

**SWAMI RAMANAND TEERTH MARATHWADA
UNIVERSITY, NANDED**

Semester Pattern
Syllabus

Of

Master in
Computer Animation, Vfx & Web

2013

Aims & objective of the program

Aims :

M. A. V. W. is a four semester full time program, to equip the students with the tools & techniques balanced with theory & practical knowledge which has today taken the shape of Multimedia industry. We focus on providing high end media and entertainment training. the Animation has seen the entry of many global majors who have tapped into India's talent pool for offshore delivery of services. The websites has become important resource and attached in many aspects to our life. Nowadays, websites becomes an interactive platform that is used for receiving information as well as providing information.

Objective :

- To develop student's aesthetic, intellectual & technological abilities through programs that integrates theory & practical.
- To offers students a rigorous & innovative curriculum taught by faculty with outstanding academic & industry experience.

Duration of the course

- 1) The duration of the Master in Animation, VFX and Web course shall be of two academic years consisting of four semesters with university examination at the end of each semester namely.
 - a. Master in Animation, VFX and Web, semester I exam
 - b. Master in Animation, VFX and Web, semester II exam
 - c. Master in Animation, VFX and Web, semester III exam
 - d. Master in Animation, VFX and Web, semester IV exam
- 2) The examination shall be held at such places & dates which are notified by the university.

Master In Animation, VFX and Web

Dayanand College Of Arts, Latur

Year	Semester	Theory	Marks	Practical	Marks	Project	Total
First Year	First Semester	4	$50 \times 4 = 200$	3	$100 \times 3 = 300$	100	600
	Second Semester	4	$50 \times 4 = 200$	3	$100 \times 3 = 300$	100	600
Second Year	Third Semester	4	$50 \times 4 = 200$	3	$100 \times 3 = 300$	100	600
	Forth Semester	3	$50 \times 3 = 150$	3	$100 \times 3 = 300$	150	600
						Grand Total=2400	

Semester I

Theory Pattern

Sr. No.	Subject	Theory Marks	Min passing marks	No of period / credit per week	Time for exam hours
1	Art of Animation	50	25	05	02
2	Drawing for Animation	50	25	05	02
3	Advance Digital Art	50	25	05	02
4	Roto and Stereo paint	50	25	05	02

Semester I

Practical Pattern

Sr. No.	Subject	Practical Marks	Min passing marks	No of period / credit per week	Time for exam hours
1	Drawing for Animation	100	50	06	03
2	Advance Digital Art	100	50	06	03
3	Roto and Stereo paint	100	50	06	03
4	Project	100	50	06	03

Semester II

Theory Pattern

Sr. No.	Subject	Theory Marks	Min passing marks	No of period / credit per week	Time for exam hours
1	Fundamentals of Web Designing	50	25	05	02
2	Classical Animation	50	25	05	02
3	Character Development and Digital Animation	50	25	05	02
4	2D and 3D Compositing	50	25	05	02

Semester II

Practical Pattern

Sr. No.	Subject	Practical Marks	Min passing marks	No of period / credit per week	Time for exam hours
1	Classical Animation	100	50	06	03
2	Character Development and Digital Animation	100	50	06	03
3	2D and 3D Compositing	100	50	06	03
4	Project	100	50	06	03

Semester III

Theory Pattern

Sr. No.	Subject	Theory Marks	Min passing marks	No of period / credit per week	Time for exam hours
1	UV Mapping and Texturing	50	25	05	02
2	Set Designing	50	25	05	02
3	Core Designing and Connectivity	50	25	05	02
4	Match moving with Live Action	50	25	05	02

Semester III

Practical Pattern

Sr. No.	Subject	Practical Marks	Min passing marks	No of period / credit per week	Time for exam hours
1	Set Designing	100	50	06	03
2	Core Design and Connectivity	100	50	06	03
3	Match moving with Live Action	100	50	06	03
4	Project	100	50	06	03

Semester IV

Theory Pattern

Sr. No.	Subject	Theory Marks	Min passing marks	No of period / credit per week	Time for exam hours
1	Game Designing	50	25	05	02
2	Advance Web Development	50	25	05	02
3	Final Editing in VFX	50	25	05	02

Semester IV

Practical Pattern

Sr. No.	Subject	Practical Marks	Min passing marks	No of period / credit per week	Time for exam hours
1	Game Designing	100	50	06	03
2	Advance Web Development	100	50	06	03
3	Final Editing in VFX	100	50	06	03
4	Project	150	75	06	03

Note –

- The marks for exemption and passing shall be same i.e. the theory subject is exempted at 50% marks and practical subject should be 50% marks.
- Other rules for A.T.K.T., grace , class, applicable to same as M.A degree to M. A. V. W.
- Project-viva examination by two examiners appointed by university.

Detailed Syllabus

First Year (I Semester)

Sub. Code:

Marks: 50

Art of Animation

1. Principles of Animation
2. History of Animation
3. Basics of Animation
4. Uses Of Animation
5. Advantages Of Animation
6. Multimedia
7. Pipeline Programming

Book List

1. The ILLUSION OF LIFE: DISNEY ANIMATION (Hardcover)
by Frank Thomas

2. The Animator's Survival Kit: A Manual of Methods, Principles, and Formulas for Classical, Computer, Games, Stop Motion and Internet Animators (Paperback)
by Richard Williams

3. Chuck Amuck: The Life and Time of an Animated Cartoonist (Paperback)
by Chuck Jones

4. Drawn to Life: 20 Golden Years of Disney Master Classes, Volume 1: The Walt Stanchfield Lectures (Paperback)
by Walt Stanchfield

5. The Art of Up (Hardcover)
by Tim Hauser

Sub. Code:

Marks: 50

Drawing for Animation

1. Fundamentals of Animation
2. Shading and Depth
3. Overview of Perspective
4. Script Writing
5. Character Anatomy
6. Detailed Model Sheet

Practical

Marks: 100

Drawing for Animation

1. Cartoon Sketch
2. BG in Perspective
3. Character Anatomy in pencil
4. Sketch with Facial Expression
5. Story Boarding

Book List

Drawing on the Right Side of the Brain

by Betty Edwards

Keys to Drawing

by Bert Dodson

The Artist's Guide to Sketching by James Gurney and Thomas Kinkad

Sketching School

by Judy Martin

Work Small, Learn Big! Sketching With Pen and Watercolor by International Artist

Sub. Code:

Marks: 50

Advance Digital Art

1. Introduction to Software
2. Classification of Image
3. Image
4. Color Theory
5. Color Scheme
6. Desktop Publishing
7. Basics of Matte Painting
8. Layout designing

Practical

Marks: 100

Advance Digital Art

1. Object designing
2. Logo/visiting card
3. Brochure/web layouts
4. Matte painting
5. Digital Background

Book List

Color and Human Response:

The Elements of Color:

Basic Color Terms: Their Universality and Evolution

Color Measurement, Themes and Variations (PB), by David L. MacAdam

Sub. Code:

Marks: 50

Roto and Stereopaint

1. Introduction to Software
2. Overview on Roto Stereopaint
3. VFX Roto
4. Stereopaint Roto
5. Animating Roto Shape
6. Clean Plate
7. Paint Techniques

Practical

Marks: 100

Roto and Stereopaint

1. Techniques of Roto
2. Roto Shape Movement
3. Creating Clean plate
4. Paint Projection

Book List

The VES Handbook of Visual Effects: Industry Standard VFX Practices and Procedures

The Visual Effects Producer: Understanding the Art and Business of VFX

The Green Screen Handbook: Real-World Production Techniques [With DVD]

First Year (II Semester)

Sub. Code:

Marks: 50

Fundamentals of Web Designing

1. Exploring Web Design

2. Hyper Text Markup Language (HTML)

4. Cascading Style Sheets (CSS)

5. jQuery Introduction

7. PHP Introduction

Book List

HTML, CSS, JAVASCRIPT, PERL, PYTHON & PHP (Paperback) by Steven M. Schafer

Content Strategy for the Web

CSS3 for Web Designers

Sub. Code:

Marks: 50

Classical Animation

1. Introduction of software
2. Overlapping and Follow Through
3. Exaggeration and Anticipation
4. Arcs and Solid Drawing
5. Timing and Staging
6. Squash and Stretch
7. Straight ahead and Pose to pose
8. Slow in Slow out

Practical

Marks: 100

Classical Animation

Create a new concept in Classical Animation .

Book list

The ILLUSION OF LIFE: DISNEY ANIMATION by Ollie Johnston

The Animator's Survival Kit by Richard Williams

Animation: From Script to Screen by Shamus Culhane

Sub. Code:

Marks: 50

Character Development and Digital Animation

1. Introduction to Software
2. Advance Character Building
3. Skeleton Building
4. Blend Shape Building
5. Advance Graph Handling
6. Use of Dope sheet

Practical

Marks: 100

1. Convey Weight with Expression
2. Advance Facial Expression
3. Project

Book List

Character Development in Blender 2.5

Jonathan Williamson

Mastering Autodesk Maya 2012

Todd Palamar & Eric Keller

Sub. Code:

Marks: 50

2D and 3D Compositing

1. Introduction to Compositing
2. Uses of Tracking for Compositing
3. Introduction to 2D and 3D Tracking
4. Feature Tracking
5. Four Point Tracking

Practical

Marks: 100

2D and 3D Compositing

1. Camera Solve and Exporting
2. Set Extension
3. Color Correction
4. Camera Animation
5. Final Compositing

Book List

The Art And Science Of Digital Compositing by Ronald Brinkman

The Art and Science of Digital Compositing: Techniques for Visual Effects, Animation and Motion Graphics (The Morgan Kaufmann Series in Computer Graphics)

by Ron Brinkmann

Digital Compositing for Film and Video by Steve Wright

Second Year (III Semester)

Sub. Code:

Marks: 50

UV Mapping with Texturing And Lighting in maya

1. Material Classification
2. Mapping
3. Unwrap Model
4. Creating Texture in Photoshop
5. Adjust Textures in UV Layout
6. Apply texture on Object
7. Types of Lights
8. Lighting Texturing and Environment Setup

Book List

Mastering Mental Ray: Rendering Techniques for 3D and CAD Professionals

Photoshop for 3D Artists,

Advanced Maya Texturing and Lighting: Lee Lanier

Maya Studio Projects Texturing and Lighting: Lee Lanier

Sub. Code:

Marks: 50

Set Designing

1. Introduction to Software
2. Overview on Set Designing
3. Basics of Architecture
4. Set Visualization
5. Concept of Interior and Exterior
6. Background Designing
7. Conceptual BG

Practical

Marks: 100

Set Designing

1. Create a Architectural Structure with Interior
2. Texturing and Lighting
3. Walkthrough
4. Create a BG with Texturing and Lighting

Book List

The Modeling and Animation Handbook: Alias

Modeling with Maya and ZBrush ... - Amazon.co.uk

Exploring 3D Modeling With Maya

Sub. Code:

Marks: 50

Core Design and Connectivity

1. Core Concepts
2. Creating Wireframes & Web Site Mockup
3. Getting Started
4. Site Control
5. CSS Foundations
6. Working with Images & Links
7. Controlling Layout with CSS
8. Working with Tables & Forms
9. Building Complete Website Templates

Practical

Marks: 100

1. Creating Wireframes
2. Web Site Mockup in Photoshop
3. Creating Layouts using Photoshop
4. Creating Layout using Photoshop

Managing Sites: Running site wide reports, checking for broken links, validating markup, checking for browser compatibility, Entering remote information, Updating and publishing files on Hosting Server

Reference Books: Adobe Photoshop CS4: Web Design, ACE Edition by Kirsten Sitnick

Adobe Dreamweaver CS4: The Official Training Workbook from Adobe Systems by Virginia DeBolt or

Dreamweaver CS4 Digital Classroom, by Aquent Creative Team, Jeremy Osborn, Greg Heald

Sub. Code:

Marks: 50

Match moving with a Live Action

1. Introduction to software
2. Match moving with 3D object
3. Green screen setup
4. Light setup
5. Shooting Angeles
6. Creating Track point

Practical

Marks: 100

Match moving with a Live Action

1. Import & adjust camera track point
2. Adjust 3D object with live footage
3. Lighting and Render setup
4. Final Match moving and Color Correction
5. Advance Keying

Book List

Matchmoving: The Invisible Art of Camera Tracking [With CDROM]

by Tim Dobbert

3D Matchmoving by virtual 1 studio

Industrial Light & Magic: Into the Digital Realm

by Mark Cotta Vaz

Game Designing

Sub. Code:

Marks: 50

1. Anatomy of Character
2. 2D game character Design
3. flash Animation

Practical

Marks: 100

Game Designing

Fundamentals of game

game model

scripting for game

Book List

The Art of Game Design: A Book of Lenses

by Jesse Schell

A Theory of Fun for Game Design

by Raph Koster

Rules of Play: Game Design Fundamentals

by Katie Salen

Sub. Code:

Marks: 50

Advance Web Development

1. CMS Basic
2. Word Press Setting
3. Adding Content
4. Creating and Editing Custom Themes
5. Search Engine Optimization
6. Google Ad Words

Practical

Marks: 100

1. Installing CMS on local host
2. Adding Content in CMS
3. Creating Theme of CMS
4. Uploading on server
5. Adding Google Ad Word

Reference Books: Word press Complete: Set Up, Customize, and Market Your Blog by Hasin Hayder

Word Press 3 Search Engine Optimization by Michael David , Using Google Ad words and Ad sense by Michael Miller

Sub. Code:

Marks: 50

Final Editing With VFX

1. Introduction to software
2. Editing
3. Effect overview
4. Plug ins Introduction
5. Rendering Setup
6. Editing Types

Practical

Marks: 100

Final Editing With VFX

1. Final Editing
2. Overview on Layers and Nodes
3. Creating Effects
4. Handling Plug ins
5. Tittles
6. Renderings

Book List

A Complete Guide to Special Effects Makeup: Conceptual Creations by Japanese Makeup Artists

The Digital Visual Effects Studio: The Artists And Their Work Revealed

by Mr. Mayur Patel

The Visual Effects Producer: