suggested Continuous Evaluation Methods: Seminar/ Presentation on any topic related to syllabus, Examination/Practical/ Internal/External Test with MCQs/short & long questions, attendance and participation in the class.

Suggested equivalent online courses: www.pdfdrive.com/3d-max-autodesk

Semester-IV

Undergraduate Diploma in Animation and Design

DISCIPLINE SPECIFIC COURSE (DSC)- FUNDAMENTAL OF 3D ANIMATION, PARTICLE, SIMULATION (PRACTICAL)

No. of Hours-60

CREDIT DISTRIBUTION, ELIGIBILITY AND PRE-REQUISITES OF THE COURSE

Course Title	Credits	Credit distribution of the Course			Eligibility criteria	Prerequisite of the course (if any)
		Lecture	Tutorial	Practical/Practice		
DSC: Fundamental of 3D Animation, Particle, Simulation (Practical)	2	0	0	2	Passed Certificate Course	Nil

UNDERGRADUATE DIPLOMA IN ANIMATION AND DESIGN

Programme: <i>Undergraduate Diploma in Animation and Design</i>		Year: II	Semester: IV
Subject: Animation & Design		Paper: DSC	
Course: DSC	Fundamental of 3D Animation, Particle, Simulation (Practical)		

Course Outcomes:

After studying this course, the students will be able to:

- Understand the basic principles of 3D animation and its applications.
- Create and manipulate 3D models using Autodesk 3ds Max software.
- Apply particle effects to simulate natural phenomena and dynamic environments.
- Perform simulations for various scenarios, such as fluid dynamics and rigid body physics.
- Produce high-quality animations integrating 3D models, particle effects, and simulations

Credits: 2		Discipline Specific Course
Max. Marks: As per Univ. rules		Min. Passing Marks: As per Univ. rules
Unit	Topic	No. of Hours
Unit I	<ul style="list-style-type: none"> • Create a simple animation sequence using key frame animation 	15
Unit II	<ul style="list-style-type: none"> • Develop a particle-based animation project demonstrating various effects 	15
Unit III	<ul style="list-style-type: none"> • Create a simulation-based animation showcasing a dynamic scenario (e.g., collapsing building, cloth interacting with wind) 	15
Unit IV	<ul style="list-style-type: none"> • Assignment: Final project integrating 3D animation, particle effects, and simulations with a focus on creativity and technical proficiency 	15

Recommended Readings:

- *3ds Max 2020 Essentials" by Dariush Derakhshani*
- *"Mastering Autodesk 3ds Max 2020" by Kelly L. Murdock*

Suggested Continuous Evaluation Methods: Seminar/ Presentation on any topic related to syllabus, Examination/Practical/ Internal/External Test with MCQs/short & long questions, attendance and participation in the class.

Suggested equivalent online courses: www.pdfdrive.com/3d-max-autodesk

Semester-IV

Undergraduate Diploma in Animation and Design

DISCIPLINE SPECIFIC COURSE / GENERIC ELECTIVE (DSC /GE)- FUNDAMENTAL OF FILM MAKING (THEORY)

No. of Hours-60

CREDIT DISTRIBUTION, ELIGIBILITY AND PRE-REQUISITES OF THE COURSE

Course Title	Credits	Credit distribution of the Course			Eligibility criteria	Prerequisite of the course (if any)
		Lecture	Tutorial	Practical/Practice		
DSC / GE: Fundamental of Film Making (Theory)	4	4	0	0	Passed Certificate Course	Nil

UNDERGRADUATE DIPLOMA IN ANIMATION AND DESIGN		
Programme: <i>Undergraduate Diploma in Animation and Design</i>		Year: II
		Semester: IV Paper: DSC / GE
Subject: Animation & Design		
Course: DSC /GE	Fundamental of Film Making (Theory)	
Course Outcomes: After studying this course, the students will be able to: <ul style="list-style-type: none"> • Understand the fundamental concepts and principles of filmmaking. • Demonstrate basic skills in scriptwriting, cinematography, directing, editing, and sound design. • Analyze and critique films using terminology and concepts learned in the course. • Apply theoretical knowledge to practical filmmaking projects. 		
Credits: 4	Discipline Specific Course	
Max. Marks: As per Univ. rules	Min. Passing Marks: As per Univ. rules	
Unit	Topic	No. of Hours
Unit I	Introduction to Filmmaking <ul style="list-style-type: none"> • Overview of the filmmaking process • History of cinema • Roles and responsibilities of key personnel in filmmaking • Introduction to film theory and terminology 	15
Unit II	Scriptwriting <ul style="list-style-type: none"> • The structure of a screenplay • Character development • Dialogue and narrative • Writing exercises and workshops 	15
Unit III	Cinematography and Directing <ul style="list-style-type: none"> • Principles of visual storytelling • Camera techniques and shot composition • Lighting and color theory • Basics of directing actors 	15
Unit IV	Editing and Sound Design <ul style="list-style-type: none"> • Principles of film editing • Introduction to non-linear editing software • Sound recording and editing • Sound effects and music in filmmaking 	15

Recommended Readings:

- *"In the Blink of an Eye: A Perspective on Film Editing"* by Walter Murch
- *"Film Directing Shot by Shot: Visualizing from Concept to Screen"* by Steven D. Katz

- "The Filmmaker's Handbook: A Comprehensive Guide for the Digital Age" by Steven Ascher and Edward Pincus

Suggested Continuous Evaluation Methods: Seminar/ Presentation on any topic related to syllabus, Examination/Practical/ Internal/External Test with MCQs/short & long questions, attendance and participation in the class.

Suggested equivalent online courses: www.pdfdrive.com/basics-film-making-the-language-of-film

Semester-IV

Undergraduate Diploma in Animation and Design

DISCIPLINE SPECIFIC COURSE / GENERIC ELECTIVE (DSC /GE)- ADVANCED UX/UI DESIGNING (PRACICAL)

No. of Hours-120

CREDIT DISTRIBUTION, ELIGIBILITY AND PRE-REQUISITES OF THE COURSE

Course Title	Credits	Credit distribution of the Course			Eligibility criteria	Prerequisite of the course (if any)
		Lecture	Tutorial	Practical/Practice		
DSC / GE: Advanced UX/UI Designing (Practical)	4	0	0	4	Passed Certificate Course	Nil

UNDERGRADUATE DIPLOMA IN ANIMATION AND DESIGN

Programme: <i>Undergraduate Diploma in Animation and Design</i>		Year: II	Semester: IV Paper: DSC / GE
Subject: Animation & Design			
Course: DSC /GE	Advanced UX/UI Designing(Practical)		
Course Outcomes: After studying this course, the students will be able to: <ul style="list-style-type: none"> • Demonstrate advanced proficiency in Adobe XD and After Effects for UX/UI design. • Apply design principles and user-centered design methodologies to create compelling user interfaces. • Develop interactive prototypes with complex interactions and animations. • Critically evaluate and iterate on design solutions based on user feedback and usability testing. • Communicate design concepts effectively through presentations and documentation. 			
Credits: 4		Discipline Specific Course / Generic Elective	
Max. Marks: As per Univ. rules		Min. Passing Marks: As per Univ. rules	
Unit	Topic		No. of Hours
Unit I	Advanced Adobe XD Techniques <ul style="list-style-type: none"> • Advanced prototyping techniques in Adobe XD • Component states and interactions 		30

	<ul style="list-style-type: none"> • Responsive design principles • Collaboration and version control in Adobe XD 	
Unit II	Advanced UI Design Principles <ul style="list-style-type: none"> • Advanced typography and color theory • Micro interactions and feedback mechanisms • Accessibility considerations in UI design • Data visualization and dashboard design 	30
Unit III	Motion Design with After Effects <ul style="list-style-type: none"> • Introduction to motion design principles • Key frame animation techniques • Expressions and scripting for advanced animations • Creating animated transitions and effects 	30
Unit IV	Advanced UX/UI Projects <ul style="list-style-type: none"> • Real-world UX/UI design challenges • Iterative design process from concept to prototype • Usability testing and feedback integration • Final project presentation and portfolio development 	30

Recommended Readings:

- *"Designing Interfaces: Patterns for Effective Interaction Design"* by Jenifer Tidwell
- *"The Elements of User Experience: User-Centered Design for the Web and Beyond"* by Jesse James Garrett
- *"The Principles of Beautiful Web Design"* by Jason Beaird
- *"After Effects Apprentice"* by Chris and Trish Meyer

Suggested Continuous Evaluation Methods: Seminar/ Presentation on any topic related to syllabus, Examination/Practical/ Internal/External Test with MCQs/short & long questions, attendance and participation in the class.

Suggested equivalent online courses: www.pdfdrive.com/jump-start-adobe-xd

Semester-IV

Undergraduate Diploma in Animation and Design

SKILL ENHANCEMENT COURSE (SEC)- DIGITAL MARKETING (PRACTICAL)

No. of Hours- 30

CREDIT DISTRIBUTION, ELIGIBILITY AND PRE-REQUISITES OF THE COURSE

Course Title	Credits	Credit distribution of the Course			Eligibility criteria	Prerequisite of the course (if any)
		Lecture	Tutorial	Practical/Practice		

SEC: Digital Marketing (Practical)	2	2	0	0	Passed Certificate Course	Nil
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UNDERGRADUATE DIPLOMA IN ANIMATION AND DESIGN						
Programme: <i>Undergraduate Diploma in Animation and Design</i>				Year: II	Semester: IV Paper: SEC	
Subject: Animation & Design						
Course: SEC		Digital Marketing (Practical)				
Course Outcomes:						
After studying this course, the students will be able to:						
<ul style="list-style-type: none"> • Understand the principles and techniques of digital marketing. • Develop effective digital marketing strategies for different business objectives. • Implement various digital marketing tactics, including SEO, social media, and email marketing. • Analyse digital marketing metrics to evaluate campaign performance and optimize strategies. 						
Credits: 2				Skill Enhancement Course		
Max. Marks: As per Univ. rules				Min. Passing Marks: As per Univ. rules		
Unit	Topic				No. of Hours	
Unit I	Introduction to Digital Marketing <ul style="list-style-type: none"> • Overview of Digital Marketing Landscape • Understanding Consumer Behaviour Online • Digital Marketing Channels and Platforms • Ethical and Legal Considerations in Digital Marketing 				10	
Unit II	Search Engine Optimization (SEO) <ul style="list-style-type: none"> • Fundamentals of SEO: On-page and Off-page Optimization • Keyword Research and Analysis • SEO Copywriting and Content Optimization • Technical SEO: Site Structure and Performance 				10	
Unit III	Social Media Marketing <ul style="list-style-type: none"> • Social Media Platforms and Audience Targeting • Content Strategy and Creation for Social Media • Social Media Advertising and Campaign Management • Community Management and Engagement 				12	
Unit IV	Email Marketing and Digital Analytics <ul style="list-style-type: none"> • Email Marketing Strategy and Best Practices • Email Campaign Planning and Execution • Automation and Personalization in Email Marketing • Introduction to Digital Analytics Tools 				8	

Recommended Readings:

- *"Digital Marketing: Strategy, Implementation and Practice"* by Dave Chaffey, Fiona Ellis-Chadwick
- *"SEO 2022: Learn Search Engine Optimization with Smart Internet Marketing Strategies"* by Adam Clarke

- "Social Media Marketing Workbook: How to Use Social Media for Business" by Jason McDonald

Suggested Continuous Evaluation Methods: Seminar/ Presentation on any topic related to syllabus, Examination/Practical/ Internal/External Test with MCQs/short & long questions, attendance and participation in the class.

Suggested equivalent online courses: www.pdfdrive.com/understanding-digital-marketing-marketing-strategies-for-engaging-the-digital-generation

Semester-V

Bachelor of Animation & Design

DISCIPLINE SPECIFIC COURSE (DSC)- GAME DESIGN - I (THEORY)

No. of Hours-30

CREDIT DISTRIBUTION, ELIGIBILITY AND PRE-REQUISITES OF THE COURSE

Course Title	Credits	Credit distribution of the Course			Eligibility criteria	Prerequisite of the course(if any)
		Lecture	Tutorial	Practical/Practice		
DSC: Game Design– I (Theory)	2	2	0	0	Passed Diploma Course	Nil

BACHELOR OF ANIMATION & DESIGN

Programme: *Bachelor of Animation & Design*

Year: III

Semester: V
Paper: DSC

Subject: Animation & Design

Course: DSC Game Design - I (Theory)

Course Outcomes:

After studying this course, the students will be able to:

- Knowledge and skills to effectively navigate the pre-production phase of game development.
- Able to generate, refine, and prototype game ideas, create comprehensive documentation, and develop project plans to guide game development processes.

Credits: 2

Discipline Specific Course

Max. Marks: As per Univ. rules

Min. Passing Marks: As per Univ. rules

Unit	Topic	No. of Hours
Unit I	Introduction to Game Design Pre-Production <ul style="list-style-type: none"> • Overview of the game development process • Importance of pre-production in game design 	10

	<ul style="list-style-type: none"> • Roles and responsibilities during pre-production • Introduction to game design documentation 	
Unit II	Conceptualization and Ideation <ul style="list-style-type: none"> • Generating and refining game ideas • Brainstorming techniques for game concepts • Defining game mechanics, themes, and player experiences • Developing concept documents and pitch materials 	10
Unit III	Prototyping and Iteration <ul style="list-style-type: none"> • Principles of game prototyping • Rapid prototyping techniques • Playtesting and feedback gathering • Iterative design and refinement 	12
Unit IV	Documentation and Project Planning <ul style="list-style-type: none"> • Overview of game design documentation types (e.g., game design documents, technical documents) • Structuring and formatting game design documents • Project planning methodologies (e.g., Agile, Waterfall) • Creating milestone schedules and task lists 	8

Recommended Readings:

- *"Level Up! The Guide to Great Video Game Design"* by Scott Rogers
- *"The Game Maker's Apprentice: Game Development for Beginners"* by Jacob Habgood and Mark Overmars

Suggested Continuous Evaluation Methods: Seminar/ Presentation on any topic related to syllabus, Examination/Practical/ Internal/External Test with MCQs/short & long questions, attendance and participation in the class.

Suggested equivalent online courses:

www.pdfdrive.com/game-on-gamification-gameful-design-and-the-rise-of-the-gamer-educator

Semester-V

Bachelor of Animation & Design

DISCIPLINE SPECIFIC COURSE (DSC)- GAME DESIGN - I (PRACTICAL)

No. of Hours-60

CREDIT DISTRIBUTION, ELIGIBILITY AND PRE-REQUISITES OF THE COURSE

Course Title	Credits	Credit distribution of the Course			Eligibility criteria	Prerequisite of the course(if
		Lecture	Tutorial	Practical/Practice		

						any)
DSC: Game Design - I (Practical)	2	0	0	2	Passed Diploma Course	Nil

BACHELOR OF ANIMATION & DESIGN		
Programme: <i>Bachelor of Animation & Design</i>		Year: III Semester: V Paper: DSC
Subject: Animation & Design		
Course: DSC	Game Design - I (Practical)	
Course Outcomes: After studying this course, the students will be able to: <ul style="list-style-type: none"> • Knowledge and skills to effectively navigate the pre-production phase of game development. • Able to generate, refine, and prototype game ideas, create comprehensive documentation, and develop project plans to guide game development processes. 		
Credits: 2	Discipline Specific Course	
Max. Marks: As per Univ. rules	Min. Passing Marks: As per Univ. rules	
Unit	Topic	No. of Hours
Unit I	Create game concept and pitch presentation	10
Unit II	Game prototyping and play testing	10
Unit III	Character, props and background designing	12
Unit IV	GDD and project plan	8

Recommended Readings:

- *"Level Up! The Guide to Great Video Game Design"* by Scott Rogers
- *"The Game Maker's Apprentice: Game Development for Beginners"* by Jacob Habgood and Mark Overmars

Suggested Continuous Evaluation Methods: Seminar/ Presentation on any topic related to syllabus, Examination/Practical/ Internal/External Test with MCQs/short & long questions, attendance and participation in the class.

Suggested equivalent online courses: www.pdfdrive.com/game-on-gamification-gameful-design-and-the-rise-of-the-gamer-educator

Semester-V

Bachelor of Animation & Design

DISCIPLINE SPECIFIC COURSE (DSC)- 3D MODELING, TEXTURING AND LIGHTING (PRACTICAL)

No. of Hours- 120

CREDIT DISTRIBUTION, ELIGIBILITY AND PRE-REQUISITES OF THE COURSE

Course Title	Credits	Credit distribution of the Course			Eligibility criteria	Prerequisite of the course(if any)
		Lecture	Tutorial	Practical/Practice		
DSC: 3D Modeling, Texturing and Lighting (Practical)	4	0	0	4	Passed Diploma Course	Nil

BACHELOR OF ANIMATION & DESIGN

Programme: <i>Bachelor of Animation & Design</i>		Year: III	Semester: V Paper: DSC
Subject: Animation & Design			
Course: DSC	3D Modeling, Texturing & Lighting (Practical)		
Course Outcomes: After studying this course, the students will be able to: <ul style="list-style-type: none"> • Understanding of 3D Modeling: Students will demonstrate proficiency in creating 3D models using various techniques such as polygonal modeling, NURBS modeling, and sculpting tools. • Proficiency in Texturing: Students will learn to apply textures to 3D models effectively, including understanding UV mapping, texture painting, and shader creation for realistic material representation. • Knowledge of Lighting Techniques: Students will gain skills in setting up different types of lighting in 3D scenes, including natural lighting, artificial lighting, and advanced lighting effects for mood and atmosphere. • Integration of Modeling, Texturing, and Lighting: Students will learn to integrate modeling, texturing, and lighting techniques to create visually compelling and cohesive 3D scenes or assets. 			
Credits: 4		Discipline Specific Course	
Max. Marks: As per Univ. rules		Min. Passing Marks: As per Univ. rules	
Unit	Topic		No. of Hours
Unit I	Introduction to 3D Modeling <ul style="list-style-type: none"> • Overview of 3D modeling principles • Polygonal modeling techniques • NURBS modeling basics • Sculpting tools and techniques Exercises and projects		15

Unit II	Texturing in Maya <ul style="list-style-type: none"> • Understanding UV mapping • Texture painting techniques • Shader creation and material properties • Applying textures to 3D models Projects focusing on texture application	15
Unit III	Lighting Fundamentals <ul style="list-style-type: none"> • Types of lighting in 3D environments • Basic lighting setups • Advanced lighting techniques (e.g., global illumination, HDRI lighting) • Creating mood and atmosphere with lighting Lighting exercises and projects	15
Unit IV	Integration and Advanced Techniques <ul style="list-style-type: none"> • Workflow optimization strategies • Integrating modeling, texturing, and lighting for cohesive scenes • Advanced texturing techniques (e.g., procedural texturing) Real-world project simulations	15

Recommended Readings:

- *"Introducing Autodesk Maya 2024" by Dariush Derakhshani*
- *"Maya for Games: Modeling and Texturing Techniques with Maya and Mudbox" by Michael Ingrassia*
- *"Digital Lighting & Rendering" by Jeremy Birn*

Suggested Continuous Evaluation Methods: Seminar/ Presentation on any topic related to syllabus, Examination/Practical/ Internal/External Test with MCQs/short & long questions, attendance and participation in the class.

Suggested equivalent online courses:

www.pdfdrive.com/3d-animation-for-the-raw-beginner-using-maya

Semester-V

Bachelor of Animation & Design

DISCIPLINE SPECIFIC COURSE (DSC)- MOTION GRAPHICS & VIRTUAL COMMUNICATION (PRACTICAL)

No. of Hours- 120

CREDIT DISTRIBUTION, ELIGIBILITY AND PRE-REQUISITES OF THE COURSE

Course Title	Credits	Credit distribution of the Course			Eligibility criteria	Prerequisite of the course(if any)
		Lecture	Tutorial	Practical/Practice		

DSC: Motion Graphics& Virtual Communication (Practical)	4	0	0	4	Passed Diploma Course	Nil
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BACHELOR OF ANIMATION & DESIGN			
Programme: <i>Bachelor of Animation & Design</i>		Year: III	Semester: V Paper: DSC
Subject: Animation & Design			
Course: DSC	Motion Graphics& Virtual Communication(Practical)		
Course Outcomes: After studying this course, the students will be able to: <ul style="list-style-type: none"> • Understand the Concepts behind Visual Effects in After Effects • Work and Animate the Perspective Visual Effects Group • Create full Projects Using Various Effects, Videos and Graphics • With The Complete Guide to for every Effect will be master and create awesome Visual Effects Animations 			
Credits: 4		Discipline Specific Course	
Max. Marks: As per Univ. rules		Min. Passing Marks: As per Univ. rules	
Unit	Topic	No. of Hours	
Unit I	AFTER EFFECTS- Introduction to Broadcasting, Introduction to User Interface and a basic compositing.	30	
Unit II	Basic Animation, Spatial Interpolation, Temporal interpolation, Pre-compositing, Time remapping, Expression.	30	
Unit III	Masking on Image, Rotoscope, Color Correction, Keying, 3D Layers-Camera + Lighting, Text Animation.	30	
Unit IV	Tracking and Stabilizing, Cleanup, Simulation, particles.	30	

Recommended Readings: *Adobe after Effects CC Classroom in a Book*, Author: Adobe Creative Team, Publisher: *Adobe*

Suggested Continuous Evaluation Methods: Seminar/ Presentation on any topic related to syllabus, Examination/Practical/ Internal/External Test with MCQs/short & long questions, attendance and participation in the class.

Suggested equivalent online courses: <https://libribook.com/view1/16426/?bookid=45368>

Semester-V

Bachelor of Animation & Design

DISCIPLINE SPECIFIC ELECTIVE (DSE)- 3D MODELING WITH BLENDER (PRACTICAL)

No. of Hours-120

CREDIT DISTRIBUTION, ELIGIBILITY AND PRE-REQUISITES OF THE COURSE

Course Title	Credits	Credit distribution of the Course			Eligibility criteria	Prerequisite of the course(if any)
		Lecture	Tutorial	Practical/Practice		
DSE: 3D Modeling with Blender (Practical)	4	0	0	4	Passed Diploma Course	Nil

BACHELOR OF ANIMATION & DESIGN

Programme: *Bachelor of Animation & Design*

Year: III

Semester: V
Paper: DSE

Subject: Animation & Design

Course: DSE 3D Modeling with Blender (Practical)

Course Outcomes:

After studying this course, the students will be able to:

- **Proficiency in Basic Modeling Techniques:** Students will demonstrate competence in fundamental modeling techniques such as polygonal modeling, subdivision surface modeling, and edge modeling.
- **Advanced Modeling Skills:** Students will develop advanced modeling skills, including sculpting organic forms, creating complex surfaces, and using modifiers effectively to streamline the modeling process.
- **Understanding of Procedural Modeling:** Students will learn the principles of procedural modeling and how to use Blender's procedural modeling tools to generate intricate geometry and patterns.
- **Integration of Modeling Techniques:** Students will integrate various modeling techniques to create detailed and realistic 3D models suitable for animation, visualization, or game development

Credits: 4

Discipline Specific Elective

Max. Marks: As per Univ. rules

Min. Passing Marks: As per Univ. rules

Unit	Topic	No. of Hours
Unit I	Introduction to Blender and Basic Modeling <ul style="list-style-type: none"> • Overview of Blender interface and navigation • Introduction to basic modeling tools (e.g., extrusion, bevel, loop cut) • Polygonal modeling techniques • Exercises focusing on creating simple objects 	24
Unit II	Advanced Modeling Techniques <ul style="list-style-type: none"> • Subdivision surface modeling • Sculpting organic forms with Blender's sculpt mode 	24

	<ul style="list-style-type: none"> Using modifiers to create complex geometry (e.g., mirror, array, boolean) Projects involving detailed object modeling 	
Unit III	Procedural Modeling in Blender <ul style="list-style-type: none"> Understanding procedural modeling concepts Introduction to Blender's procedural modeling tools (e.g., modifiers, node-based modeling) Creating procedural textures and geometry Exercises and projects emphasizing procedural modeling techniques 	24
Unit IV	Integration and Real-World Applications <ul style="list-style-type: none"> Workflow optimization strategies Integrating various modeling techniques to create complete scenes or assets Applying modeling skills to real-world projects (e.g., architectural visualization, character modeling) Portfolio development and presentation techniques 	48

Recommended Readings:

- "Blender Foundations: The Essential Guide to Learning Blender 2.9" by Roland Hess
- "Blender 3D Cookbook" by Enrico Valenza

Suggested Continuous Evaluation Methods: Seminar/ Presentation on any topic related to syllabus, Examination/Practical/ Internal/External Test with MCQs/short & long questions, attendance and participation in the class.

Suggested equivalent online courses: www.pdfdrive.com/blender-3d-basics-2nd-edition-a-quick-and-easy-to-use-guide-to-create-3d-modeling-and-animation-using-blender

Semester-V

Bachelor of Animation & Design

DISCIPLINE SPECIFIC ELECTIVE (DSE)- PRINCIPLE OF ADVERTISING (THEORY)

No. of Hours-60

CREDIT DISTRIBUTION, ELIGIBILITY AND PRE-REQUISITES OF THE COURSE

Course Title	Credits	Credit distribution of the Course			Eligibility criteria	Prerequisite of the course(if any)
		Lecture	Tutorial	Practical/Practice		
DSE: Principle of Advertising	4	4	0	0	Passed Diploma Course	Nil

BACHELOR OF ANIMATION & DESIGN

Programme: Bachelor of Animation & Design		Year: III	Semester: V Paper: DSE
Subject: Animation & Design			
Course: DSE	Principle of Advertising		
Course Outcomes:			
After studying this course, the students will be able to:			
<ul style="list-style-type: none"> The course aims at imparting knowledge on Marketing Management from the perspective of Marketing Communications. It explains the fundamentals of Marketing and emphasizes on Consumer Behaviour and the elements of Marketing Mix: Product, Price, Place and Promotion, their nature, characteristics, scope and strategies and advertising in the perspective of Indian society, art and culture. The concepts of Segmenting, Targeting and Positioning are also described along with the ethical and social responsibility issues that marketing must address. The course helps to develop an understanding on the various aspects advertising which includes its objectives, classification, creative aspect, role in the economy and society, functions of the advertising agency and department, media strategies. Personal Selling, Sales Promotion, Public Relations, Sales Force Management and Integrated Marketing Communication has considerable detailing in the course. 			
Credits: 4		Discipline Specific Elective	
Max. Marks: As per Univ. rules		Min. Passing Marks: As per Univ. rules	
Unit	Topic		No. of Hours
Unit I	Advertising Definition, concept, evolution of advertising, Types and Functions of Advertising, Advertising and Society, Economic effects of advertising. ASCI.		15
Unit II	Advertising Agency: Types of agencies, structure, functions & scope, Planning and advertising campaigns: market research, product research, consumer analysis, Media planning and scheduling. Marketing mix, Brand building, Brand loyalty, unique selling proposition.		15
Unit III	Public Relations: Evolution, Definitions, concept, scope, Publicity, Propaganda, advertising. Public Opinion, Lobbying, PR Campaign, Promotion. PR and social responsibility.		15
Unit IV	Corporate communication: Definition and functions. Internal and external communication. Tools of corporate communication. CSR, Crisis management. Scheduling and handling of press Conference, Press get - together, Press Meet, Press kit, PR and Media Relations. Event Management, PR code of ethics.		15

Recommended Readings:

- *Agarwal C.D., Media and Advertising, Mohit publication, 2008*
- *Robert R. Ulmer, Timothy L. Sellnow, Effective Crisis Communication, Sage publication, 2011*
- *Rajiv Batra: Advertising Management, Prentice publication, 1996*
- *Paul A Argenti: Corporate Communication, Irwin Publication, 2015*
- *Al Ries & Laora Ries: The Fall of Advertising and the Rise of PR, Harper Business Publication, 2002*
- *Clow and Baack: Integrated Advertising Promotion and Marketing communication, 2004*

Suggested Continuous Evaluation Methods: Seminar/ Presentation on any topic related to syllabus, Examination/Practical/ Internal/External Test with MCQs/short & long questions, attendance and participation in the class.

Semester-V

Bachelor of Animation & Design

INTERNSHIP/APPRENTICESHIP/PROJECT/COMMUNITY OUTREACH(IAPC)- ACADEMIC PROJECT

No. of Hours-60

CREDIT DISTRIBUTION, ELIGIBILITY AND PRE-REQUISITES OF THE COURSE

Course Title	Credits	Credit distribution of the Course			Eligibility criteria	Prerequisite of the course(if any)
		Lecture	Tutorial	Practical/Practice		
IAPC: Academic Project	2	0	0	2	Passed Class Diploma Course	Nil

BACHELOR OF ANIMATION & DESIGN

Programme: *Bachelor of Animation & Design*

Year: III

Semester: V
Paper: IAPC

Subject: Animation & Design

Course: IAPC Academic Project

Course Outcomes:

After studying this course, the students will be able to:

- Gain first hand exposure of working in the real world.
- Allow harnessing skills, knowledge and theoretical practice learnt during the course.
- Develop and refine skills to suit the industry demands and build a strong network with professionals in the field.
- Gain confidence and improve chances as a job applicant.

Credits: 2

IAPC Course

Max. Marks: As per Univ. rules

Min. Passing Marks: As per Univ. rules

Unit	Topic	No. of Hours
Unit I	Student need submit showreel OR project based on 3D OR 2D Animation OR UX / UI Design	60

Note: Bachelor in Animation & Design Course Students can choose this academic project or can choose one course from pool of the SEC Course.

Suggested Continuous Evaluation Methods: Submission of Showreel/Report/Project/Attendance and it will be evaluated by Internal examiner.

Semester-VI

Bachelor of Animation & Design

DISCIPLINE SPECIFIC COURSE (DSC)- GAME DESIGN II (THEORY)

No. of Hours- 30

CREDIT DISTRIBUTION, ELIGIBILITY AND PRE-REQUISITES OF THE COURSE

Course Title	Credits	Credit distribution of the Course			Eligibility criteria	Prerequisite of the course(if any)
		Lecture	Tutorial	Practical/Practice		
DSC: Game Design II (Theory)	2	2	0	0	Passed Diploma Course	Nil

BACHELOR OF ANIMATION & DESIGN

Programme: <i>Bachelor of Animation & Design</i>		Year: III	Semester: VI Paper: DSC
Subject: Animation & Design			
Course: DSC	Game Design II (Theory)		
Course Outcomes: After studying this course, the students will be able to: <ul style="list-style-type: none"> • Understand the game production pipeline from concept to release. • Apply project management methodologies to game development projects. • Create and integrate game assets using industry-standard tools. • Implement testing procedures to ensure the quality and stability of game products. • Navigate the publishing and distribution process for games. 			
Credits: 4		Discipline Specific Course	
Max. Marks: As per Univ. rules		Min. Passing Marks: As per Univ. rules	
Unit	Topic		No. of Hours
Unit I	Introduction to Game Production <ul style="list-style-type: none"> • Overview of the game production pipeline • Roles and responsibilities in game development teams • Project management methodologies (e.g., Agile, Scrum) • Budgeting and scheduling considerations 		6
Unit II	Asset Creation and Integration <ul style="list-style-type: none"> • Principles of visual and audio design for games • Tools and software for creating game assets (e.g., Unity, 		6

	Blender, Adobe Creative Suite) <ul style="list-style-type: none"> Techniques for integrating assets into game engines Optimization strategies for performance and file size 	
Unit III	Quality Assurance and Testing <ul style="list-style-type: none"> Importance of testing in game development Types of testing: functionality, usability, compatibility, etc. Bug tracking and issue management User experience (UX) testing and feedback gathering 	10
Unit IV	Publishing and Distribution <ul style="list-style-type: none"> Publishing platforms and distribution channels Marketing and promotion strategies for games Legal considerations: copyright, licensing, etc. Post-launch support and updates 	8

Recommended Readings:

- "Game Production Handbook" by Heather Maxwell Chandler
- "The Ultimate Guide to Video Game Writing and Design" by Flint Dille and John Zuur Platten
- "Level Up! The Guide to Great Video Game Design" by Scott Rogers

Suggested Continuous Evaluation Methods: Seminar/ Presentation on any topic related to syllabus, Examination/Practical/ Internal/External Test with MCQs/short & long questions, attendance and participation in the class.

Suggested equivalent online courses: www.pdfdrive.com/eurogames-the-design-culture-and-play-of-modern-european-board-games

Semester-VI

Bachelor of Animation & Design

DISCIPLINE SPECIFIC COURSE (DSC)- GAME DESIGN II (PRACTICAL)

No. of Hours-60

CREDIT DISTRIBUTION, ELIGIBILITY AND PRE-REQUISITES OF THE COURSE

Course Title	Credits	Credit distribution of the Course			Eligibility criteria	Prerequisite of the course(if any)
		Lecture	Tutorial	Practical/Practice		
DSC: Game Design II (Practical)	2	0	0	2	Passed Diploma Course	Nil

BACHELOR OF ANIMATION & DESIGN

Programme: <i>Bachelor of Animation & Design</i>	Year: III	Semester: VI Paper: DSC
Subject: Animation & Design		

Course: DSC	Game Design II (Practical)		
Course Outcomes:			
After studying this course, the students will be able to:			
<ul style="list-style-type: none"> • Understand the game production pipeline from concept to release. • Apply project management methodologies to game development projects. • Create and integrate game assets using industry-standard tools. • Implement testing procedures to ensure the quality and stability of game products. • Navigate the publishing and distribution process for games. 			
Credits: 2		Discipline Specific Course	
Max. Marks: As per Univ. rules		Min. Passing Marks: As per Univ. rules	
Unit	Topic		No. of Hours
Unit I	Concept art futuristics game and texturing according to game design		15
Unit II	Create environment modeling according to game design		15
Unit III	Create props modeling according to game		15
Unit IV	Concept art on character according to game		15

Recommended Readings:

- *"Game Production Handbook"* by Heather Maxwell Chandler
- *"The Ultimate Guide to Video Game Writing and Design"* by Flint Dille and John Zuor Platten
- *"Level Up! The Guide to Great Video Game Design"* by Scott Rogers

Suggested Continuous Evaluation Methods: Seminar/ Presentation on any topic related to syllabus, Examination/Practical/ Internal/External Test with MCQs/short & long questions, attendance and participation in the class.

Semester-VI

Bachelor of Animation & Design

DISCIPLINE SPECIFIC COURSE (DSC)- 3D RIGGING, DYNAMICS BASICS, ANIMATION (PRACTICAL)

No. of Hours- 120

CREDIT DISTRIBUTION, ELIGIBILITY AND PRE-REQUISITES OF THE COURSE

Course Title	Credits	Credit distribution of the Course			Eligibility criteria	Prerequisite of the course(if any)
		Lecture	Tutorial	Practical/Practice		
DSC: 3D Rigging, Dynamic	4	0	0	4	Passed Diploma Course	Nil

Basics, Animation (Practical)						
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BACHELOR OF ANIMATION & DESIGN		
Programme: <i>Bachelor of Animation & Design</i>		Year: III
Semester: VI Paper: DSC		
Subject: Animation & Design		
Course: DSC	3D Rigging, Dynamics Basics, Animation (Practical)	
Course Outcomes:		
After studying this course, the students will be able to:		
<ul style="list-style-type: none"> • Gain a solid understanding of 3D animation principles and techniques using Autodesk Maya. • Develop proficiency in rigging characters and objects for animation. • Learn the basics of dynamics simulation for creating realistic motion effects. • Master fundamental animation techniques and principles. • Acquire skills in advanced animation topics such as motion capture and scripting. • Build a portfolio showcasing various animation projects and techniques. 		
Credits: 4		Discipline Specific Course
Max. Marks: As per Univ. rules		Min. Passing Marks: As per Univ. rules
Unit	Topic	No. of Hours
Unit I	Fundamentals of 3D Rigging <ul style="list-style-type: none"> • Introduction to 3D Rigging • Understanding joints and skeletons • Skinning and weighting • Rigging controls and constraints • IK (Inverse Kinematics) and FK (Forward Kinematics) • Introduction to character rigging • Rigging best practices 	30
Unit II	Dynamics Basics <ul style="list-style-type: none"> • Introduction to dynamics simulation • Understanding particle systems • Basics of rigid body dynamics • Simulating fluids and cloth • Dynamic constraints and forces • Integrating dynamics into animation • Dynamics optimization and performance 	30
Unit III	Animation Techniques <ul style="list-style-type: none"> • Principles of animation • Keyframing fundamentals • Timing and spacing • Easing and interpolation • Advanced animation techniques • Character animation basics • Lip-sync and facial animation 	30

Unit IV	Fundamentals of 3D Rigging <ul style="list-style-type: none"> • Introduction to 3D Rigging • Understanding joints and skeletons • Skinning and weighting • Rigging controls and constraints • IK (Inverse Kinematics) and FK (Forward Kinematics) • Introduction to character rigging • Rigging best practices 	30
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Recommended Readings:

- *"Maya Character Creation: Modeling and Animation Controls"* by Chris Maraffi
- *"The Animator's Survival Kit"* by Richard Williams

Suggested Continuous Evaluation Methods: Seminar/ Presentation on any topic related to syllabus, Examination/Practical/ Internal/External Test with MCQs/short & long questions, attendance and participation in the class.

Suggested equivalent online courses: www.pdfdrive.com/maya-studio-projects-dynamics

Semester-VI

Bachelor of Animation & Design

DISCIPLINE SPECIFIC COURSE (DSC)- PRINCIPLE OF COMPOSITION (PRACTICAL)

No. of Hours- 120

CREDIT DISTRIBUTION, ELIGIBILITY AND PRE-REQUISITES OF THE COURSE

Course Title	Credits	Credit distribution of the Course			Eligibility criteria	Prerequisite of the course(if any)
		Lecture	Tutorial	Practical/Practice		
DSC: Principle of Composition (Practical)	4	0	0	4	Passed Diploma Course	Nil

BACHELOR OF ANIMATION & DESIGN		
Programme: <i>Bachelor of Animation & Design</i>		Year: III
Subject: Animation & Design		Semester: VI Paper: DSC
Course: DSC	Principle of Composition (Practical)	

Course Outcomes:

After studying this course, the students will be able to:

- Understand the principles of composition and their application in digital media.
- Navigate and utilize the key features and tools of Adobe After Effects.
- Create visually engaging compositions, animations, and effects using After Effects.
- Analyze and critique compositions for their effectiveness and aesthetic appeal.
- Apply creative problem-solving skills to design and execute original projects.

Credits: 4

Discipline Specific Course

Max. Marks: As per Univ. rules

Min. Passing Marks: As per Univ. rules

Unit	Topic	No. of Hours
Unit I	Introduction to Composition <ul style="list-style-type: none">• Overview of composition theory• Elements of composition: line, shape, color, texture, space• Principles of design: balance, contrast, emphasis, rhythm, unity	30
Unit II	Advanced Composition Techniques <ul style="list-style-type: none">• Advanced principles of composition: hierarchy, proportion, scale, repetition• Working with layers and masks in After Effects• Incorporating typography and text animation• Understanding lighting and shadow effects• Introduction to 3D space and camera manipulation	30
Unit III	Special Effects and Motion Graphics <ul style="list-style-type: none">• Introduction to special effects: particles, simulations, and visual effects• Using plugins and presets to enhance compositions• Motion graphics fundamentals: kinetic typography, logo animation• Green screen (chroma key) techniques	30
Unit IV	Project Development and Critique <ul style="list-style-type: none">• Developing a final project incorporating all learned concepts• Project planning and storyboard creation• Iterative design process: prototyping, feedback, revisions• Presentation and critique of final projects	30

Recommended Readings:

- *"After Effects Apprentice" by Trish and Chris Meyer*
- *"The After Effects Illusionist" by Chad Perkins*
- *"Creating Motion Graphics with After Effects" by Chris and Trish Meyer*

Suggested Continuous Evaluation Methods: Seminar/ Presentation on any topic related to syllabus, Examination/Practical/ Internal/External Test with MCQs/short & long questions, attendance and participation in the class.

Suggested equivalent online courses: www.pdfdrive.com/creating-motion-graphics-with-after-effects-the-essentials

Semester-VI

Bachelor of Animation & Design

DISCIPLINE SPECIFIC ELECTIVE (DSE)- VFX (PRACTICAL)

No. of Hours- 120

CREDIT DISTRIBUTION, ELIGIBILITY AND PRE-REQUISITES OF THE COURSE

Course Title	Credits	Credit distribution of the Course			Eligibility criteria	Prerequisite of the course(if any)
		Lecture	Tutorial	Practical/Practice		
DSE: VFX (Practical)	4	0	0	4	Passed Diploma Course	Nil

BACHELOR OF ANIMATION & DESIGN

Programme: *Bachelor of Animation & Design*

Year: III

Semester: VI
Paper: DSE

Subject: Animation & Design

Course: DSCE

VFX (Practical)

Course Outcomes:

After studying this course, the students will be able to:

- Understand the principles and techniques of camera tracking in After Effects.
- Analyze live-action footage to identify suitable tracking points.
- Implement camera tracking solutions for different types of shots, including stationary, moving, and handheld camera shots.
- Integrate computer-generated elements seamlessly into tracked footage.

Credits: 4

Discipline Specific Elective

Max. Marks: As per Univ. rules

Min. Passing Marks: As per Univ. rules

Unit	Topic	No. of Hours
Unit I	Introduction to Camera Tracking <ul style="list-style-type: none"> • Overview of camera tracking principles and applications • Introduction to Adobe After Effects interface and basic navigation • Understanding tracking data formats (2D tracking, 3D tracking, camera solving) • Setting up a project for camera tracking 	30
Unit II	Basic Camera Tracking Techniques <ul style="list-style-type: none"> • Identifying tracking points in live-action footage • Applying 2D and 3D tracking methods • Solving the camera motion using After Effects built-in tracking tools • Creating and refining tracking data 	30

	<ul style="list-style-type: none"> • Troubleshooting common tracking problems 	
Unit III	Advanced Camera Tracking Techniques <ul style="list-style-type: none"> • Tracking complex camera movements (pan, tilt, zoom, dolly, crane, handheld) • Using planar tracking techniques for difficult shots • Integrating 3D objects and elements into tracked footage • Enhancing realism through shadow and lighting adjustments • Exploring third-party plugins for advanced tracking tasks 	30
Unit IV	Project Work and Finalization <ul style="list-style-type: none"> • Applying camera tracking skills to real-world projects • Collaborative project work and peer review • Finalizing and rendering tracked compositions • Presentation and critique of completed projects 	30

Recommended Readings:

- *"The After Effects Illusionist: All the Effects in One Complete Guide"* by Chad Perkins
- *"Adobe After Effects CC Classroom in a Book"* by Lisa Fridsma and Brie Gyncild
- *"After Effects Apprentice: Real-World Skills for the Aspiring Motion Graphics Artist"* by Chris and Trish Meyer

Suggested Continuous Evaluation Methods: Seminar/ Presentation on any topic related to syllabus, Examination/Practical/ Internal/External Test with MCQs/short & long questions, attendance and participation in the class.

Suggested equivalent online courses: www.pdfdrive.com/matchmoving-the-invisible-art-of-camera-tracking

Semester-VI

Bachelor of Animation & Design

DISCIPLINE SPECIFIC ELECTIVE (DSE)- BROADCAST DESIGN (THEORY)

No. of Hours-60

CREDIT DISTRIBUTION, ELIGIBILITY AND PRE-REQUISITES OF THE COURSE

Course Title	Credits	Credit distribution of the Course			Eligibility criteria	Prerequisite of the course(if any)
		Lecture	Tutorial	Practical/Practice		
DSE: Broadcast Design (Theory)	4	4	0	0	Passed Diploma Course	Nil

BACHELOR OF ANIMATION & DESIGN

Programme: Bachelor of Animation & Design		Year: III	Semester: VI Paper: DSE
Subject: Animation & Design			
Course: DSCE		Broadcast design (Theory)	
Course Outcomes: After studying this course, the students will be able to: <ul style="list-style-type: none"> • Evaluate and critique broadcast and production practices both holistically and in terms of their component parts, namely: audio, video, scripting, production, and editing. • Write effectively for broadcast media as well as other forms and styles appropriate for the communications professions and audiences they serve. • Demonstrate competency in shooting and editing video in the field and studio, using professional-level equipment and non-linear editing systems. • Demonstrate proficiency in recording and editing for audio productions. 			
Credits: 4		Discipline Specific Elective	
Max. Marks: As per Univ. rules		Min. Passing Marks: As per Univ. rules	
Unit	Topic		No. of Hours
Unit I	<ul style="list-style-type: none"> • Concepts of Graphics & Illustrations Character Design, Digital Painting 		15
Unit II	<ul style="list-style-type: none"> • Typography Design Digital Illustrations, Storyboarding & Animatics 		15
Unit III	<ul style="list-style-type: none"> • Concepts of Cinematography & Photography Audio-Video Editing ,Concepts of 2D Digital Animation, 2D Animation Principles 		15
Unit IV	<ul style="list-style-type: none"> • Broadcast Design, Digital Marketing & Media Concepts Broadcast Media, Broadcast Design Portfolio 		15

Recommended Readings:

- *Broadcast Design - Bjorn Bartholdy*
- *Standard Handbook of Broadcast Engineering by Jerry Whitaker*

Suggested Continuous Evaluation Methods: Seminar/ Presentation on any topic related to syllabus, Examination/Practical/ Internal/External Test with MCQs/short & long questions, attendance and participation in the class.

Semester-VI

Bachelor of Animation & Design

INTERNSHIP/APPRENTICESHIP/PROJECT/COMMUNITY OUTREACH (IAPC) - INTERNSHIP

No. of Hours-60

CREDIT DISTRIBUTION, ELIGIBILITY AND PRE-REQUISITES OF THE COURSE

Course Title	Credits	Credit distribution of the Course			Eligibility criteria	Prerequisite of the course (if any)
		Lecture	Tutorial	Practical/Practice		
IAPC: Internship	2	0	0	2	Passed Diploma Course	Nil

BACHELOR OF ANIMATION & DESIGN		
Programme: <i>Bachelor of Animation & Design</i>		Year: III Semester: VI Paper: IAPC
Subject: Animation & Design		
Course: IAPC	Internship	
Course Outcomes: After studying this course, the students will be able to: <ul style="list-style-type: none"> • Gain first hand exposure of working in the real world. • Allow harnessing skills, knowledge and theoretical practice learnt during the course. • Develop and refine skills to suit the industry demands and build a strong network with professionals in the field. • Gain confidence and improve chances as a job applicant. 		
Credits: 2	IAPC Course	
Max. Marks: As per Univ. rules	Min. Passing Marks: As per Univ. rules	
Unit	Topic	No. of Hours
Unit I	Internship will be undertaken with any reputed organization/Industry/NGO and will be evaluated by an Internal examiner.	60

Suggested Continuous Evaluation Methods: Internship Report/Attendance