Certified Multimedia Developer
(Detailed Curriculum)

Section-1

Detailed Syllabus of Course

S. No	Module Title	Topics	Duration (Hours)		Learning Outcome
			Theory	Lab	
1.	**Introduction to Multimedia**	Basic Multimedia Concepts, Definitions of Multimedia, Multimedia objects: Text, Graphics, Animation, Audio, Images, video, definition of hypertext and hypermedia. Multimedia applications in education, entertainment, advertising world etc. Components of a Multimedia system, desirable features for a multimedia system, requirements of multimedia communication	10	-	Acquire a basic understanding of Multimedia Systems and its Applications
2.	**Image Editing & Graphic Designing**	Concepts on Image and Photo Editing, Graphic Designing, Masks and Channels, Retouching and Repairing, Painting and Editing, Basic Pen tool techniques, creating special effects. Digital Design, Page Layout Design, Interactive Design, 3D Modelling, Texturing, Digital Illustration, User Interface Design, Compositing and 3D Animation.	05	20	Demonstrate an working knowledge of Image Editing & Graphic Design Techniques
3.	**Audio Editing**	Sound editing, recording, sound effects, Audio compression, audio production, basic sound editing and navigation, advanced editing, recording, applying sound effects, applying sound process	05	15	Demonstrate an working knowledge of Audio Editing Techniques

4.	**2D Animation**	Introduction to 2D Animation, Computer based animation, sprite animation, rendered animation. Introduction to tweening, warping, morphing, walk cycle. Shapes and Objects. Transformation Tools.	10	20	Demonstrate an working knowledge of 2D Animation Principles & Techniques
5.	**Video Editing & Special Effects**	Multiple exposure, mattes and introduction to computer generated imagery. Basic to Advanced level video editing, Basic Overview, Transitions and Titles, Editing Techniques, Adding video effects and motion, adding audio, Alpha Channels and Mattes, Tools and Techniques for advanced editing, Media Management(Post-edit), colour correction, Titling and composting, Packaging Timeline, Edit to tape(mastering) & exporting to different media Introduction to Mechanical Effects and optical effects. Scenery, scale models, animatronics, pyrotechnics and atmospheric effects.	05	20	Acquire Skill on video editing and special effects
6.	**3D Animation**	Introduction to 3D animation, Understanding of 3D Coordinate systems, concept of Viewport, navigation in space, modelling of objects in 3D space, Viewing Transformations: Camera models, Using Transformation Tools.	10	20	Demonstrate an working knowledge of 3D Animation Techniques
7.	**Introduction to Web Page Development**	Introduction to Web Page Development, Introduction to the Internet and World Wide Web, Designing and Building your website, using content types effectively, hypertext theory and node link diagrams. Planning a website. Design Guidelines	05	15	Acquire skill on Web Page Design & Development

9.	**Project Work**	Industry Level Project Work undertaken in a peer group setting, Learn problem solving and integration of different components of multimedia viz. image, graphics, audio, video & animation for development of multimedia applications using an appropriate authoring tool	-	40	Develop industry oriented integrated multimedia project
Total Hours = 200			**50**	**150**	

Recommended Hardware:	• Desktop PC's with Graphics Card (16 GB RAM Recommended
Recommended Software:	• Adobe Photoshop • Adobe Premiere Pro • Adobe Animate • Adobe After Effects • Adobe Illustrator • Adobe Dreamweaver • 3D Max • Corel Draw • Sonic Soundforge
Text Books:	• Principles of Multimedia by Ranjan Parekh • Introduction to Multimedia by Satish Jain/Shashank Jain
Reference Books:	• Getting Started in 3D using 3D Max • Adobe Flash Professional CS6 Bible by Robert Reinhardt • Photoshop CC in Simple Steps by DT Editorial Services • Adobe Premiere Pro Classroom Book by Maxim Jago • Corel Draw Training Guide by Satish Jain • Adobe Dreamweaver Classroom in a Book by Jim Maivald

LIST OF EQUIPMENT (For a batch of 20 students)

Description		Qty	Specifications
1	Classroom	1	30 Sq M
2	Student Chair	20	
3	Student Table	20	
4	Computer with Internet	1	
5	LCD Projector	1	
6	Trainer Chair & Table	1	
7	Pin up Boards	1	
8	White Board	1	
	Computer Lab		
1	Desktop computer with accessories	20	Installed with Multimedia Software Minimum 16 GB RAM or Higher
3	Desk jet printer	1	A4

TRAINER PROFILE

Level: 5

Batch Size: 20 students

No of Trainers: 1

No of demonstrators: 1

Education Qualification	Engineer/ Diploma in Computer Science/IT/Multimedia
Experience	• Minimum 5 years hands on experience in a reputed Multimedia training institute or organization as a trainer
Technical Skills	• Hands on Knowledge of Multimedia Softwares • Good understanding of Multimedia tools and Design
Other Skills	• Should be able to communicate well in English • Good command on regional language • Knowledge of working on computers and Multimedia tools • Should be able to prepare lesson plan, deliver the courses through the specified media as per schedule • Should be able to aspire the trainees &evaluate and assess the trainees • Should be able to monitor progress and give feedback to trainees • Should be able to maintain MIS related to training

LIST OF SOFTWARE (For a batch of 20 students)

1. Primary requirement	
Operating system	For all computers
Web browser	
Antivirus	
Internet connectivity	

From the following software one from each group need to be installed in minimum 10 work stations. Original licenses need to be obtained wherever necessary. Open-source softwares are allowed.

2. Software for Documentation, Calculation & Presentation	
Proprietary Software	MS Office (Latest Version)
Open Software	Libre Office

3. Software for Multimedia Design & Development	
Proprietary Software	Adobe Master Collection Suite/ Adobe Creative Cloud 3D Max Corel Draw Sonic Soundforge