LEARNING OUTCOME BASED VOCATIONAL CURRICULUM

Media and Entertainment

Character Designing
Storyboard Artist
Texturing Artist
Roto Artist

Class XI and XII

COURSE OVERVIEW –

COURSE TITLE: Media and Entertainment

Character Designer: The Character Designer course is crafted to help students develop recognizable characters with captivating personalities and distinctive shapes that support storytelling. Students will learn to use references, real-world observations, and their own imagination to visually communicate their characters. By the end of this course, the student can design characters that are required as per the storyline.

Storyboard Artist: The Storyboard Artist course is prepared to help students to visualize Scripts for specific mediums. Illustrated frames are created to visualize the script/story/idea/concept. This subject requires good drawing skills and creative capabilities. By the end of the course, the student can translate scripts to illustrated drawings that are needed in media and entertainment industry for making films, short story, animation etc.

Texturing Artist: The Texturing Artist course is designed to equip students with the essential skills and techniques required to create high-quality textures for 3D models used in Animation, Films, Games, Visual Effects, and Media Entertainment. By the end of the course, students will have developed a professional texturing portfolio, demonstrating their ability to create lifelike textures, work with different rendering pipelines, and effectively integrate textures into 3D environments.

Roto Artist: Roto artist in the Media & Entertainment Industry are individuals whose job is to break down the content into individual frames/elements and alter/re-create them in accordance to requirements. The individual must know the fundamentals of depth and should possess good drawing and illustration skills. By the end of the course, the student will gain a good working knowledge of Roto software including Nuke, After Effects and Silhouette etc. After completion of the course of Roto Artist, the candidate may opt a career as a VFX Artist.

COURSE OUTCOMES:
On completion of the course, students should be able to:
- Apply effective oral and written communication skills to interact with customers.
- Demonstrate self-management skills.
- Demonstrate the ability to provide a self-analysis in context of entrepreneurial skills.
- Identify the principal components of a computer system.
- Demonstrate the knowledge of the importance of green skills in meeting the challenges of sustainable development and environment protection.
- Understand the core elements of character design, including anatomy, proportion, gesture and expression.

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- Explain the importance of gesture and pose in enhancing character storytelling.
- Create dynamic and expressive poses that bring characters to life.
- Apply gesture and pose principles to effectively convey personality and emotion.
- Use design techniques to craft expressive and impactful facial expressions.
- Adapt character design principles to suit various genres and styles.
- Establish a strong design workflow, from initial concept sketches to fully polished character illustrations.
- Describe the basics of storyboarding.
- Identify different animation types to understand storyboard requirement.
- Breakdown the script into scenes and shots.
- Describe the storyboarding production process.
- Describe different shots, scenes, camera angles and transition used to create storyboard.
- Demonstrate a strong understanding of texturing principles, including UV mapping, material properties and shading techniques.
- Develop and apply realistic textures using industry-standard software such as Substance Painter, Photoshop and Maya.
- Efficiently unwrap 3D models, optimize UV layouts and apply seamless textures to enhance the realism of assets.
- Use advanced texturing techniques such as normal mapping, displacement, and specular mapping to add depth and realism to assets.
- Create a high-quality texturing portfolio showcasing various materials, surfaces and detailed texture applications for industry opportunities.
- Determine key post-production processes and Rotoscopy requirement that would be involved to produce the desired outcome and chart-out the process workflow.
- Gather raw footage/material and select relevant material that can be used for post- production.
- Ingest the footage/keep the material ready for the post-production process.
- Ensure final work-products are prepared in appropriate file formats (such as mp4, avi, wmv, mpg and mov) and appropriate medium compatible with intended distribution/exhibition mediums.
- Use the software to break the content down into individual frames in accordance to requirements.
- Ensure that the work-products meet roto-scope objectives and quality standards and are ready for compositing.

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CLASS XI – Paper 1 || Full Marks: 100

	Units	No. of Theory classes	No. of Practical Classes	Max Marks
Part A	**Employability Skills**			
Unit 1	Communication Skills – I	04	10	10
Unit 2	Self-management Skills – I	03	10	
Unit 3	Information and Communication Technology Skills - I	03	10	
	Total (A)	**10**	**30**	**10**
Part B	**Vocational Skills**			
Unit 4	Character Designing - I	10	15	40
Unit 5	Storyboard Artist - I	10	15	
	Theory (B)	**20**	**30**	**40**
Part C	**Practical Work**			
	Practical Examination			15
	Written Test			10
	Viva Voce			5
	Total (C)			**30**
Part D	**Project Work/Field Visit**			
	Practical File/Student Portfolio			15
	Viva Voce			05
	Total (D)			**20**
	Grand Total (A+B+C+D) -	**30**	**60**	**100**

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CLASS XI – Paper 2 || Full Marks: 100

	Units	No. of Theory classes	No. of Practical Classes	Max Marks
Part A	**Employability Skills**			
Unit 1	Entrepreneurial Skills – I	5	10	10
Unit 2	Green Skills and Sustainability - I	5	10	
	Total (A)	**10**	**20**	**10**
Part B	**Vocational Skills**			
Unit 3	Character Designing - II	10	20	40
Unit 4	Storyboard Artist - II	10	20	
	Theory (B)	**20**	**40**	**40**
Part C	**Practical Work**			
	Practical Examination			15
	Written Test			10
	Viva Voce			05
	Total (C)			**30**
Part D	**Project Work/Field Visit**			
	Practical File/Student Portfolio			15
	Viva Voce			05
	Total (D)			**20**
	Grand Total (A+B+C+D) -	**30**	**60**	**100**

Question Setting Pattern for Theory Subject for Class XI and XII

Marks: 50 **Time Duration: 2 hrs 30 minutes**

		Each Question Value	No. of questions to answer	Maximum Marks
Part I	10 MCQs (All Questions to be answered)	1	10	10
Part II	Short answer type - 40 to 50 words each. (Students will answer 4 out of 6 given questions)	5	4	20
Part III	Long type Answer – 200 to 300 words (Students will answer 2 out of 4 given questions)	10	2	20
			TOTAL MARKS	**50**

Paper 1 (Theory and Practical)

Part A: Employability Skills

Unit 1: Communication Skills - I

Theory	Practical
Demonstrate knowledge of communication ○ Introduction to communication ○ Importance of communication ○ Elements of communication ○ Perspectives in communication ○ Effective communication	○ Role-play on the communication process ○ Group discussion on the importance of communication and factors affecting perspectives in communication ○ Charts preparation on elements of communication ○ Classroom discussion on the 7Cs (i.e. Clear, Concise, Concrete, Correct, Coherent, Courteous and Complete) for effective communication
Demonstrate verbal communication ○ Verbal communication	○ Role play of a phone conversation ○ Group activity on delivering a

o Public Speaking	speech and practicing public speaking
Demonstrate non-verbal communication o Importance of non-verbal communication, o Types of non-verbal communication, o Visual communication	o Role plays on non-verbal communication o Group exercise and discussion on Do's and Don'ts to avoid body language mistakes o Group activity on methods of communication
Demonstrate speech using correct Pronunciation o Pronunciation basics, o Speaking properly o Phonetics, o Types of sounds	o Group activities on practicing pronunciation
Apply an assertive communication style o Important communication styles o Assertive communication o Advantages of assertive communication o Practicing assertive communication	o Group discussion on communication styles o Group discussion on observing and sharing communication styles
Demonstrate the knowledge of saying no o Steps for saying "No" o Connecting words	o Group discussion on how to say 'No'
Identify and use parts of speech in writing o Capitalisation o Punctuation o Basic parts of speech o Supporting parts of speech	o Group activity on identifying parts of speech o Writing a paragraph with punctuation marks o Group activity on constructing sentences o Group activity on identifying parts of speech
Write correct sentences and paragraphs o Parts of a sentence o Types of object o Types of sentences o Paragraph	o Activity on framing sentences o Activity on active and passive voice o Assignment on writing different types of sentences.
Communicate with people o Greetings o Introducing self and others	o Role-play on formal and informal greetings o Role-play on introducing someone

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	o Practice and group discussion on how to greet different people
Introduce yourself to others and write about oneself o Talking about self o Filling a form	o Practicing self-introduction and filling up forms o Practicing self-introduction to others
Develop questioning skill o Main types of questions o Forming closed and open ended questions	o Practice exercise on forming questions o Group activity on framing questions.
Communicate information about family to others o Names of relatives o Relations	o Practice taking about family o Role play on talking about family members
Describe habits and routines o Concept of habits and routines	o Group discussion on habits and routines o Group activity on describing routines
Ask or give direction to others o Asking for directions o Using landmarks	o Role-play on asking and giving o directions o Identifying symbols used for giving directions

Unit 2: Self-Management Skills - I

Theory	Practical
Identify and analyze own strengths and weaknesses o Understanding self-techniques for identifying strengths and weaknesses o Difference between interests and abilities	o Activity on writing aims in life o Prepare a worksheet on interests and abilities
Demonstrate personal grooming skills o Guidelines for dressing and grooming o Preparing a personal grooming checklist	o Role-play on dressing and grooming standards o Self-reflection activity on various aspects of personal grooming
Maintain personal hygiene o Importance of personal hygiene	o Role-play on personal hygiene o Assignment on personal hygiene

Theory	Practical
o Three steps to personal hygiene o Essential steps of hand washing	
Demonstrate the knowledge of working in a team and participating in group activities o Describe the benefits of teamwork o Working in a team	o Assignment on working in a team, o Self-reflection on teamwork
Develop networking skills o Benefits of networking skills, o Steps to build networking skills	o Group activity on networking in action o Assignment on networking skills
Describe the meaning and importance of self-motivation o Meaning of self-motivation, o Types of motivation, o Steps to building self-motivation	o Activity on staying motivated o Assignment on reasons hindering motivation
Set goals o Meaning of goals and purpose of goal-setting o Setting SMART goals	o Assignment on setting SMART goals o Activity on developing long- term and short-term goals using SMART method
Apply time management strategies and techniques o Meaning and importance of time management o Steps for effective time management	o Preparing checklist of daily activities

Unit 3: Information and Communication Technology Skills - I

Theory	Practical
Create a document on the word processor o Introduction to ICT o Advantages of using a word processor o Work with LibreOffice Writer	o Demonstration and practice of the following: o Creating a new document o Typing text o Saving the text o Opening and saving file in Microsoft word/Libre Office Writer
Identify icons on the toolbar o Status bar o Menu bar o Icons on the Menu bar o Multiple ways to perform a function	o Group activity on using basic user interface of LibreOffice writer o Group activity on working with Microsoft Word

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Save, close, open and print document ○ Save a document, ○ Close a document, ○ Open an existing document, ○ Print a document	○ Group activity on performing the functions for saving, closing and printing documents in LibreOffice Writer, ○ Group activity on performing the functions to save, close and print documents
Format text in a document ○ Change style and size of text ○ Align text ○ Cut, Copy, Paste ○ Find and replace	○ Group activity on formatting text in LibreOffice Writer, ○ Group activity on formatting text in Microsoft Word
Check spelling and grammar in a word document ○ Use of spell checker ○ Autocorrect	○ Group activity on checking spellings and grammar using LibreOffice Writer ○ Group activity on checking spellings and grammar using Microsoft Word
Insert lists, tables, pictures, and shapes in a word document ○ Insert bullet list ○ Number list ○ Tables ○ Pictures ○ Shapes	○ Practical exercise of inserting lists and tables using LibreOffice Writer
Insert header, footer and page number in a word document ○ Insert header ○ Insert footer ○ Insert page number ○ Page count	○ Practical exercise of inserting header, footer and page numbers in LibreOffice Writer ○ Practical exercise of inserting header, footer and page numbers in Microsoft Word
Make changes by using the track change options in a word document ○ Tracking option ○ Manage option ○ Compare documents	○ Group activity on performing track changes in LibreOffice Writer ○ Group activity on performing track changes in Microsoft Word

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Part B: Vocational Skills

Unit 4: Character Designing – I

Unit 4(A): Introduction to Character Designing

Theory:
- Explain the different aspects of character designing
  - Definition and purpose of character designing
  - History and evolution of character designing
- Describe the developmental stages of character designing
  - Developmental stages of character designing
  - Idea
  - Research Concept

Practical:
- Drawing characters of different origins.
  - Types of characters:
    - Human characters (historical, stylised, realistic)
    - Science fiction characters (aliens, robots, cyborgs)
    - Animal characters
    - Fantasy characters (mythical creatures, elves, dwarves, orcs, magical beings, hybrid creatures)
    - Superheroes and villains
    - Everyday people (professionals, children and teens)
    - Elderly characters
    - Historical or mythological figures (famous people, gods and goddesses)
    - Characters from Indian content like Panchatantra, Vikram Betal, Jataka tales, Abalakara etc.
    - Traditional style - Odisha *Patta* Painting characters.

Unit 4(B): Elements of Character Designing
Theory:
- Describe the elements of character designing
  - Elements of character designing:
    - Personality
    - Physical appearance (silhouettes, palette, exaggeration)
    - Backstory
    - Clothing and accessories
    - Cultural and historical influences
    - Appeal
    - Body language

Practical

- Demonstrate the use of shapes in character designing
  - Drawing characters using different shapes
    - Triangle, Rectangle, Pentagon, Hexagon, Square, Circle, Oval
  - Drawing expressions of characters (neutral, happy, sad and angry)
- Explain sketching techniques for character designing.
  - Sketching techniques:
    - Hatching and crosshatching
    - Stippling
    - Scribbling
    - Circling
    - Smooth shading and blending
    - Creating highlights
- Describe the significance of the character poses and demonstrate model turn-around.
  - Types of poses and their definition, significance, purpose, and examples:
    - Ideal pose
    - T-pose
    - 3/4th pose
  - Techniques to enhance dynamics pose (use of line of action, arcs, balance and asymmetry)
  - Concept of turn-around / Model Sheet / Profile (visualizing character's appearance for storytelling, animation, 3- D graphics, visual communication, etc.)
- Creating a 3D Clay Model of the Character to bring it to life with a realistic and tangible appearance.
  - Introduction to Clay Modelling Tools and Materials
  - Study of posture in reference to use of Mannequins
  - Step-by-Step Demonstration of Clay Modelling Process
  - Adding Realistic Features and Textures Finishing, Detailing and Presentation Techniques

Unit 4(C): Process of 2D Character Designing
Theory:

- Identifying visual reference tools in character designing
  - Visual reference tools:
    - Physical reference
    - Digital camera
    - Sketch-book
    - Movie reference

Practical
- Demonstrate character designing on 2D software [Photoshop and CorelDraw / Illustrator or any related]
  - Fundamentals of character design in 2D software:
    - Conceptualization (Sketching on paper and digital sketching using 2D software)
    - Detailed drawing (line art using digital pen tools and colouring)
- Introduction to 2D Character Animation using Adobe Animate
  - Traditional Cel Animation
    - Bouncing Ball
    - Character Walk Cycle
    - Character Run Cycle
    - Character Facial Expression

Unit 5: Storyboard Artist – I

Unit 5(A): Planning and Visualizing Storyboard

Theory:
- **Describe the basics of storyboarding**
  - History and evolution of storyboarding,
  - Examples of storyboard for animated movies
  - Use of storyboard as preproduction for animation and films
  - Software and hardware requirement of storyboarding.
- **Describe different types of storyboards and their application area**
  - Types of Storyboard or Editorial Production boards
  - Concept panels
  - Commercial boards
  - Graphic novels and Comic boards
  - Game boards, Website navigation panels
  - Application area of different types of storyboards

Practical:
- **Breakdown the script into scenes and shots**
  - Elements of script – locations
  - Characters, dialogue, actions
  - Techniques to breakdown the script into scenes and shots
  - Creating thumbnails from the scenes of the script

- **Describe the shot description in storyboard**
  - Shot description in storyboard – camera angle, shot number, depth, duration, action, dialogue, audio.

Unit 5(B): Storyboarding tools and Techniques
Theory:
- Information required to create a storyboard –
  - location or set related photographs
  - Prop and wardrobe illustrations and photographs
  - aspect ratio

Practical:
- **Describe the cinematic techniques used to create storyboard**
  - Types of shots sizes –
    - Extreme long shot (ELS)
    - Long shot (LS)
    - Medium shot (MS)
    - Medium Long Shot (MLS)
    - Close-up (CUS) etc.
  - Camera angles –
    - Low angle, High angle, Dutch angle
  - Camera movements –
    - Pan, Track, Dolly, Rotation, Rack focus
  - Types of scene –
    - Active scene, passive scene, Dialogue, Montage and silhouette,
  - Types of transitions –
    - Cross Dissolve, Dissolve ripple, Wipe, Fade to black

- **Describe the different sketching tools**
  - Sketching tools –
    - Pencil and paper
    - Different types of pencil
  - Sketching techniques –
    - Line and tone drawing
    - Texture and purpose.

Unit 5(C): Drawing and Sketching Storyboard
Theory:
- Introduction to storyboarding and its role in visual storytelling
- Basic principles of drawing and sketching for storyboard frames
- Understanding composition, perspective, and character positioning
- Importance of sequence, continuity, and visual flow in storytelling

Practical:
- **Sketch the object through observation and recording**
  - Simple drawing technique – straight line and circle
  - Landscape sketching and Landforms sketching

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- o Water bodies sketching, Different types of gestures and actions of human.
- **Draw perspective drawings**
  - Perspective – one point, two-point, three-point perspective, multi-view drawings, multi-view drawing of a box Proportion in perspective drawing.
- **Perform shading and lighting on object**
  - o Different Pencil grades from 9H to 9B.
  - o Shading techniques – Hatching, Cross Hatching and Contour Shading.
  - o Tips and Tricks for Pencil Shading.
- **Create a storyboard**
  - o Creating a template for storyboard.
  - o Creating a storyboard using script.

PROJECT – I

- Create a new Character Design portfolio including sketches, final line traced drawing, colored version, various facial expressions and various poses.
  AND
- Create a Storyboard of a typical short story like *Gopal Rahasya, Jadumani, and Chakulia Panda* etc.

Paper 2 (Theory and Practical)

Part A: Employability Skills

Unit 1: Entrepreneurial Skills - I

Theory	Practical
Differentiate between different kinds of businesses o Introduction to entrepreneurship o Types of business activities	o Role play on different kind of business around us
Describe the significance of entrepreneurial Values o Meaning of value o Values of an Entrepreneur o Case study on qualities of an entrepreneur	o Role play on qualities of an Entrepreneur
Demonstrate the attitudinal changes required to become an entrepreneur o Difference between the attitude of entrepreneur and employee	o Interviewing employees and entrepreneurs
Develop thinking skills like an entrepreneur o Problems of entrepreneurs o Problem-solving, o Ways to think like an entrepreneur	o Group activity on identifying and solving problems
Generate business ideas o The business cycle o Principles of idea creation o Generating a business idea o Case studies	o Brainstorming on generating a business ideas
Describe customer needs and importance of conducting a customer survey o Understanding customer needs o Conducting a customer survey	o Group activity to conduct a customer survey
Create a business plan o Importance of business planning o Preparing a business plan o Principles to follow for growing a business o Case studies	o Group activity on developing a business plan

Unit 2: Introduction to Green Skills & Sustainability - I

Theory	Practical
Describe the importance of the main sector of the green economy o Meaning of ecosystem, food chain and sustainable development o Main sectors of the green economy-E-waste management, green transportation, renewal energy, green construction, and water management	o Group discussion on sectors of green economy o Poster making on various sectors for promoting green economy
Describe the main recommendations of policies for the green economy o Policies for a green economy	o Group discussion on initiatives for promoting the green economy, o Writing an essay or a short note on the important initiatives for promoting green economy.
Describe the major green sector/area and the role of various stakeholders in the green economy o Stakeholders in the green economy	o Group discussion on the role of stakeholders in green economy. o Preparation of posters on green sectors and their stakeholders. o Making solar bulbs.
Identify the role of government and private agencies in the green economy o Role of the government in promoting a green economy o Role of private agencies in promoting green economy	o Group discussion on the role of Government and Private Agencies in promoting a green economy. o Posters making on green sectors.

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Part B: Vocational Skills

Unit 3: Character Designing – II

Unit 3(A): Character Designing in 3D Environment
Theory:
- Describe the basics of 3D character modelling using 3DS MAX / Maya / Blender / Rhino etc.
  - Techniques of 3D modelling:
    - Spline Modelling
    - Surface Modelling
    - Polygon Modelling

Practical:
- Demonstrate the process of creating props and accessories in 3D character designing.
  - Props and accessories for character designing:
    - Everyday items as props (hats, sunglasses, mobile, keys, books, watches, jewellery, etc.)
    - Occupational tools (medical instruments, mechanical tools and equipment, musical instruments, etc.)
    - Food and beverages (snacks, food, fruits, beverage bottles and cans, etc.)
    - Fantasy and magical items
    - Symbolic props (umbrella, masks, mirrors, etc.).
    - Trees and flowers
    - Fruits and vegetables
    - Cars and motorbikes
    - Household appliances

Unit 3(B): Adapting Character Design for Genres
Theory:
- Demonstrate the technique to create a cartoon character
  - Techniques for infusing genre-specific visual cues into character design
    - Creation of cartoon characters:
    - Exaggerated proportions
    - Heads, silhouette, and expressions
    - Poses

Practical:
- Describe zoomorphic and anthropomorphic character
  - Animal characters:
    - Biped
    - Quadrupeds

- Zoomorphic animals
- Anthropomorphic animals
- Draw fantasy cartoon characters
  - Fantasy modes:
    - Caricature
    - Exaggeration

Unit 3(C): Creating Human Characters
Theory:
- Describe character's stylization
  - Matching characters with their backstory
  - Balancing character's realism and stylization.

Practical:
- Sketch human body showing basic human forms and proportions
  - Human anatomy structure
  - Sketching basic human forms and proportions:
    - Comprehensive body structure
    - Feet, Hand and Posing
- Sketch the facial features of a human
  - Facial expressions and their significance
  - Proportion of facial features:
    - Eyes and eyebrows
    - Nose and mouth
    - Hairs

Unit 3(D): Planning a Character Designing Project
Theory:
- Describe the importance and scope of character design in a project.
  - Overview of the character design industry, including trends and growth opportunities.
  - Character design services, including the types of character design (e.g., game characters, mascots, and avatars).
- Explain the meaning and purpose of market analysis for Character Design Project
  - Market for concept development and character designing, digital rendering, animation, etc.
  - Identification and analysis of competitors in the character design space.
  - Strengths, weaknesses, opportunities and threats (SWOT) analysis.

Practical:
- Prepare a project for providing services related to character designing
  - Developing a project proposal:

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- Creating a Character Design portfolio showcasing a range of character designs & character motions to attract potential clients.

Unit 4: Storyboard Artist – II

Unit 4(A): Describe the digital Storyboarding Software
Theory
- Hand drawn storyboarding
- Advantage and disadvantage
- Concept of digital storyboards
- Digital storyboarding software – Toon Boom Storyboard Pro, Adobe Photoshop, Shot PRO, Storyboarder.

Practical
- **Create storyboard in Photoshop**
  - Starting and exploring the user interface of Photoshop software.
  - Setting up the document, Setting-up shortcuts, Use of brush tool.
  - Creating storyboarding in Photoshop, Rendering and exporting the final storyboard.

Create storyboard in Toon Boom Storyboard Pro software
  - Features of Toon Boom Storyboard Pro software,
  - Terminology in Toon Boom Storyboard Pro, Options in user interface of Toon Boom Storyboard Pro – Layer Panel, Thumbnail view, Timeline view, Creating new scene for storyboard.

Unit 4(B): Describe the process of creating a work profile of Storyboard Artist
Theory
Read the case study of various storyboards
- Case study of different types of movie genre – Sci-Fi, Drama, Horror, Fantasy.
- Case studies of storyboard – Television show, Animation, Video games.
- Research on the scope of work of a storyboard artist.

Practical
- **Describe the storyboard for different media**
  - Different Media of storyboard – Film, Theater, Animatic, Comic books, Presentation Board, Architecture studios, Interactive media, Software, Benefits of storyboarding in various media.
  - Storyboards in Education, Storyboards in Hollywood, Guideline for creating storyboarding
  - Use of AI in storyboarding
  - Understanding of Script
  - Use of AI tools like ChatGPT, Deep Seek, Mid Journey, and Leonardo AI etc.

- **Doing the Process of creating a Portfolio of a Storyboard Artist.**
  - **Select Your Best Work –** Choose diverse and high-quality storyboard samples that showcase your skills in storytelling, composition, and scene transitions.
  - **Organize by Category or Project –** Group your work by genre, client, or project type to make it easier for viewers to navigate and understand your strengths.
  - **Add Descriptions and Context –** Provide brief captions or notes explaining each storyboard's purpose, medium, and the scenario it was designed for.
  - **Present in a Clean Layout –** Use a consistent, professional format (digital or printed) that highlights your visuals clearly without clutter.

PROJECT - II
- Create an innovative 3D Character Design for a Story with texturing.
  AND
- Create a Storyboard for an advertisement.

CLASS XII – Paper 1 || Full Marks: 100

	Units	No. of Theory classes	No. of Practical Classes	Max Marks
Part A	**Employability Skills**			
Unit 1	Communication Skills – II	04	07	10
Unit 2	Self-management Skills – II	03	07	
Unit 3	Information and Communication Technology Skills – II	03	06	
	Total (A)	**10**	**20**	**10**
Part B	**Vocational Skills**			
Unit 4	Texturing Artist - I	10	20	40
Unit 5	Roto Artist – I	10	20	
	Theory (B)	**20**	**40**	**40**
Part C	**Practical Work**			
	Practical Examination			15
	Written Test			10
	Viva Voce			5
	Total ©			**30**
Part D	**Project Work/Field Visit**			
	Practical File/Student Portfolio			15
	Viva Voce			05
	Total (D)			**20**
	Grand Total (A+B+C+D) -	**30**	**60**	**100**

CLASS XII – Paper 2 || Full Marks: 100

	Units	No. of Theory classes	No. of Practical Classes	Max Marks
Part A	**Employability Skills**			
Unit 1	Entrepreneurial Skills – II	05	10	10
Unit 2	Green Skills and Sustainability - II	05	10	
	Total (A)	**10**	**20**	**10**
Part B	**Vocational Skills**			
Unit 3	Texturing Artist - II	10	20	40
Unit 4	Roto Artist - II	10	20	
	Theory (B)	**20**	**40**	**40**
Part C	**Practical Work**			
	Practical Examination			15
	Written Test			10
	Viva Voce			05
	Total (C)			**30**
Part D	**Project Work/Field Visit**			
	Practical File/Student Portfolio			15
	Viva Voce			05
	Total (D)			**20**
	Grand Total (A+B+C+D)	**30**	**60**	**100**

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CLASS XII – Paper 1 || Full Marks: 100

Part A: Employability Skills

Unit 1: Communication Skills - II

Theory	Practical
Demonstrate active listening skills o Active listening -listening skill, stages of active listening, o Overcoming barriers to active listening	o Group discussion on the factors affecting active listening, o Preparing posters of steps for active listening, o Role-play on negative effects of not listening actively
Identify the parts of speech o Parts of speech – using capitals, punctuation, basic parts of speech, supporting parts of speech	o Group practice on identifying parts of speech o Group practice on constructing sentences
Write sentences Writing skills to practice the following: o Simple sentence o Complex sentence o Types of object Identify the types of sentences o Active and Passive sentences o Statement/Declarative sentence o Question/Interrogative sentence o Emotion/Reaction or Exclamatory sentence o Order or Imperative sentence	o Group activity on writing sentences and paragraphs, o Group activity on practicing writing sentences in active or passive voice, o Group activity on writing different types of sentences (i.e., declarative, exclamatory, interrogative and imperative)

Unit 2: Self-Management Skills - II

Theory	Practical
Describe the various factors influencing motivation and positive attitude o Motivation and positive attitude o Intrinsic and extrinsic motivation o Positive attitude – ways to maintain positive attitude	o Role Play on avoiding stressful situation, o Activity on listing negative situations and ways to turn it positive

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Theory	Practical
o Stress and stress management - ways to manage stress	
Describe how to become result oriented o How to become result oriented? o Goal setting – examples of result-oriented goals	o Pair and share activities on the aim of life
Describe the importance of self-awareness and the basic personality traits, types and disorders o Steps towards self-awareness o Personality and basic personality traits o Common personality disorders- o Suspicious o Emotional and impulsive o Anxious o Steps to overcome personality disorders	o Group discussion on self-awareness o Group discussion on common personality disorders o Brainstorming steps to overcome personality disorder

Unit 3: Information and Communication Technology Skills - II

Theory	Practical
Identify the components of a spreadsheet application o Getting started with spreadsheet – types of a spreadsheet, components of a worksheet, o Starting LibreOffice Calc o Creating a worksheet	o Group activity on identifying components of spreadsheet in LibreOffice Calc
Perform basic operations in a spreadsheet o Opening workbook and entering data – types of data, steps to enter data, editing and deleting data in a cell o Selecting multiple cells o Saving the spreadsheet in various formats o Closing the spreadsheet o Opening the spreadsheet. Printing the spreadsheet.	o Group activity on working with data on LibreOffice Calc
Demonstrate the knowledge of	o Group activity on formatting a

working with data and formatting text o Using a spreadsheet for addition – adding value directly, adding by using cell address, using a mouse to select values in a formula, using sum function, copying and moving formula o Need to format cell and content o Changing text style and font size o Align text in a cell o Highlight text	spreadsheet in LibreOffice Calc o Group activity on performing basic calculations in LibreOffice Calc.
Demonstrate the knowledge of using advanced features in spreadsheet o Sorting data, o Filtering data, o Protecting spreadsheet with password	o Group activity on sorting data in LibreOffice Calc
Make use of the software used for making slide presentations o Available presentation software o Stapes to start LibreOffice Impress o Adding text to a presentation	o Group practice on working with LibreOffice Impress tools, o Group practice on creating a presentation in LibreOffice Impress
Demonstrate the knowledge to open, close and save slide presentations o Open, Close, Save and Print a slide presentation	o Group activity on saving, closing and opening a presentation in LibreOffice Impress
Demonstrate the operations related to slides and texts in the presentation o Working with slides and text in a presentation - adding slides to a presentation, deleting slides, adding and formatting text, highlighting text, aligning text, changing text colour	o Group practice on working with font styles and types in LibreOffice Impress
Demonstrate the use of advanced features in a presentation o Advanced features used in a presentation, o Inserting shapes in the presentation, o Inserting clipart and images in a presentation, o Changing slide layout	o Group activity on changing slide layout on LibreOffice Impress

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Part B: Vocational Skills

Unit 4: Texturing Artist - I

Unit 4(A): Introduction to Colour Theory
Theory
- Definition and importance of colour theory
- History and evolution of colour in art and design
- Colour Models & Systems
- Colour Properties & Relationships
- Colour Psychology & Symbolism
- Colour Harmony & Composition
- Digital Colour Theory & Tools

Practical
Lighting for Photography
- Introduction to Lighting in Photography
- Importance of lighting in photography
- Types of Light Sources
- Lighting Techniques & Styles
- Key Light, Fill Light, and Backlight (3-Point Lighting System)
- Outdoor & Natural Light Photography
- Post-Processing & Color Correction

Unit 4(B): Photoshop Basics for Texturing
Theory
- Overview of Photoshop Interface and Tools
- Setting up a new canvas (resolution, color modes, document sizes)
- Understanding raster vs. vector graphics
- Working with Layers and Masks
- Photoshop Brushes & Customization

Practical
Creating Textures in Photoshop
- Creating Diffuse, Specular, and Normal Maps
- Using Brushes and Custom Patterns for Texturing
- Cloning and Healing Tools for Seamless Textures
- Using Adjustment Layers for Color Corrections

Advanced Texturing Techniques
- Using Photoshop to Generate Transparency and Opacity Maps
- PBR (Physically Based Rendering) Texturing Techniques
- Texture Baking and Optimization for Games & Animation

Unit 5: Roto Artist - I
Unit 5(A): Animation and Visual Effects
Theory:

- Describe Animation and Visual Effects
  - Animation and visual effects
  - An overview of Indian animation and VFX industry
  - Animation and VFX in advertising
  - Job opportunity in Animation and VFX

Practical:

- Describe Post Production Process
  - Video Production process – preproduction, production and post-production
  - Storage devices for videos
  - Organising the footage in storage Device
  - Organising the footage in Editing Application
  - Aspect Ratio and Resolution
  - Editing
  - Visual effects workflow
  - Audio effects workflow
  - Sound editing and mixing
  - Tools and equipment for mixing
  - Exporting the footage for VFX from editing software
  - Colour correction or colour grading
  - Mastering and create delivery format
- Describe the past, present and future scope of Rotoscopy
  - Origins of Rotoscoping
  - Rotoscoping in other animation
  - Rotoscoping in visual effects
  - Digital Rotoscopy
  - Rotoscoping technique in video game
- Describe the roles and responsibility of Roto Artist
  - Roto artist work profile
  - Skills required for Roto Artists
  - Responsibilities of Roto Artists
  - Job sector of Roto Artists

Unit 5(B): Creative and Technical Requirement
Theory:

- Describe the video basics
  - Video content creation – tools and techniques
  - Types of video camera

- o Different video camera controls of DSLR
- o Different shot sizes
- o Different video file format
- o Codec – video codec, audio codec, still image codec
- o Frame Rate
- o Resolution
- o Aspect Ratio

Practical:

- Describe the tools and technique to capture raw footage
  - o Chroma keying technique
  - o Comparison between Chroma key and Rotoscoping
  - o Materials required for Chroma key
  - o Rotoscoping tools
  - o Traditional or Analog roto-scoping
  - o Digital Rotoscoping
  - o Hardware and software for digital Rotoscoping
- Perform Rotoscoping using different Rotoscoping software
  - o Rotoscoping software – Layer base and Node base software
  - o Layer base software – Adobe After Effects – Key features, System requirement, Advantages in Rotoscoping
  - o Node base software – Nuke, Silhouette – Key features, System requirement, Advantages in Rotoscoping
- Perform Rotoscoping in Adobe Photoshop
  - o Adobe Photoshop interface, menus and tools
  - o Different group of Photoshop tools
  - o Tools used in Rotoscoping and their function
  - o Rotoscoping process in Adobe Photoshop
  - o Import the Footage
  - o Video layer used in Rotoscoping
  - o Exporting a video
  - o Object separation for VFX

Unit 5(C): Rotoscoping Basics

Theory:

- Describe VFX techniques and Rotoscoping terminologies
  - o Basic VFX techniques and equipment – Blue and Green screen, Motion Control, Encoda Cam, Motion Capture
  - o Rotoscopy terminologies – Comp, Matte, Control Points, Spline, Shape, Edge, Motion path, Key frame, Focus Object, Tracking, Alpha Channel, Frame Range, Interpolation, Keying, Object Mode, Sub-Object Mode

Practical:

- Draw various shapes in Adobe After Effects using Layers and Pen tool
  - Adobe After Effects Layers – Shape Layer, Solid Layer, Text Layer, Adjustment Layer, Null Layer, Camera Layer, Light Layer,
  - Masking
  - Shape Layer and Pen Tool
- Create Matte and color of video in After Effects
  - Matte Creation
  - Luma Mattes
  - Alpha Mattes
  - Colour Correction
- Demonstrate Rotoscoping using Brush and Refine brush tool in After Effects
  - Rotoscoping of object
  - Roto brush and Refine brush tool
  - Roto Brush and Refine Matte overview and workflow
- Paint and remove the part of object using Motion tracking in After Effects
  - Motion tracking
  - Clone and paint (wire removal)
  - Clone Stamp

PROJECT

- Create a texture for a 3D Prop using the UV Mapping techniques and display it from different camera angles.
  AND
- Create an original Roto project for a Social Media Reel / Advertisement out of a self-recorded footage of 30/60 seconds.

CLASS XII – Paper 2 || Full Marks: 100

Part B: Employability Skills

Unit 1: Entrepreneurial Skills – II

Theory	Practical
Describe the concept of entrepreneurship and the types and roles and functions entrepreneur o Entrepreneurship and entrepreneur o Characteristics of entrepreneurship o Entrepreneurship-art and science o Qualities of a successful entrepreneur o Types of entrepreneurs o Roles and functions of an entrepreneur o What motivates an entrepreneur o Identifying opportunities and risk-taking Startups	o Group discussion on the topic "An entrepreneur is not born but created". o Conducting a classroom quiz on various aspects of entrepreneurship. o Chart preparation on types of entrepreneurs o Brainstorming activity on What motivates an entrepreneur
Identify the barriers to entrepreneurship o Barriers to entrepreneurship o Environmental barriers o No or faulty business plan o Personal barriers	o Group discussion about "What we fear about entrepreneurship" o Activity on taking an interview of an entrepreneur.
Identify the attitude that make entrepreneur Successful o Entrepreneurial attitude	o Group activity on identifying entrepreneurial attitude.
Demonstrate the knowledge of entrepreneurial attitude and competencies o Entrepreneurial competencies o Decisiveness o Initiative o Interpersonal skills-positive attitude, stress management o Perseverance o Organisational skills- time management, goal setting, efficiency, managing quality.	o Playing games, such as "Who am I". o Brainstorming a business ideas o Group practice on "Best out of Waste" o Group discussion on the topic of "Let's grow together" o Group activity on listing stress and methods to deal with it like Yoga, deep breathing exercise.

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Unit 2: Green Skills and Sustainability - II

Theory	Practical

Identify the benefits of the green jobs
 o Green jobs
 o Benefits of green jobs
 o Green jobs in different sectors:
     • Agriculture
     • Transportation
     • Water conservation
     • Solar and wind energy
     • Eco-tourism
     • Building and construction
     • Solid waste management
     • Appropriate technology
	o Group discussion on the importance of green job
	 o Chart preparation on green jobs in different sectors.

State the importance of green jobs o Importance of green jobs in Limiting greenhouse gas emissions o Minimizing waste and pollution o Protecting and restoring ecosystems o Adapting to the effects of climate change	o Preparing posters on green jobs, o Group activity on tree plantation. o Brainstorming different ways of minimizing waste and pollution

Part B: Vocational Skills

Unit 3: Texturing Artist - II

Unit 3(A): Introduction to 3D Modeling & Maya Interface
Theory
- Overview of 3D Modeling and its Applications
- Introduction to Autodesk Maya Interface
- Navigating the Viewport & Maya Hotkeys
- Understanding Object Types (Polygons, NURBS, Subdivision Surfaces)
- Saving and Organizing Maya Projects

Practical
Basic Polygon Modeling
- Creating and Editing Basic Shapes (Cube, Sphere, Cylinder, etc.)
- Transformation Tools (Move, Rotate, Scale)
- Combining, Separating, and Deleting Objects

- Using the Outliner and Hypergraph for Scene Organization
- Extrude, Bevel, Bridge, and Boolean Operations
- Working with Edge Loops & Topology Flow
- Mirroring Geometry & Working with Instances

Unit 3(B): Advanced Hard Surface Modeling
Theory
Hard Surface Modeling
- Understanding Character Topology and Edge Flow
- Box Modeling vs. Edge Extrusion Workflow
- Sculpting Basic Forms in Maya

Practical
- Modeling Interior, Vehicles, Weapons, and Props
- Detailing with Edge Creasing and Subdivision Surfaces
- Retopology Techniques for Optimized Models
- Creating Facial Features and Hands

Unit 3(C): UV Mapping & Texturing Basics
Theory
- Importance of UV Mapping in 3D Modeling
- Understanding the process of Unwrapping UVs Using Maya's UV Editor
- Understanding to export UV Layouts for Texturing in Photoshop

Practical
Introduction to Shaders and Materials
- Introduction to the Hypershade Editor
- Types of Materials: Lambert, Blinn, Phong, AI Standard Surface (Arnold)
- Applying and Editing Materials on Objects
- PBR (Physically Based Rendering) Shaders
- Using Normal, Bump, and Displacement Maps
- Subsurface Scattering for Skin Materials
- Setting Up Lighting for Model Showcase
- Overview of Arnold as a Production Renderer
- Rendering with Arnold: Quality Settings and Optimizations
- Lighting and Rendering a Complete Scene

Unit 3(D): Introduction to Substance Painter
Theory
- Overview of Substance Painter and its Applications
- Understanding the Interface and Navigation
- Setting Up a New Project & Importing 3D Models
- Understanding Texture Sets and U-Dimensional Workflow

- Introduction to PBR (Physically Based Rendering) Workflow
- Exploring Built-in Material Library
- Creating and Editing Smart Materials

Practical
Baking Mesh Maps in Substance Painter
- Importance of Baking in Texturing Workflow
- Baking Ambient Occlusion, Curvature, Normal, and ID Maps
- Fixing Baking Errors and Optimizing Maps
- Using Brushes, Stencils, and Alphas
- Using Projection Painting for Custom Details
- Using Anchor Points for Advanced Layering
- Exporting Textures for Game and Film Production
- Exporting Textures to Maya, Blender, Unreal Engine, and Unity
- Setting Up Materials in Arnold etc.
- Adjusting Texture Maps for Different Render Engines
- Exporting High-Quality Renders for Portfolio

Unit 4: Roto Artist - II

Unit 4(A): Drawing and Animation Roto shapes
Theory:
- Describe Rotoscoping Pre- Requisite
  - Important terms in Rotoscoping –
    - The Shot Length
    - Stabilization of the Footage
    - Identification of the Focus object for Rotoscoping
    - Matte Usage
    - Edge and Shape
    - Edge Feather
    - Multiple Shapes
    - Positive Space
    - Motion Path

Practical:
- Work with Silhouette Software
  - User interface of SilhouetteFX
  - Sources Window
  - Sessions, Trees, Nodes
  - Obey Matte
  - Details of Roto Nodes
  - Object and Object List
  - Layer/Shape icon and its function

- o Object list shortcuts
- o Viewer and Time bar
- o Important controls in viewer's panel
- Draw Shapes
    - o Need of creating shapes for Rotoscoping
    - o Tools for creating roto shape
    - o Bezier shape
    - o Adjust Bezier curve tension
    - o B-Spline shape
    - o B-Spline Curvature Control
    - o X-Spline shape
    - o X-Spline Curvature control
    - o Comparison between Bezier, B- Spline and X- Spline
    - o Converting B-Splines or X-Splines to Bezier Splines
    - o Square and circle
    - o Open Shapes/ Open Poly
    - o Blend Mode
    - o Reshape tool – Adding, Deleting, Moving Control Point
    - o Magnetic Reshape Tool
    - o Feather
    - o Closed Shapes, Open Shapes
    - o Navigating the viewer with tools
    - o Breakdown subject in to Shapes for Rotoscoping
- Animation Shapes
    - o Animation tools – Transform tool, Reshape tool
    - o Transform tool – Moving, Shearing, Scaling, Corner Pinning, Anchor Point tools
    - o Setting the Anchor Point and using special transformation tool
    - o Using Reshape tool in transformation
    - o Key frame Techniques
    - o Incremental Key Frames

Unit 4(B): Roto Techniques in SilhouetteFx
Theory:
- Describe Blur and Motion Blur
    - o Depth of Field Blur
    - o Motion Blur
    - o Comparison between Depth of Field Blur and Motion Blur
Practical:
- Demonstrate Motion Tracking in SilhouetteFX
    - o Motion Tracking
    - o Use of Motion Tracking

- o SilhouetteFX Motion Tracking –
  - ▪ Point Tracker,
  - ▪ Planer Tracker,
  - ▪ Mocha Planer Tracker
- o Creating One Point Tracker
- o Moving and Scaling Tracker component
- o Pre-Processing the Object
- o Two Point Tracker
- o SilhouetteFX Planar Tracker
- o Mocha Planar Tracker
- o Use of Planar Tracking – Motion Tracking, Corner Pinning, Stabilizing, Rotoscoping
- Demonstrate the Rotoscoping Human Figure
  - o Human walking movement
  - o Isolating Extremities
  - o Isolating hands from the video shot
  - o Overlap the shapes
  - o Inverse Kinematics (IK)
- Demonstrate the Rotoscopy of Hair
  - o Basic shape of hairs
  - o Standout Shapes
  - o Open Shapes/ Open Poly
  - o Animate the shapes – basic shape and standout shape

Unit 4(C): Advanced Roto Techniques and Applications using AI (Artificial Intelligence)
Theory:
- Demonstrate the use of AI:
  - o Introduction to AI in video editing
  - o Automatic object tracking using AI
  - o Semantic segmentation for foreground extraction
  - o AI-driven edge and boundary detection
  - o Pose estimation and motion analysis
  - o Instance segmentation in multi-subject scenes
  - o Efficiency and time management in Rotoscopy with AI
  - o AI techniques for frame interpolation and continuity
  - o Smart mask refinement and real-time preview tools

Practical:
- Demonstrate the techniques to perform repairs in scene salvaging problems
  - o Use **Adobe After Effects** (Roto Brush 2) to automatically separate foreground subjects using AI-driven edge detection.
  - o Apply **Runway ML** for quick background removal and subject isolation with machine learning models.

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- o Use **DaVinci Resolve** (Magic Mask) to track and isolate people using AI-based facial and body recognition.
- o Leverage **Nuke** (Roto node + CopyCat ML Tool) to train custom AI models for specific rotoscoping tasks.
- o Use **EbSynth** to propagate painted frames across a sequence using AI-assisted frame interpolation.
- o Try **DeepMotion** to extract motion capture data from videos for AI-assisted character isolation.
- o Utilize **Kognat Silhouette** with AI tools for detailed rotoscope work in VFX production pipelines.
- o Implement **Wonder Studio** by Wonder Dynamics to automatically detect and replace human actors with CG characters using AI.
- o Use **Photoshop** (Video Timeline + Select Subject) to mask frames individually with AI help and export for compositing.
- Demonstrate Stereo Roto technique
  - o Stereography
  - o Convergence
  - o Viewing Stereo
  - o Stereo Conversion
  - o Stereo Roto
  - o Key to good stereo conversion

Unit 4(D): Finalizing Matte
Theory
- Describe the Rotoscopy Work Environment
  - o Difference between CGI, VFX, SFX and FX
  - o Different work area – Compositing, Chroma Keying, Rotoscoping, Retouch, Matte Painting, CGI, Motion Tracking
  - o Difference between Compositor and other VFX Artist
  - o Software for Compositing – Nuke and After Effect
  - o Software for Keying, Rotoscoping and Retouch – Photoshop, Mocha Pro
  - o Software for Matte Painting – Maya and 3D Max
  - o Software for CGI – Maya and Cinema 4D
  - o Digital effects, Tracking

Practical:
- Finishing the Rotoscoping using manual and AI techniques.
  - o Create a shape and track it
  - o Multi-frame tool
  - o Extracting tracker from the shape
  - o Opacity control in timeline
- Render and Export Shape
  - o Rendering

- o Export/Import shapes from Silhouette FX
- o Export the shapes from Silhouette software to After Effects
- o Import and Export of shapes in After Effects
- o Import After Effects shapes in Silhouette
- o Rendering Shape Outlines or Color Filled Shapes

PROJECT

- Create a texture map of a 3D Character or a 3D Background environment with props.
  AND
- Create a Rotoscopy using any AI Tool with self-recorded footage for a story/reel/promotional advertisement.

ORGANISATION OF FIELD VISITS / WORKSHOP

In an academic year, a minimum of two field visits and one workshop should be organized to expose students to the character design ecosystem every six months. These visits may include Studios, Art Houses, Museums, Art/Design/Animation/VFX Workshops, 2D and 3D Animation Studios and similar venues.

- Resource person from industry to be invited for conducting workshop offline or online, whichever is suitable.

During each visit, students should gather the following information from the design studios:

a) **Concept Development:** Understand how ideas are generated, refined, and translated into concepts.
b) **Industry Standards:** Understand the industry standards for art, design and effects, including quality benchmarks, attention to detail, and consistency. Learn about the importance of client confidentiality and handling sensitive information.
c) **Target orientation:** Gain insights into how art, design and effects are tailored to specific target audiences, such as children, adult, or gaming.

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LIST OF EQUIPMENT AND MATERIAL

The tools, equipment and materials required for training are quite expensive, therefore; only basic tools, equipment and accessories should be procured by the Institution so that the routine tasks can be performed by the students regularly for practice and acquiring adequate practical experience.

Sl. No.	List of Equipment	Qty.	Estimated Cost (Rs)
A	**Software**		
1.	Adobe Photoshop, Adobe Animate, Toon Boom Storyboard Pro, Nuke, Fusion, Adobe After Effects, 3D Modelling, Sculpting and Painting Software (3DS Max / Maya)	1	2,40,000 (Licensed with Per Year Subscription)
2.	Skilled Level Software	1	50,000 (License with Per Year Subscription)
B	**Equipment/Devices**		
1.	Computer- CPU: 8-core (configurable to 18-core) 3.2GHz Intel Xeon W, Graphics: Radeon Pro Vega graphics: 8GB, RAM: 32GB (Configurable to 128GB), Storage: 1TB SSD (configurable to 4TB)	4	6,00,000
2.	Camera or Smartphone	1	1,50,000
3.	Digital Drawing Tablet	1	50,000
4.	Scanner and Printer	1	50,000
5.	Lighting Equipment kit	1	50,000
7.	Desk Lamp	2	80,000
C	**Tools**		
1.	Paper set	1	5,000
2.	Stationary set (Pencil 10H to 12B, Pen, Colour Pencil, Sharpener and Eraser, Wax Colour, Water Colour, Ink, Sketchbook, Marker set, Paper cutter, Pencil case or pouch, Brushes set and Colour Chalks)	2	20,000
3.	Stylus Pen	1	2,000
4.	Stencil	1	1,500
5.	Drawing Compass	1	1,500
6.	Ruler	1	500
13.	Color Swatches and Pantone Guides	1	1,000

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14.	Art Mannequins	1	10,000
15.	Furniture (Ergonomic Chair and Adjustable Desk)	2	1,00,000
D	**Sculpting Tools**		
1.	Clay	1	5,000
2.	Polymer Clay	1	6,000
3.	Clay Tool Kit	1	20,000

VOCATIONAL TEACHER'S/TRAINER'S QUALIFICATION AND GUIDELINES

Qualification and other requirements for appointment of vocational teachers/trainers on contractual basis should be decided by the State/UT. The suggestive qualifications and minimum competencies for the vocational teacher should be as follows:

Qualification	Minimum Competencies	Age Limit
Post-Graduation in Visual Art/Fine Art/Design/Computer Science/2D Animation/3D Animation from a recognised Institute/University, with at least 2 years work/ teaching experience.	Effective communication Skills (oral and written) Basic computing skills Industry experience related to Graphic Design, Storyboarding, Character Design, Roto, 3D Modeling and Animation	24-55 years - as on Jan. 01 (mention the year) Age relaxation to be provided as per Govt. rules.

References

1. Job Role: Character Designer, Syllabus, Sector: Media and Entertainment, Grades 11 and 12, PSS Central Institute of Vocational Education (a constituent unit of NCERT under Ministry of Education, Government of India), Bhopal.

2. Job Role: Storyboard Artist, Syllabus, Sector: Media and Entertainment, Classes 11 and 12, PSS Central Institute of Vocational Education (a constituent unit of NCERT under Ministry of Education, Government of India), Bhopal.

3. Job Role: Texturing Artist, Syllabus, Sector: Media and Entertainment, Classes 11 and 12, PSS Central Institute of Vocational Education (a constituent unit of NCERT under Ministry of Education, Government of India), Bhopal.

4. Job Role: Roto Artist, Syllabus, Sector: Media and Entertainment, Grades 11 and 12, PSS Central Institute of Vocational Education (a constituent unit of NCERT under Ministry of Education, Government of India), Bhopal.

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