



PUNJAB TECHNICAL UNIVERSITY
Jalandhar
DISTANCE EDUCATION PROGRAMME
<http://www.ptu.ac.in>

Syllabus Manual
Multimedia Technology
Courses

Applicable to September 2005 Admission Batch
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Scheme

Diploma in Multimedia Technology (DMM)
B.Sc. (Multimedia Technology) (BSCMM)
Post Graduate Diploma in Multimedia Technology (PGDMM)
M.Sc. (Multimedia Technology) (MSCMM)

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Syllabus

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Scheme

September 2005
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Scheme of Papers
Diploma in Multimedia Technology (DMM)

Sr	Semester	One	Contact Hours(Per semester)			Theory Exam Marks			Practical Exam Marks			Duration of Exam	Remarks
	Paper code	Paper name	Theory Hrs	Practical Hrs	Total Hrs	Internal	External	Total	Internal	External	Total		
1	BSc.mm - 101	Graphics	40	40	80	25	75	100				3 Hrs	
2	BSc.mm - 102	Desktop Publishing	40	40	80	25	75	100				3 Hrs	
3	BSc.mm - 103	Digital Art Photography	40	40	80	25	75	100				3 Hrs	
4	BSc.mm - 104	Project	-	-	-	-	-	-	25	100	100		Practical (Internal)
5	BSc.mm - 105	Practical	-	-	-	-	-	-	25	75	100	3 Hrs	Practical
Total			120	120	240	300			200				500 Total

Sr	Semester	Two	Contact Hours(Per semester)			Theory Exam Marks			Practical Exam Marks			Duration of Exam	Remarks
	Paper code	Paper name	Theory Hrs	Practical Hrs	Total Hrs	Internal	External	Total	Internal	External	Total		
1	BSc.mm - 201	Digital Photography (Part-2)	40	40	80	25	75	100				3 Hrs	
2	BSc.mm - 202	Transferring digital photographs	40	40	80	25	75	100				3 Hrs	
3	BSc.mm - 203	Advertising	40	40	80	25	75	100				3 Hrs	
4	BSc.mm - 204	Project	-	-	-	-	-	-	25	75	100		Practical (Internal)
5	BSc.mm - 205	Practical	-	-	-	-	-	-	25	75	100	3 Hrs	Practical
Total			120	120	240	300			200				500 Total

Scheme of Papers
BSc. Multimedia Technology (BSc. MM)

Sr	Semester	One	Contact Hours(Per semester)			Theory Exam Marks			Practical Exam Marks			Duration of Exam	Remarks
			Theory Hrs	Practical Hrs	Total Hrs	Internal	External	Total	Internal	External	Total		
1	BSc.mm - 101	Graphics	40	40	80	25	75	100				3 Hrs	
2	BSc.mm - 102	Desktop Publishing	40	40	80	25	75	100				3 Hrs	
3	BSc.mm - 103	Digital Art Photography	40	40	80	25	75	100				3 Hrs	
4	BSc.mm - 104	Project	-	-	-	-	-	-	25	100	100		Practical (Internal)
5	BSc.mm - 105	Practical	-	-	-	-	-	-	25	75	100	3 Hrs	Practical
Total			120	120	240	300			200				500 Total

Sr	Semester	Two	Contact Hours(Per semester)			Theory Exam Marks			Practical Exam Marks			Duration of Exam	Remarks
			Theory Hrs	Practical Hrs	Total Hrs	Internal	External	Total	Internal	External	Total		
1	BSc.mm - 201	Digital Photography (Part-2)	40	40	80	25	75	100				3 Hrs	
2	BSc.mm - 202	Transferring digital photographs	40	40	80	25	75	100				3 Hrs	
3	BSc.mm - 203	Advertising	40	40	80	25	75	100				3 Hrs	
4	BSc.mm - 204	Project	-	-	-	-	-	-	25	75	100		Practical (Internal)
5	BSc.mm - 205	Practical	-	-	-	-	-	-	25	75	100	3 Hrs	Practical
Total			120	120	240	300			200				500 Total

Sr	Semester	Three	Contact Hours(Per semester)			Theory Exam Marks			Practical Exam Marks			Duration of Exam	Remarks
			Theory Hrs	Practical Hrs	Total Hrs	Internal	External	Total	Internal	External	Total		
1	BSc.mm - 301	Fundamentals of web designing & java script	40	40	80	25	75	100				3 Hrs	
2	BSc.mm - 302	HTML Basics	40	40	80	25	75	100				3 Hrs	
3	BSc.mm - 303	2D Animation	40	40	80	25	75	100				3 Hrs	
4	BSc.mm - 304	Project	-	-	-	-	-	-	25	75	100		Practical (Internal)
5	BSc.mm - 305	Practical	-	-	-	-	-	-	25	75	100	3 Hrs	Practical
Total			120	120	240	300			200				500 Total

Sr	Semester	Four	Contact Hours(Per semester)			Theory Exam Marks			Practical Exam Marks			Duration of Exam	Remarks
			Theory Hrs	Practical Hrs	Total Hrs	Internal	External	Total	Internal	External	Total		
1	BSc.mm - 401	Flash website design	40	40	80	25	75	100				3 Hrs	
2	BSc.mm - 402	3D Introduction & Advanced (Modeling & Animation) Part-1	40	40	80	25	75	100				3 Hrs	
3	BSc.mm - 403	3D Introduction & Advanced (Modeling & Animation) Part-2	40	40	80	25	75	100				3 Hrs	
4	BSc.mm - 404	Project	-	-	-	-	-	-	25	75	100		Practical (Internal)
5	BSc.mm - 405	Practical	-	-	-	-	-	-	25	75	100	3 Hrs	Practical
Total			120	120	240	300			200				500 Total

Sr	Semester	Five	Contact Hours(Per semester)			Theory Exam Marks			Practical Exam Marks			Duration of Exam	Remarks
			Theory Hrs	Practical Hrs	Total Hrs	Internal	External	Total	Internal	External	Total		
1	BSc.mm - 501	Video introduction & advance	40	40	80	25	75	100				3 Hrs	
2	BSc.mm - 502	Digital editing	40	40	80	25	75	100				3 Hrs	
3	BSc.mm - 503	Sound editing	40	40	80	25	75	100				3 Hrs	
4	BSc.mm - 504	Project	-	-	-	-	-	-	25	75	100		Practical (Internal)
5	BSc.mm - 505	Practical	-	-	-	-	-	-	25	75	100	3 Hrs	Practical
Total			120	120	240	300			200				500 Total

Sr	Semester	Six	Contact Hours(Per semester)			Theory Exam Marks			Practical Exam Marks			Duration of Exam	Remarks
			Theory Hrs	Practical Hrs	Total Hrs	Internal	External	Total	Internal	External	Total		
1	BSc.mm - 601	Script writing & story board designing	40	40	80	25	75	100				3 Hrs	
2	BSc.mm - 602	Realistic concepts of animation & special effects	40	40	80	25	75	100				3 Hrs	
3	BSc.mm - 603	Director basics	40	40	80	25	75	100				3 Hrs	
4	BSc.mm - 604	Project	-	-	-	-	-	-	25	75	100		Practical (Internal)
5	BSc.mm - 605	Practical	-	-	-	-	-	-	25	75	100	3 Hrs	Practical
Total			120	120	240	300			200				500 Total

Scheme of Papers
Post Graduate Diploma in Multimedia Technology (PGDMM)

Sr	Semester	One	Contact Hours(Per semester)			Theory Exam Marks			Practical Exam Marks			Duration of Exam	Remarks
	Paper code	Paper name	Theory Hrs	Practical Hrs	Total Hrs	Internal	External	Total	Internal	External	Total		
1	MSc.mm - 101	Script writing & story board designing	40	40	80	25	75	100				3 Hrs	
2	MSc.mm - 102	Desktop Pblishing	40	40	80	25	75	100				3 Hrs	
3	MSc.mm - 103	Advance Digital art Photography (Part-1 & 2)	40	40	80	25	75	100				3 Hrs	
4	MSc.mm - 104	Project	-	-	-	-	-	-	25	75	100		Practical (Internal)
5	MSc.mm - 105	Practical	-	-	-	-	-	-	25	75	100	3 Hrs	Practical
			120	120	240	300			200				500 Total

Sr	Semester	Two	Contact Hours(Per semester)			Theory Exam Marks			Practical Exam Marks			Duration of Exam	Remarks
	Paper code	Paper name	Theory Hrs	Practical Hrs	Total Hrs	Internal	External	Total	Internal	External	Total		
1	MSc.mm - 201	2D Animation	40	40	80	25	75	100				3 Hrs	
2	MSc.mm - 202	3D Introduction & Advanced (Modeling & Animation)	40	40	80	25	75	100				3 Hrs	
3	MSc.mm - 203	Audio & Video	40	40	80	25	75	100				3 Hrs	
4	MSc.mm - 204	Project	-	-	-	-	-	-	25	75	100		Practical (Internal)
5	MSc.mm - 205	Practical	-	-	-	-	-	-	25	75	100	3 Hrs	Practical
			120	120	240	300			200				500 Total

Scheme of Papers
MSc. Multimedia Technology (MSc. MM)

Sr	Semester	One	Contact Hours(Per semester)			Theory Exam Marks			Practical Exam Marks			Duration of Exam	Remarks
	Paper code	Paper name	Theory Hrs	Practical Hrs	Total Hrs	Internal	External	Total	Internal	External	Total		
1	MSc.mm - 101	Script writing & story board designing	40	40	80	25	75	100				3 Hrs	
2	MSc.mm - 102	Desktop Publishing	40	40	80	25	75	100				3 Hrs	
3	MSc.mm - 103	Advance Digital art Photography (Part-1 & 2)	40	40	80	25	75	100				3 Hrs	
4	MSc.mm - 104	Project	-	-	-	-	-	-	25	75	100		Practical (Internal)
5	MSc.mm - 105	Practical	-	-	-	-	-	-	25	75	100	3 Hrs	Practical
			120	120	240	300			200				500 Total

Sr	Semester	Two	Contact Hours(Per semester)			Theory Exam Marks			Practical Exam Marks			Duration of Exam	Remarks
	Paper code	Paper name	Theory Hrs	Practical Hrs	Total Hrs	Internal	External	Total	Internal	External	Total		
1	MSc.mm - 201	2D Animation	40	40	80	25	75	100				3 Hrs	
2	MSc.mm - 202	3D Introduction & Advanced (Modeling & Animation)	40	40	80	25	75	100				3 Hrs	
3	MSc.mm - 203	Audio & Video	40	40	80	25	75	100				3 Hrs	
4	MSc.mm - 204	Project	-	-	-	-	-	-	25	75	100		Practical (Internal)
5	MSc.mm - 205	Practical	-	-	-	-	-	-	25	75	100	3 Hrs	Practical
			120	120	240	300			200				500 Total

Sr	Semester	Three	Contact Hours(Per semester)			Theory Exam Marks			Practical Exam Marks			Duration of Exam	Remarks
	Paper code	Paper name	Theory Hrs	Practical Hrs	Total Hrs	Internal	External	Total	Internal	External	Total		
1	MSc.mm - 301	Digital editing	40	40	80	25	75	100				3 Hrs	
2	MSc.mm - 302	Sound editing	40	40	80	25	75	100				3 Hrs	
3	MSc.mm - 303	MAYA (Professional animation)	40	40	80	25	75	100				3 Hrs	
4	MSc.mm - 305	Project	-	-	-	-	-	-	25	75	100		Practical (Internal)
5	MSc.mm - 306	Practical	-	-	-	-	-	-	25	75	100	3 Hrs	Practical
			120	120	240	300			200				500 Total

Sr	Semester	Four	Contact Hours(Per semester)			Theory Exam Marks			Practical Exam Marks			Duration of Exam	Remarks
	Paper code	Paper name	Theory Hrs	Practical Hrs	Total Hrs	Internal	External	Total	Internal	External	Total		
1	MSc.mm - 401	Cartoon animation	40	40	80	25	75	100				3 Hrs	
2	MSc.mm - 402	Digital animation & special effects	40	40	80	25	75	100				3 Hrs	
3	MSc.mm - 403	Interactive Media	40	40	80	25	75	100					
4	MSc.mm - 404	Final Project	-	-	-	-	-	-	25	75	100		Practical (Internal)
5	MSc.mm - 405	Practical	-	-	-	-	-	-	25	75	100	3 Hrs	Practical
			120	120	240	300			200				500 Total



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Syllabus

September 2005

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Total assessment = 100
External = 75
Internal = 25

**B.Sc (MM) 101 - Graphics
First Semester**

- I. **Basics of Sketching & Drawing (with practice)**
Lines in different grades of pencils HB +0.8b, Shading in pencil medium, shading in different angles of pencil strokes, formatting in different textures in pencil, shading, simple objects in drawing, simple shapes of geometrical shapes, paper division & forming of sky land, stones, deserts, trees & plants, roadsides, rivers, perspective in lines in landscapes, different head shapes, characters, human anatomy parts like hand, legs, arms, horror characters.
- II. **The Process of Design**
Marketing consideration, creative concepts, shooting a add, preparing for production, production,
- III **Sign and Technology**
ascending descending, leading, kerning, appropriateness, harmony, apprenace, emphasis, copy casting and type specification, copy casting, character-count method, word -count method, points, picas, typesetting, typesetting methods, photo
- IV **Text and Typography**
Typography, type setting, readability, classes of type, display type, type groups, roman, serifs, gothic, block, square serif type, a font, cursive or script type, measuring type, size, width, resolution, compositing,
- V **The shape of Design**
Planning for print production, overlay, camera ready, dates and deadlines.
- VI **Design in Publishing**
Typesetting, photoplatemaking.
- VII **Various types of Papers**
Basics weight, caliper, equivalent weight, basics weight, acid free paper, antique finishing, brightness, basics weight, Bristol's, bulk, calendaring, bond, recycled, symbol "m", symbol "mm".
- VIII **Packaging & Product Design**
To make the packing boxes design, hands on designing using computer, making layouts for real printing, with margins typesetting.
- IX **Basics of Printing Technology**
Application, screen fabrics, filament, mesh count, strength, weave patterns, silk, organdy, nylon, polyester, metal mesh, paper, stencil types, direct and in direct, ink, press types, flatbed, flatbed cylinder, cylinder, textiles, precision flatbed, rotary.
- X **The Production Process**
Role of production manager, impact and non impact printers, preparing production, planning print production.

Total assessment = 100
External = 75
Internal = 25

**B.Sc (MM) 102 - Desk Top Publishing (By using Corel Draw, Photoshop & PageMaker)
First Semester**

I. Computer Basics

Introduction: Introduction to computers, parts of computer system, hardware, software, difference between hardware and software, user, data, processor, memory, input devices, output devices. Generations of Computers: 1st, 2nd, 3rd, 4th, 5th generation. Basic computer organization: C.P.U, A.L.U. Keyboard, Mouse, OMR, OCR, Bar Code Reader, Scanner, Light pen, Cameras etc. Output Devices: Monitors (CRT, FST, LCD), Impact and non impact printers (Dot matrix, Inkjet, LaserJet), Plotters. Storage Devices: Hard Disk, Floppy disk, CD's, DVD's.

II. Operating System

Introduction: Introduction to Operating System, its need and Operating System services; Operating System classification - single user, multi-user, simple batch processing, Multiprogramming, Multitasking, Parallel system, Distributed system, Real time system

III. Basic Designing Software

Windows Paint, Basics Concept making and Implement on Computer, Colour knowledge, Generating Ideas, Basics About Various Software's in Industry for still image manipulating, knowledge about pixels, measuring units in diff image manipulating software's.

IV. Vector Graphics (Designing, Color Theory , Vector Designing & Editing, Text Formatting)

Interface: working with menus, toolbars, Dockers

Document Setup: Setting Page Size& Orientation, Document Navigation

Rulers & Guidelines: Status Bar

Text: Formatting, Text Layout, Skewing and rotating, Creating drop shadow, Text to Path, Extruding text

Objects: Grouping & locking objects, Combining & breaking apart, Transforming & Shaping, Cutting objects apart, Trim, weld & Intersection of objects

Lines & Curves: Using freehand & Bezier tool, Line properties, Arrowheads

Eraser & artist media tools

Nodes & Paths

Color & Fills: Solid Color, Color Palettes, Eyedropper & Paint bucket, Fountain, Fills, Patterns, Texture Fills, Interactive Mesh Fill

Special effects: Envelopes, Blends, Perspective, Shadow Objects, Power clip Command, Transparency, Distortion, Contour, Lens Docker

Complex Shapes: Polygon & Stars, Spirals

Printing Menu.

V. Raster Graphics (Designing , Color Theory , Raster Designing & Editing, text Formatting

Getting to Know the Work Area, Starting to work in Adobe Photoshop, Colour modes, Colour, Using the tools, Selecting and using a tool from the toolbox, Using the tool options bar and other palettes, Customizing the workspace, Using Photoshop Help, Viewing and editing files in Adobe Bridge, Embedding information for easy identification, Automating routine tasks, Resolution and image size, Straightening and cropping an image, Making automatic adjustments, Manually adjusting the tonal range, Replacing

colors in an image, Adjusting lightness with the Dodge tool, Adjusting saturation with the Sponge tool, Retouching and Repairing, Repairing areas with the Clone Stamp tool, Using the Spot Healing Brush tool, Using the Healing Brush and Patch tools, Retouching on a separate layer, Working with Selections, About selecting and selection tools, Selecting with the Magic Wand tool, Using the Magic Wand with other selection tools, Working with oval and circular selections, Selecting with the lasso tools, Rotating a selection, Selecting with the Magnetic Lasso tool, Cropping an image and erasing within a selection, Layer Basics, Using the Layers palette.

VI. Page Making

Document Setup Option

Page Type, Page Style, Page Numbering, Page Measurement

Standard Tool Bar Options

Create New Document with Setting, Open & Store Options, Preferences

Import & Export Objects options, Scanning, Document Setup, Columns Guide Setting, etc.

Formatting Tool Bar Option

Copy Paste Options, Cross Pasting, Multiple Pasting, Insert Objects,

Import Images & Text from other Objects etc.

Text Setting Options

Fonts Setting, Control Palette, Paragraph Setting, Text Warping,

Master Files, Text Rotating options Alignment Setting, Text Colors.

Rulers & Guide Lines, Print Out Bar

Import Objects, Polygon Setting, Draw & Filling Objects, Alignment

Setting of the Images etc.

Books Reference:-

- Adobe PageMaker 7.0 classroom in a Book.
By (Adobe Publisher).
- Ramesh Bangia -Learning Photoshop CS
Khanna Book Pub
- Ramesh Bangia- Learning Multimedia
Khanna book pub.
- Ramesh Bangia- Computer Basics
Khanna book pub.
- Corel draw 12 - The Official guide
By - Corel Press.

Total assessment = 100
External = 75
Internal = 25

B.Sc (MM) 103 - Digital Art Photography - 103
First Semester

- I. **The Exploration Stage**
The past and future of Photography (Digital Photography), Types of Cameras, Choosing Cameras, Start Taking Photos, Using buttons and menus.
- II. **Selection and Treatment**
Selecting image size and quality, Image management, Photo editing tools
Color management.
- III. **Execution , Installation & Presentation**
Choosing Exposure modes, how your exposure system works and affects your image.
Installation of different types of Image Editing Software, Slide show programs and background music, E-mail and websites, displaying images
Wallpapers

Digital Photography (Part - 1)

- I **Inside the digital camera**
Image sensor and types, Built in memory and memory cards.
- II **The Principles of Photography**
The General Principles of Photography
Types of cameras: Miniature Cameras, medium format cameras, large format camera and digital cameras.
Comparative study of digital Camera and analogue(SLR) camera.
Advantages and applications of digital photography.
Lenses: Normal, wide, tele, zoom, PC and TS lens.
Working of a lens and angle of view of a lens.
Camera Controls: Shutter speed aperture exposure control, auto winder or motorized camera, depth of field, selective focus.
Exposure Meter: Incident meter and reflected meter.
Metering System: Center weighted, Spot and Matrix metering.
Filters: UV Filter, Polarizing filter, special effect filters and tripod.
Composition: Creative Composition, rule of thirds and Golden section.
Flash and its types.
- III **Managing Your Digital Assets**
Managing digital cameras, Cleanliness, Precautions, Managing Images printouts, Burning CDs

Book Ref: Tom Ang: Digital Photography an Introduction
Publisher's Name: Dorling Kindersley Ltd.

Total assessment = 100
External = 75
Internal = 25

**B.Sc (MM) 104 - Project
First Semester**

Design a Logo, a letterhead and a visiting card.

Total assessment = 100
External = 75
Internal = 25

**B.Sc (MM) 105 - Practical
First Semester**

Practical on all the subjects of 1st semester.

Total assessment = 100
External = 75
Internal = 25

B.Sc (MM) 201 - Digital Photography (Part - II)
Second Semester

1. **Beyond the Basics.**
Camera Controls and Creativity
About Digital Photographs
Automatic All the Way
Working of Digital Camera and comparison
Selecting Images Size and Quality (Photoshop)
Definition of shutter speed in detail, delineation of aperture
Using Shutter Speed in detail, definition of aperture
Selecting Exposure Modes
Types of Lenses
2. **Photographing people**
Photography aesthetics of people
(Male, females, couples, groups & child Photography)
In studio and out door and available light
3. **Product Photography**
Using Selective Focus
Exposure affects you Images
Controlling Brightness and Contrast
Close up Photography.
4. **Interior and Exteriors**
Architectural photography
Industrial shooting (Internal & external)
And use of various wide angle lenses.
Landscape photography, science shorts.
5. **Action and Sports Photography**
To capture the action, in different ways, to know the game first,
Selecting the equipments according to the game.
(Use of various zoom and tele lenses and tripods)
6. **The Photo Shoot from Start to Finish**
Photography on the given theme to selecting subject
To select the equipment the location and finally shooting.

Book Ref:

Tom Ang: Digital Photography an Introduction
Publisher's Name: Dorling Kindersley Ltd.

B.Sc (MM) 202 - Transferring Digital Photographs
Second Semester

I Transferring Devices

ATA-Flash-Cards, The exchange of digital information between two or more computers. Data is usually transmitted via a direct cable connection, a computer network, AD-conversion, I.C Cards PC-Card, ID Photo MO Disk The smallest rewritable optical storage medium for digital cameras. A joint development from Olympus, Sanyo and Hitachi Maxell. It features an amazing capacity of 730 MB. This means about 2,000 photos can be taken before the media needs to be changed. Image converter Semiconductor-image converter (CCD chip). Image transmission/ transfer the digitization of images means they can be transmitted via data carriers or networks without the loss of quality or copied an infinite number of times.

II Blue Tooth

Blue tooth carries a wlan concept to a small scale, low power 10 m range, also known as personal is networking (pan)
Bluetooth Profile Dependencies, data transferring, connection, wireless signals. Bluetooth file transfer profile (FTP) – enables browsing of the file system of other Bluetooth devices which support Bluetooth FTP, serial port (SPP) –provides a wireless serial connection to other Bluetooth devices, human interface device (HID) enables the use of Bluetooth input devices (keyboards and mice).

III Data Cable

USB based wires with both ends with the commutability of USB with computers, palmtops, I-pods, to transfer the data from one device to another, compatibility with memory card readers pro.different devices in which data cable is used, use of data cable in internet browsing.

IV Pen Drive

Temporary storage devices, attach with computer, having USB head compatible plug and play utility. I-pods, Pen drives with music player option, pen drive capacity of data storage, software's of pen drive for win 98, formatting the pen drive, labeling the pen drive, handling and caring of the pen drive, diff brands dealing with pen drive .

V CD Burning

Cd writing, cd writing software's, making video of still images, making data cd, making the labels for the cd, formatting the re-writable cd, diff types of cd available , storage capacity of cds , labeling the cd's, storing and handling the cd's, CD Burning.

Book Ref:

Discovering Blue Tooth - BPB Publisher.

Total assessment = 100
External = 75
Internal = 25

B.Sc (MM) 203 - Advertising

Second Semester

Advertising: Meaning, Nature, Functions, Benefits, History,
Nature (Art, Science, and Profession), Ethics in Advertisement...

Social and Economic aspects in advertising.

Types of Advertising : (Classified advertisements, Display advertisements, Hard Sell advertisement, Soft sell advertisements, Reminder advertisements, Prestige advertisements, Humorous advertisements, Professional advertisements, National advertisements, Local advertisements, Global advertisements, Product Advertising, Service Advertising, Institutional Advertising, Consumer Advertising, Distributor Advertising, Retail Advertising, industrial Advertising, Educational Advertising, Financial Advertising, Travel and Entertainment Advertising, Co-operative Advertising, Advertising, by Government and Public Bodies)

Advertisement relationship with the product life cycle.

Advertisement as a communication tool. Marketing communication process.

Advertisement as a Marketing Tool: Marketing, Marketing Mix, Advertisement and Product (Positioning and Packaging), Place, Price, Promotion. AIDA Model.

Media Selection and Media Planning.

Types of Media: Newspapers, Television ,Radio, Magazines, Web advertising, Exhibitions, Telemarketing ,Posters and Hoardings.

Advertisement Campaign: Campaign Planning and Process

Advertisement Agency: Structure, Client Agency Relationship, Agency Media Relationship, Compensation.

Advertisement Budget: Meaning &Methods

Advertisement Copy & Layout Designing: Types of Advertisement Copy, Types Of Headlines. Components of Layout.

Production: Advertisement Production Process and Implementation, Typography.

Regulation of Advertisement in India. ASCI (Advertisement Standard code of India), Deceptive advertising.

Books Ref:

1. By: S.A. Chunawala and K.C. Sethia (Himalaya Publishing House)
Foundations of Advertisement-Theory and Practice
2. By: Rajeev Batra, John G.Myers, David A. Aaker (Prentice Hall of India)
Advertisement Management
3. Regulation of advertising in India.

Total assessment = 100
External = 75
Internal = 25

**B.Sc (MM) 204 - Project
Second Semester**

Design a Print ad or create a digital photo album (minimum 30 photographs).

Total assessment = 100
External = 75
Internal = 25

**B.Sc (MM) 205 - Practical
Second Semester**

Practical on all the subjects of 2nd semester.

Total assessment = 100
External = 75
Internal = 25

**B.Sc (MM) 301 - Fundamentals of Web Designing \$ Java Script
Third Semester**

- I. The Fundamentals of Web Design**
The web we know today, working of web, history of web, evolution of world wide web, now days the use of internet, sample web pages, how did they are constructed, function and stand point, hands on good web sites , browsing good web sites, analyzing a sample site from a function standpoint.
- II. The Principal of web Design**
Well designed site from a poorly conceived one, difference between web and print design, focusing on those issues a web designer, discover top tem web design, and critique a sample site from an esthetic perspective.
- III. Getting Started in Web Design**
A technology does a web designer need to be master, look at well-stocked web design, software option for digital imaging, HTML editors and Multimedia, real-world design environment.
- IV. Getting to know Java Script**
Introduction, what is an object, object encapsulate state and behaviour, implementing objects, introduction, about the class, object description, methods, need for class, classes as abstraction, for sets of objects, class of object factory, about java, history of java, bytes code, java virtual machine, characteristics of java, types of java programming, writing program on bluej environment, creating a bluej project, adding a new class to your project, editing a class code, compiling the sources code, saving output from the console window, printing your source, code, closing a project, opening an exiting bluej project, executing a java application's main method, creating (executable)jar file, creating documentation
- V. Script Analysis and Event Handlers**
Java character set, keywords, identifiers, literals, operators, concept of data types, primitive data type, reference types, variables, declaration of variables, initialization of variables,
- V. Working with Complete scripts**
Operation in java, expressions, java statements, significance of classes, object as instance of class, function definition, function prototype and signature, accessing a function, call by reference, function overloading, calling overloaded function.

Book reference: -

- ABC of java script (By Purcell) - BPB - Publisher
- BEGINNING JAVA SCRIPT (By Paul Wilton)
Publisher: Wiley Dreamtech

Total assessment = 100
External = 75
Internal = 25

**B.Sc (MM) 302 - HTML Basics
Third Semester**

- I. The ABCs of HTML**
Begins with an HTML overview, how HTML evolved, how to construct a basic HTML page, explore the ins and outs of formatting, Web colors, images, and links, essential elements of a Web page, to create files and folders using the correct directory structure, view source code to learn from the inspiration of others, create an online menu for a restaurant.
- II. Tools for Tables**
HTML tables are used everywhere on the Web as a layout, content organization tool, tools for tables, construct them,, format them, place elements in them, and fix them when they break, to add sophistication to your tables by modifying their properties, adding background colors and images, and using cols pan and row span tags, explore a common application for tables by building an e-commerce product page from scratch.
- III. Putting it all together**
A taste of some of the challenges of a professional HTML assignment, the dynamic templates often used to construct e-commerce sites, an introduction to how HTML interacts with other coding languages such as ASP and Cold Fusion, the "front end" of a form is created, to create common form elements, wraps up with a guide to common HTML troubleshooting issues, create a 4-page "prototype" for an ecommerce site.

Book Ref:

- **HTML in an Instant (By Ruth Maran)**
Publisher: Wiley Dreamtech
- **HTML Complete (By Sybex)**
Publisher: BPB Publications
- **WORLD WIDE WEB DESIGN WITH HTML(By XAVIER, C)**
Publisher: Tata McGraw-Hill
- **HTML The Complete Reference(By POWELL, T.)**
Publisher: Tata McGraw-Hill

Total assessment = 100
External = 75
Internal = 25

**B.Sc (MM) 303 - 2D Animation
Third Semester**

Intro to flash

About 2d animation, Properties Bar, Size and Publish

Symbols and Layers

Library, Insert layer, Motion Guide

Frame and Animation

Frame rate

Making animation

Bells and Whistles

Scripting

Making a Splash

Making interactive buttons

Interactive Adventure

Compiling objects

Bringing movement to the web

Creating and uploading to web

Beyond the Frames

Understanding frames size, Frame rate, Symbol

Frame of Mind

Optimized flash player, about framing

Books Reference:-

- Ramesh Bangia (Khanna Book Publishing Co. Pvt Ltd).
Learning Flash MX 2004

Total assessment = 100
External = 75
Internal = 25

**B.Sc (MM) 304 - Project
Third Semester**

Design a website using 2D animation in flash & HTML tags.

Total assessment = 100
External = 75
Internal = 25

**B.Sc (MM) 305 - Practical
Third Semester**

Practical on all the subjects of 3rd semester.

**B.Sc (MM) 401 - Flash Website Design
Fourth Semester**

I. The New Paradigm

Flash's as an animation tool and evolvement as multimedia powerhouse .the key advantages of designing Web sites with Flash for motion and interaction. In your first exercise, compare and contrast a Flash site with an HTML site and experiment with a high-level Flash design.

II. Design and Construction

Work in the Flash environment with layers and frames organized. Concept and file structure of the Flash Web site is broken down into its main components. plan site's content and build the framework.

III. Interface, Navigation, and Structure

A site's interface, contents. Design of overall interface with specific attention to navigation systems, button design, and way finding methods. World of high-level, experimental interfaces intensity. Flash-based navigation, from modern art and the principles of abstraction.

IV. The Stage, Transitions, and Behaviors

Script dictates techniques for transitioning your content in and out of main interface, drawing attention to important information and features with quick, tasteful animations.

V. Framing and Usability

HTML designing with Flash methods of embedding Flash site in an HTML page for optimal viewing. Publish your site, usability concerns, Flash usability debate. HTML for a seamless experience, and publish it to the Web.

VI. The Future of Flash Site Design

Flash Web site with a splash preloader page that occupies users' interest as main site loads.

Books Ref: - Flash MX BIBLE (By BPB Publisher)

Total assessment = 100
External = 75
Internal = 25

B.Sc (MM) 402 - 3D Introduction & advanced (Modeling & Animation) Part-1
Fourth Semester

- I. **Getting in Control of 3D Space.**
Menu commands, File Menu, Edit Menu, Tools menu, Group Menu, view Menu.
Main Toolbar, Working with Viewports and files: Controlling the Viewports: Zooming a view, panning a view, rotating a View, Maximizing the active Viewports, max Scene files. Saving files, opening files, merging and replacing objects. Importing and exporting files.
- II **Solid Modeling and the tools of the Trade.**
Create menu, Modifiers Menu, Command Panel: Create, Modify, Hierarchy, motion, display, Utilities.
- III **Color, Texture and surface styles.**
The Material Editor, colors and patterns in materials, multiple materials on single objects, lofting the materials, bump mapping, luminance values, maps, mapping coordinates, materials, multi/sub-object materials, procedural maps.
Material Editor: sample window, sample sphere, material type, material name, get material, assign material to selection, materials and mapping, importing maps & textures from photoshop.
- IV **Tips and tricks for good lighting.**
Standard sunlight system, faking bounced light, daylight system, angle of incidence, attenuation, exposure control, photometric lights, radiosity, standard lights with scan line rendering, photometric lights with radiosity render, skylight with light tracer rendering, sunlight system, day light system, Skylight. Target spot, free spot, target direct, and free direct, omni. Day light with exterior scenes.
- V **Virtual camera movement.**
Camera types, Creating and adjusting cameras, Camera composition, Camera movement, Focal length, Field of view, Cut edit, Fade or dissolve edit, Camera Basics, Target cameras, Free cameras, Adjusting the Field of View, Dolling and zooming, Crabbing and panning, Basic scene editing, Take the time to watch film and television with a more critical eye toward the techniques employed by directors to involve you, the viewer, in the world created by the camera. For still images, you can refer to books and magazines on architecture or product design to develop a feel for how the focal length and the composition of cameras can affect your perception of the scene.
- VI **Dummy properties**
Dummy objects, animating the Rotation of the Dummy Object, Fundamental key frame animation, Repeating animation over time, Hierarchical linking.

Book Ref: - New Riders 3ds max 7 Fundamentals.
3d's Max 5 Fundamentals - Ted Boardman (Techmedia)

Total assessment = 100
External = 75
Internal = 25

B.Sc (MM) 403 -3D Introduction & advanced (Modeling & Animation) Part II
Fourth Semester

- VII Animation, multimedia & virtual reality**
Fundamental key frame animation, repeating animation over time, Hierarchical linking, Key frame, Parameters Out-of-Range, Setting Animation Keys, Animating the Rotation of the Dummy Object, Creating a Continuously Looping Animation.
- VIII Using advanced techniques.**
Assigning Constraints on the Motion Panel, Applying an Ease Curve to Control Animation, Multiplier curves, Link constraint, Inverse kinematics, Solver, Applying Multiplier Curves, and Switching Hierarchical Parents.
- IX Advanced Modeling**
Editable poly, Symmetry modifier, Lathe modifier, Merge, Quad polygon, Settings dialog, NURMS, Editing Using Multiple Viewports, Adding Detail to the Model, Tessellate, Deformation, XRef, Using Modifiers to Add Detail to 3D Objects, Merging Files While Retaining a Connection.
- X Advanced lighting effect**
Placing and adjusting photometric lights, Using exposure control, Adjusting meshing parameters, Controlling color bleed and reflectance, Making materials act as lights, Attenuation, Direct illumination, Indirect illumination, Refine Iterations, Filtering, Reflectance, Placement and Adjustment, Applying Exposure Control, Setting Radiosity Meshing at the Local Level, Controlling Radiosity Using Materials. Applying Advanced Lighting Override Material.
- XI Advanced Animation**
The Fundamentals of Hierarchical Linking, Animation controllers, Track View Dope Sheet, Ease curves, Controllers, Constraints, Graph editors, Ease curves.
- XII Architectural modeling / industrial modeling and animation**
Modeling the Building with exteriors and interiors, the lights should be properly placed in the scene. Modeling the Mech. components, for eg: - hand tools, Auto components & animating then with key framing.
- XIII Preparation for Multimedia Development**
Modeling a Project with a final output after using that software , TV Product add, News channel Logo Animation, Post production effects, Animated series , Montaz, Structural Modeling and animation.

Book Ref: - New Riders - Inside 3ds max 7.
Model rig, Animate with 3d's max 6 - Michele bousquet /
Many world production

Total assessment = 100
External = 75
Internal = 25

**B.Sc (MM) 404 - Project
Fourth Semester**

Furniture modeling or design a motorbike or a car.

Total assessment = 100
External = 75
Internal = 25

**B.Sc (MM) 405 - Practical
Fourth Semester**

Practical on all the subjects of 4th semester.

Total assessment = 100
External = 75
Internal = 25

**B.Sc (MM) 501 - Video introduction & Advanced
Fifth Semester**

- I. **Creating Digital video**
Adding all raw shorted shorts and clips all together, and add few finishing touch, even a small technique make an good effect, using some nice software for video editing, making fade in - outs, mixing the sound to video file , using diff angles of shorts for different emotions , happy or sorrow, trimming the video clips as per the audio or story, giving some seconds of blank space at the end of the video, make in concentration that text should not cover the video, lights, Illuminator, silver/ gold reflector, shotgun microphone, wireless microphone. Always use 5 second pre roll and post roll of blank space.
- II. **Camera types & movements**
Sony PD 150 Cameras, miller Fluid-Head Tripods, DV Stead cam, handy cams, web cams, Beta cams, setting the temp grid on the floor, perspective view of cameras, panning the camera movements, zoom in the camera, dolly camera, and camera using the crane shots, camera shocking for making earthquake effect. Attaching camera on the tripod for the removal of shaking in the clips, giving the proper lightning effect, setting the lights and proper reflection, correct exposer, Framing, Focus, Hand held shorts, Slow berating wile video shooting, shoulder pan, hip pan,
- III. **Lenses types**
Wide angle lens, Fish eye lens, colored lens, blur lens, sharpness lens.
- IV. **Storytelling through visual means**
Making the story board, just using the actions, emotions and happy moment's scene to making the story, can make a comedy video, short film etc to practice on it; can take the reference from some short film, comedy shows.
- V. **The users of digital video**
Different uses of digital videos, making add films, documentaries, even feature film.

Book Ref: Digital Multimedia by (Wiley Dreamtech).

Total assessment = 100
External = 75
Internal = 25

**B.Sc (MM) 502 - Digital Editing
Fifth Semester**

- I. **The fundamentals of editing**
Basics of editing, Pal Video for windows, Pal quick time multimedia QuickTime, Using Project Window, Video Settings, Audio Settings, Compressor, Depth, Frame Size, Frame Rate, Importing still images, Using the monitor window, Viewing safe zones, use of editing and full knowledge about video editing.
- II. **The fundamentals of transition effects**
Creating Transitions, Transition Settings, Image Mask Transition, Applying Transitions, viewing transitions.
- III. **Finishing & the future**
Making movie, finalizing sound and effects, rendering, making video CD.

**Book Ref: - Adobe Premier Pro Class Room in a book
By (Adobe Publishers)**

Total assessment = 100
External = 75
Internal = 25

**B.Sc (MM) 503 - Sound Editing
Fifth Semester**

- I. **Introduction to sound**
Sound, Digital sound files, different sound formats, midi & digital audio, creating digital audio files, sound producing, sound extracting, Advantages and disadvantages of midi & digital, choosing between midi and digital audio.
- II. **Linking files**
Sound for the World Wide Web, adding the sound to your multimedia project, production tips, audio recording, keeping track of your sound, testing and evaluation.
- III. **Record clips & editing**
Sound recording, editing digital recording, trimming, splicing and assembly, volume adjustments, format conversion, resampling or downloading, fade-ins and fade -outs, equalization, time stretching, digital signal processing, reverting sound, making midi audio, audio file formats.
- IV. **Special effects**
Adding effect automation enveloping, adding a volume envelop, adding a panning envelop, previewing effect automation, applying effect automation, adjusting envelope, adding envelop points, flipping a envelop points, setting fade properties, cutting, copying, pasting, envelope points, adding mirror and wave hammer, pan to left , pan to right, dry out , wet out , convert mono to stereo, looping .
- V. **Finalize files**
Burning the audio Cd, mp3, making the remix sound track with using all the special FX from the software. Exporting the files in diff formats, save in wav, mp3 etc,

Book Ref: Sound Forge Power by (Firewall media).

Total assessment = 100
External = 75
Internal = 25

**B.Sc (MM) 504 - Project
Fifth Semester**

Create a film or TV serial casting.

Total assessment = 100
External = 75
Internal = 25

**B.Sc (MM) 505 - Practical
Fifth Semester**

Practical on all the subjects of 5th semester.

Total assessment = 100

External = 75

Internal = 25

**B.Sc (MM) 601- Script Writing and Story Board Designing
Sixth Semester**

I. Introduction to Scriptwriting, screenplay and teleplay

Scripts are elements

Basics of Scriptwriting, Use of scriptwriting, Action, Scene Headings, Character Name, Screenplay Page Breaking, Short Lines/Poetry/Lyrics, Titles or Opening Credits, Screenplay Title Page, Continued and Revisions, Header Text + Do's & Don'ts, Screenplay Related Formats and full knowledge about teleplay script

II. scriptwriting for both short film

Dialogue, Parenthetical, Extension, Shot Transition, Dual-Column Dialogue, Act numbers, Scene Numbers, Cast List, short lines, dialogue paragraphs, Script Styles & Types, Script Length Scene Heading Action Description, Character Name, Dialogue, Parenthetical, Extension, Transition, Shots

III. scriptwriting for feature film

Dialogue split by Action, Emphasis in Action, Abbreviations, Short Lines, Dialogue Paragraphs, Montage & Series of Shots, Supers - Titles, Signs, etc, Phone Calls and Intercuts
Two people talking at the same time

IV. As student develops their own script

Attention will be paid to principles of script analysis, narrative strategy, genre and structure. By the end of the semester, students are expected to have developed a script treatment and flashed out the first act in script form.

V. Introduction to storyboard

Introduction, Multimedia Storyboarding Tools, The Advantages of Storyboarding, Interactive Storyboarding, Using Interactive Storyboarding to Speed-up the Content-writing Phase, Using Interactive Storyboarding to Speed-up Report Document Production

VI. Steps of storyboard writing

Storyboard table, Topic, Timeline, Sketches, color scheme, text attributes, Audio, camera angle, Interaction of buttons and text.

Total assessment = 100
External = 75
Internal = 25

**B.Sc (MM) 602 - Realistic Concept of Animation & Special Effects
Sixth Semester**

- I. Comparison between Animated & Realistically Animated Films**
Watch the different animated flicks and make a comparison report on them.
- II. Timing & State**
Watch the different animated flicks and make a comparison report on them.
- III. Movements in Animation**
Understanding key frames, key frame animation, fine tuning the animation,
Manual animation, path follow animation, frame rate of animation.
- IV. Frames**
Frame rate, resolution, size, video standards used worldwide, and fps.
- V. Special Effect : Environmental Effects and Morphing**
Keying, color correction, depth of field, particles, fire, fog, cg camera,
Cg lights, motion blur masking, text making and formatting, mattes.

Books Reff: - Adobe After Effects 6 classroom in a book (Adobe Publishers).

Total assessment = 100
External = 75
Internal = 25

**B.Sc (MM) 603 - Director
Sixth Semester**

I. Introduction to Director

Getting Started, The Interface, The Stage and Score, More of the Score Window, The Property Inspector, Casts and the Cast Window, Improved MX 2004 Workflow, Planning Your Projects, Movie Properties, Display Templates, Appearance Options, Sprites and Channels, The Tools, Previewing a Movie.

II. Animation & Interactivity

Sprites/Channels/Animation, Sprites, Selecting Sprites, Overlaying Sprites, Aligning Sprites, Transforming Sprites, Sprite Properties, Tweening, Sprite Inks, Transparency Images, Tempo, Transitions.

III. Planning & Implementation

Laying Out Your Project, Markers, Grids and Guides, The Library Palette, Find and Replace, The Message Window, Organizing and Saving Workspaces, Cast Members, Importing Cast Members, Cast Properties, Working with Color, Image and Media Casts, Organizing Casts.

IV. Learning Lingo and Using Variables

Programming Concepts, Lingo and JavaScript, JavaScript in Director, Variables and Scope, Naming Variables, Expressions and Statements, Control Structures, Events.

V. Web Integration and Reusable Behavior

Scripting, Types of Scripts and Behaviors, Working with Behaviors, Tool Window, Flash Properties, Controlling Flash and Buttons, Changes to the Flash Asset Extra, Flash MX 2004 Components, Flash Navigation, Cross-Platform and Versions.

VI. Publishing in Shockwave

Publishing and Preferences, Update Movie Options, Protected Movies, Projector and File Options, Shockwave Movies, Exporting Bitmaps and Movies.

Book Ref:

Director MX Bible By (Wiley).

Total assessment = 100
External = 75
Internal = 25

**B.Sc (MM) 604 - Project
Sixth Semester**

Make a short animated film.

Total assessment = 100
External = 75
Internal = 25

**B.Sc (MM) 605 - Practical
Sixth Semester**

Practical on all the subjects of 6th semester.

Total assessment = 100

External = 75

Internal = 25

M.Sc (MM) 101 - Script writing & Story board designing First Semester

I. Introduction to Scriptwriting, screenplay and teleplay

Scripts are elements

Basics of Scriptwriting, Use of scriptwriting, Action, Scene Headings, Character Name,

Screenplay Page Breaking, Short Lines/Poetry/Lyrics, Titles or Opening Credits, Screenplay Title Page, Continued and Revisions, Header Text + Do's & Don'ts, Screenplay Related Formats and full knowledge about teleplay script

II. scriptwriting for both short film

Dialogue, Parenthetical, Extension, Shot Transition, Dual-Column Dialogue, Act numbers, Scene Numbers, Cast List, short lines, dialogue paragraphs, Script Styles & Types, Script Length Scene Heading Action Description, Character Name, Dialogue, Parenthetical, Extension, Transition, Shots

III. scriptwriting for feature film

Dialogue split by Action, Emphasis in Action, Abbreviations, Short Lines, Dialogue Paragraphs, Montage & Series of Shots, Supers - Titles, Signs, etc, Phone Calls and Intercuts

Two people talking at the same time

IV. As student develops their own script

Attention will be paid to principles of script analysis, narrative strategy, genre and structure. By the end of the semester, students are expected to have developed a script treatment and flashed out the first act in script form.

V. Introduction to storyboard

Introduction, Multimedia Storyboarding Tools, The Advantages of Storyboarding, Interactive Storyboarding, Using Interactive Storyboarding to Speed-up the Content-writing Phase, Using Interactive Storyboarding to Speed-up Report Document Production

VI. Steps of storyboard writing

Storyboard table, Topic, Timeline, Sketches, color scheme, text attributes, Audio, camera angle, Interaction of buttons and text.

Total assessment = 100
External = 75
Internal = 25

**M.Sc (MM) 102 - Desk Top Publishing
First Semester**

I. Computer Basics

Introduction: Introduction to computers, parts of computer system, hardware, software, difference between hardware and software, user, data, processor, memory, input devices, output devices. Application of Computers in various fields: Defense, Industry, Management, Sports, Commerce, Internet. Generations of Computers: 1st, 2nd, 3rd, 4th, 5th generation. Basic computer organization: C.P.U, A.L.U, Input and Output Input Devices: Keyboard, Mouse, OMR, OCR, Microphones, Bar Code Reader, Scanner, Light pen, Cameras etc. Output Devices: Monitors (CRT, FST, LCD), Impact and non impact printers (Dot matrix, Inkjet, LaserJet), Plotters. Storage Devices: Hard Disk, Floppy disk, Pen Drive, CD's, DVD's.

II. Operating System

Introduction: Introduction to Operating System, its need and Operating System services; Operating System classification - single user, multi-user, simple batch processing, Multiprogramming, Multitasking, Parallel system, Distributed system, Real time system. Process Management: Process Concept, Process scheduling, Overview of Inter-Process communication, CPU Scheduling: Basic concepts, Scheduling Criteria, Scheduling Algorithms. Memory Management: Logical Versus Physical addresses space, Swapping Partition, paging and segmentation, concepts of Virtual Memory. File Management: File concept, access methods, Directory Structure, file protection. Allocation methods: Contiguous, linked and index allocation. Deadlocks: Deadlock Characteristics, Prevention, Avoidance, Detection and Recovery, critical section, synchronization hardware, semaphores, combined approach to deadlock handling. Security: Authentication, Program Threats, System Threats, and Encryption.

III. Basic Designing Software

Windows Paint, Basics Concept making and Implement on Computer, Colour knowledge, Generating Ideas, Basics About Various Software's in Industry for still image manipulating, knowledge about pixels, measuring units in diff image manipulating software's.

IV. Vector Graphics (Designing, Color Theory , Vector Designing & Editing, Text Formatting)

Interface: working with menus, toolbars, Dockers

Document Setup: Setting Page Size& Orientation, Document Navigation

Rulers & Guidelines: Status Bar

Text: Formatting, Text Layout, Skewing and rotating, Creating drop shadow, Text to Path, Extruding text

Objects: Grouping & locking objects, Combining & breaking apart, Transforming & Shaping, Cutting objects apart, Trim, weld & Intersection of objects

Lines & Curves: Using freehand & Bezier tool, Line properties, Arrowheads

Eraser & artist media tools

Nodes & Paths

Color & Fills: Solid Color, Color Palettes, Eyedropper & Paint bucket, Fountain, Fills, Patterns, Texture Fills, Interactive Mesh Fill

Special effects: Envelopes, Blends, Perspective, Shadow Objects, Power clip Command, Transparency, Distortion, Contour, Lens Docker

Complex Shapes: Polygon & Stars, Spirals

Printing Menu.

V. Raster Graphics (Designing , Color Theory , Raster Designing & Editing, text Formatting

Getting to Know the Work Area, Starting to work in Adobe Photoshop, Colour modes, Colour, Using the tools, Selecting and using a tool from the toolbox.

Using the tool options bar and other palettes, Customizing the workspace, Using Photoshop Help, Using Adobe Bridge, Viewing and editing files in Adobe Bridge, Embedding information for easy identification, Automating routine tasks.

Resolution and image size, Straightening and cropping an image, Making automatic adjustments, Manually adjusting the tonal range, Replacing colors in an image, Adjusting lightness with the Dodge tool, Adjusting saturation with the Sponge tool.

Retouching and Repairing, Repairing areas with the Clone Stamp tool, Using the Spot Healing Brush tool, Using the Healing Brush and Patch tools, Retouching on a separate layer.

Working with Selections, About selecting and selection tools, Selecting with the Magic Wand tool, Using the Magic Wand with other selection tools, Working with oval and circular selections, Selecting with the lasso tools, Rotating a selection, Selecting with the Magnetic Lasso tool.

Cropping an image and erasing within a selection, Layer Basics, Using the Layers palette, Rearranging layers, Applying a layer style, Flattening and saving files, Masks and Channels, Creating a quick mask, Editing a quick mask, Saving a selection as a mask, Editing a mask, Loading a mask as a selection and applying an adjustment.

Applying effects using a gradient mask, Correcting and Enhancing Digital Photographs, about camera raw, processing camera raw files, correcting digital photographs.

Editing images with a vanishing-point perspective, correcting image distortion, creating a PDF portfolio, Typographic Design.

Advanced Layer Techniques, Advanced Compositing, and Creating Links within an Image, Creating Rollover Web Visuals, and Animating GIF Images for the Web, Producing and Printing Consistent Color, Using the Filters.

VI. Page Making

Document Setup Option

Page Type, Page Style, Page Numbering, Page Measurement

Standard Tool Bar Options

Create New Document with Setting, Open & Store Options, Preferences

Import & Export Objects options, Scanning, Document Setup, Columns Guide Setting, etc.

Formatting Tool Bar Option

Copy Paste Options, Cross Pasting, Multiple Pasting, Insert Objects,

Import Images & Text from other Objects etc.

Text Setting Options

Fonts Setting, Control Palette, Paragraph Setting, Text Warping,

Master Files, Text Rotating options Alignment Setting, Text Colors.

Rulers & Guide Lines, Print Out Bar

Import Objects, Polygon Setting, Draw & Filling Objects, Alignment Setting of the Images etc.

Books Reference:-

- **Adobe PageMaker 7.0 classroom in a Book.**
By (Adobe Publisher).
- **Adobe Photoshop 7.0 classroom in a Book.**
By (Adobe Publisher).
- **Ramesh Bangia- Learning Multimedia**
Khanna book pub.
- **Corel draw 12 - The Official guide**
By - Corel Press.
- **Ramesh Bangia- Computer Basics**
Khanna book pub
- **Computer Fundamentals**
Author (PK Sinha) by (BPB Publisher)

Total assessment = 100

External = 75

Internal = 25

M.Sc (MM) 103 - Advance Digital Art Photography
First Semester

I. The Exploration Stage

The past and future of Photography (Digital Photography), Types of Cameras, Choosing Cameras, Start Taking Photos, Using buttons and menus.

II. Selection and Treatment

Selecting image size and quality, Image management, Photo editing tools Color management.

III. Execution , Installation & Presentation

Choosing Exposure modes, how your exposure system works and affects your image.

Installation of different types of Image Editing Software, Slide show programs and background music, E-mail and websites, displaying images Wallpapers

Digital Photography (Part - 2)

I. Beyond the Basics.

Camera Controls and Creativity

About Digital Photographs

Automatic All the Way

Working of Digital Camera and comparison

Selecting Images Size and Quality (Photoshop)

Definition of shutter speed in detail, delineation of aperture

Using Shutter Speed in detail, definition of aperture

Selecting Exposure Modes

Types of Lenses

II. Photographing people

Photography aesthetics of people

(Male, females, couples, groups & child Photography)

In studio and out door and available light

III. Product Photography

Using Selective Focus

Exposure affects you Images

Controlling Brightness and Contrast

Close up Photography.

IV. Interior and Exteriors

Architectural photography

Industrial shooting (Internal & external)

And use of various wide angle lenses.
Landscape photography, science shorts.

V. Action and Sports Photography

To capture the action, in different ways, to know the game first,
Selecting the equipments according to the game.
(Use of various zoom and tele lenses and tripods)

VI. The Photo Shoot from Start to Finish

Photography on the given theme to selecting subject
To select the equipment the location and finally shooting

**Book Ref: Tom Ang: Digital Photography an Introduction
Publisher's Name: Dorling Kindersley Ltd.**

Total assessment = 100
External = 75
Internal = 25

**M.Sc (MM) 104 - Project
First Semester**

Create a Story Board using your Desk Top Publishing Skills.

Total assessment = 100
External = 75
Internal = 25

**M.Sc (MM) 105 - Practical
First Semester**

Practical on all subjects of 1st semester.

Total assessment =
100
External = 75
Internal = 25

M.Sc (MM) 201 - 2D Animation
Second Semester

Intro to flash

About 2d animation, Properties Bar, Size and Publish

Symbols and Layers

Library, Insert layer, Motion Guide

Frame and Animation

Frame rate

Making animation

Bells and Whistles

Scripting

Making a Splash

Making interactive buttons

Interactive Adventure

Compiling objects

Bringing movement to the web

Creating and uploading to web

Beyond the Frames

Understanding frames size, Frame rate, Symbol

Frame of Mind

Optimized flash player, about framing

Books Ref:-

Flash MX BIBLE (By BPB Publisher)

Total assessment = 100

External = 75

Internal = 25

**M.Sc (MM)202 – 3D Introduction & Advanced (Modeling & Animation)
Second Semester**

I. Getting in Control of 3D Space.

Menu commands, File Menu, Edit Menu, Tools menu, Group Menu, view Main Toolbar, Working with View ports and files: Controlling the View ports: Zooming a view, panning a view, rotating a View, Maximizing the active View ports, max Scene files. Saving files, opening files, merging and replacing objects. Importing and exporting files.

II Solid Modeling and the tools of the Trade.

Create menu, Modifiers Menu, Command Panel: Create, Modify, Hierarchy, motion, display, Utilities.

III Color, Texture and surface styles.

The Material Editor, colors and patterns in materials, multiple materials on single objects, lofting the materials, bump mapping, luminance values, maps, mapping coordinates, materials, multi/sub-object materials, procedural maps. Material Editor: sample window, sample sphere, material type, material name, get material, assign material to selection, materials and mapping, importing maps & textures from Photoshop.

IV Tips and tricks for good lighting.

Standard sunlight system, faking bounced light, daylight system, angle of incidence, attenuation, exposure control, photometric lights, radiosity, standard lights with scan line rendering, photometric lights with radiosity render, skylight with light tracer rendering, sunlight system, day light system, Skylight. Target spot, free spot, target direct, and free direct, omni. Day light with exterior scenes.

V Virtual camera movement.

Camera types, Creating and adjusting cameras, Camera composition, Camera movement, Focal length, Field of view, Cut edit, Fade or dissolve edit, Camera Basics, Target cameras, Free cameras, Adjusting the Field of View, Dolling and zooming, Crabbing and panning, Basic scene editing, Take the time to watch film and television with a more critical eye toward the techniques employed by directors to involve you, the viewer, in the world created by the camera. For still images, you can refer to books and magazines on architecture or product design to develop a feel for how the focal length and the composition of cameras can affect your perception of the scene.

VI Dummy properties

Dummy objects, animating the Rotation of the Dummy Object, Fundamental key frame animation, Repeating animation over time, Hierarchical linking.

- VII Animation, multimedia & virtual reality**
 Fundamental key frame animation, repeating animation over time, Hierarchical linking, Key frame, Parameters Out-of-Range, Setting Animation Keys, Animating the Rotation of the Dummy Object, Creating a Continuously Looping Animation.
- VIII Using advanced techniques.**
 Assigning Constraints on the Motion Panel, Applying an Ease Curve to Control Animation, Multiplier curves, Link constraint, Inverse kinematics, Solver, Applying Multiplier Curves, and Switching Hierarchical Parents.
- IX Advanced Modeling**
 Editable poly, Symmetry modifier, Lathe modifier, Merge, Quad polygon, Settings dialog, NURMS, Editing Using Multiple View ports, Adding Detail to the Model, Tessellate, Deformation, XRef, Using Modifiers to Add Detail to 3D Objects, Merging Files While Retaining a Connection.
- X Advanced lighting effect**
 Placing and adjusting photometric lights, Using exposure control, Adjusting meshing parameters, Controlling color bleed and reflectance, Making materials act as lights, Attenuation, Direct illumination, Indirect illumination, Refine Iterations, Filtering, Reflectance, Placement and Adjustment, Applying Exposure Control, Setting Radiosity Meshing at the Local Level, Controlling Radiosity Using Materials. Applying Advanced Lighting Override Material.
- XI Advanced Animation**
 The Fundamentals of Hierarchical Linking, Animation controllers, Track View Dope Sheet, Ease curves, Controllers, Constraints, Graph editors, Ease curves.
- XII Introduction to Character Animation**
 Modeling in Sub-Ds, Quad polygon, Settings dialog, NURMS, Understanding the Basics, Getting Started with the Tools. Making a character by using low poly.
- XIII Modeling Low Polygon Character**
 A Pig in a Box, Collapsing the box to an Editable Poly object, Selecting the polygons to be deleted, Selecting edges for connection, Connecting edges to create a new loop, Two more rows of edges, Selecting and extruding the feet, Flattening the feet with Make Planar, Two newly created edge loops, Extruding the neck, Reshaping the neck, Shaping the snout, Model with Mesh Smooth applied, Sharpening the snout, Creating the ears, Shaping the ears with new edges, Eyes and nostrils are created by extruding selected polygons, Helix for the tail, Picking the helix for spline extrusion, Altering the tail's shape, Mesh Smoothed pig from the side, Using Auto Grid to create an eye, Mirroring the eye using the pig's coordinate center, Completed pig.
- XIV NURBS Character Animation**
 Making a dog model by using a nurbs tool.
- XV Skin and Flex Modeling**

- Using the modifiers skin and flex.
- XVI Surface Modeling**
Using surface modifier making a model, and Applying the surface modifier on it.
- XVII Lip Synchronization**
Using lip Synchronization tools and implementing on the face and lips.
- XVIII Plug INS**
Exploring the 3d's max with the new plug-in.
- XIX Special Effects**
Elements of a Particle System, Several types of particle emitters, from left to right: Blizzard, Super Spray, PCloud, and PF Source, Particle Effects, Flight Path, Fire, Smoke, Final Touches.
- XX Animation Film**
Use of max in animated films, promos, and the effects that influence the film industry, making a scene using max with a video file practically.

Books Reff: -

- New Riders 3ds max 7 Fundamentals.
- New Riders Inside 3ds max 7.
- 3Ds Max 7 Fundamental (Tech media).
- Modeling a character in 3d's Max - Paul Steed

Total assessment = 100

External = 75

Internal = 25

M.Sc (MM) 203 - AUDIO & VIDEO
Second semester

I. Creating Digital video

Adding all raw shorted shorts and clips all together, and add few finishing touch, even a small technique make an good effect, using some nice software for video editing, making fade in -outs, mixing the sound to video file , using diff angles of shorts for different emotions , happy or sorrow, trimming the video clips as per the audio or story, giving some seconds of blank space at the end of the video, make in concentration that text should not cover the video, lights, Illuminator, silver/ gold reflector, shotgun microphone, wireless microphone. Always use 5 second pre roll and post roll of blank space.

II. Camera types & movements

Sony PD 150 Cameras, miller Fluid-Head Tripods, DV Stead cam, handy cams, web cams, Beta cams, setting the temp grid on the floor, perspective view of cameras, panning the camera movements, zoom in the camera, dolly camera, and camera using the crane shots, camera shocking for making earthquake effect. Attaching camera on the tripod for the removal of shaking in the clips, giving the proper lightning effect, setting the lights and proper reflection, correct exposer, Framing, Focus, Hand held shorts, Slow berating wile video shooting, shoulder pan, hip pan,

III. Lenses types

Wide angle lens, Fish eye lens, colored lens, blur lens, sharpness lens.

IV. Storytelling through visual means

Making the story board, just using the actions, emotions and happy moment's scene to making the story, can make a comedy video, short film etc to practice on it; can take the reference from some short film, comedy shows.

VCD & Books Reff: -

- Digital Multimedia by (Wiley Dreamtech).
- VTC online cd for five steps of video production.
- Ramesh Bangia- Learning Multimedia
By Khanna book pub.

Total assessment = 100
External = 75
Internal = 25

M.Sc (MM) 204 - Project
Second semester

3d Logo Animation, Architectural Walkthrough and Special effect Shot Length Movie.

Reference: (Must Watch Films)

1. Harry potter.
2. Spiderman.
3. Gladiator.

Total assessment = 100
External = 75
Internal = 25

M.Sc (MM) 205 - Practical
Second semester

Practical on all subjects of 2nd semester.

Total assessment = 100

External = 75

Internal = 25

M.Sc (MM) 301 - Digital Editing
Third semester

I. The fundamentals of editing

Basics of editing, Pal Video for windows, Pal quick time multimedia QuickTime, Using Project Window, Video Settings, Audio Settings, Compressor, Depth, Frame Size, Frame Rate, Importing still images, Using the monitor window, Viewing safe zones, use of editing and full knowledge about video editing.

II. The fundamentals of transition effects

Creating Transitions, Transition Settings, Image Mask Transition, Applying Transitions, viewing transitions.

III. Finishing & the future

Making movie, finalizing sound and effects, rendering, making video CD.

Ref. Books:-

Adobe Premier pro (Class room in a book)

By: Adobe publisher

Total assessment = 100

External = 75

Internal = 25

M.Sc (MM) 302 - Sound Editing
Third semester

- I. **Introduction to sound**
Sound, Digital sound files, different sound formats, midi & digital audio, creating digital audio files, sound producing, sound extracting, Advantages and disadvantages of midi & digital, choosing between midi and digital audio.
- II. **Linking files**
Sound for the World Wide Web, adding the sound to your multimedia project, production tips, audio recording, keeping track of your sound, testing and evaluation.
- III. **Record clips & editing**
Sound recording, editing digital recording, trimming, splicing and assembly, volume adjustments, format conversion, resampling or downloading, fade-ins and fade -outs, equalization, time stretching, digital signal processing, reverting sound, making midi audio, audio file formats.
- IV. **Special effects**
Adding effect automation enveloping, adding a volume envelop, adding a panning envelop, previewing effect automation, applying effect automation, adjusting envelope, adding envelop points, flipping a envelop points, setting fade properties, cutting, copying, pasting, envelope points, adding mirror and wave hammer, pan to left , pan to right, dry out , wet out , convert mono to stereo, looping .
- V. **Finalize files**
Burning the audio Cd, mp3, making the remix sound track with using all the special FX from the software. Exporting the files in diff formats, save in wav, mp3 etc,

Books reference: - Sound Forge Power by (Firewall media).

Total assessment = 100
External = 75
Internal = 25

M.Sc (MM) 303 – MAYA (Professional Animation)
Third semester

1. **The MAYA user Interface**
Menus, working area, toolbar, time line, bars
2. **Working in 3D space**
Views, handling working areas, full Use of mouse & keyboard with views
3. **Polygonal Modeling**
About polygon, create and reshape polygon, Combining, separating, and splitting, Editing polygons, The Sculpt Geometry Tool, Coloring polygons, Texturing polygons
4. **Key frames and Motion Paths**
Frames, motion keys, Path, motion paths, Motion path markers
5. **Non-Liner Animation**
Full knowledge about non-liner animation
6. **Forward and Inverse Kinematics**
Creating and animating FK & IK
7. **Surface Deformations**
Deformable geometry
9. **Cameras and Lights**
Applying Ambient light, directional light, point light, spot light area light, volume light, and camera and changing attributes.
10. **Shedders and Texture**
Anisotropic, blinn, Lambert, phong, phong e, layered, ramp, shading, surface
11. **Rendering Techniques**
Render the scene using retracing, Render the scene using Global Illumination, Render a single frame, mental ray.
12. **Particles and Dynamics**
Emitter, air, drag, gravity, Newton, radial, turbulence, uniform, vortex, volume axis, rigid body, source of field.
13. **Modeling**
Edit curves, surface modeling, nurbs modeling, and subdiv surfaces.
14. **Animation**
Animation, deform, Skelton, skin, constrain, characters.
15. **Brush based Techniques**
Working with brush, understanding brush, use and applying paint effects by using brushes, animating brush stocks, changing attributes.
16. **Visual Effects Rendering**
Fire effect, smoke effect, fireworks effect, lightning effects, shatter effects, shards to fields, curve flow, surface flow, surface flow procedure, Render the scene using caustics, Render parts of a scene separately, render multiple scenes, Batch renders from within Maya (UI)
17. **Fluid Effects**
3D container, 2d container, Pint fluid tool, emitters, collide, resolution, cashed
18. **MAYA Cloth**

Panel, garment, seam, collision, cloth object, constraint, paint cloth properties, cache, simulation

19. MAYA Fur

Creating fur, applying fur, animating fur, changing attributes.

Books reference: -

Learning Maya 7 (foundation), (Unlimited)& (character rigging and animation) - Alias.
Maya 6 Complete Reference - Tata McGraw hill.

Total assessment = 100

External = 75

Internal = 25

M.Sc (MM) 304 - Project

Third semester

Any 3D Model and 3D animated short length movie.

Total assessment = 100

External = 75

Internal = 25

M.Sc (MM) 305 - Practical

Third semester

Practical on all subjects of 3rd semester.

Reference: (Must watch movies)

1. Matrix
2. Monster Inc.
3. Casper

Total assessment = 100
External = 75
Internal = 25

M.Sc (MM) 401 - Cartoon Animation
Fourth semester

- I. Character Developer.
- II. Visualization of Different Views.
- III. How to draw expressions.
- IV. How to achieve Lip synchronization.

Total assessment = 100
External = 75
Internal = 25

M.Sc (MM) 402 - Digital Animation & Special Effects
Fourth semester

- I. **Introduction to special Effects**
Knowledge about effects, making effects, applying effects
- II. **Types of special effects**
Particle system, masking, keying, color range, text effects, CG effects
- III. **Synchronization with editing**
Tips and tricks for editing, advance knowledge about editing, compositing,
Final rendering (output)

Book Ref:

Combustion 4 (By: - Discreet)

Total assessment = 100
External = 75
Internal = 25

M.Sc (MM) 403 - Interactive Media.
Fourth semester

Introducing the Director workspace

The Stage, The Score, The Cast window, The Property inspector, **Setting Stage and movie properties**, Increasing or decreasing your view of the Stage, About Sprites, About Frames, Managing the workspace in Director MX, Window types, Managing panels and panel groups, Cast Members and Cast Windows, Animation, About tweening in Director, Tweening the path of a sprite, Accelerating and decelerating sprites, Tweening other sprite properties, Changing tweening settings, Editing sprite frames, Frame-by-frame animation, Using film loops, Setting film loop properties, Step-recording animation, **About importing bitmaps**, Using animated GIFs, Using the Paint window, Changing selected areas of a bitmap, Flipping, rotating, and applying effects to bitmaps, Using Auto Distort, Changing size, color depth, and color palette for bitmaps, Controlling bitmap images with Lingo, Using gradients, Using patterns, Creating a custom tile, **Using Paint window inks**, Using bitmap filters, Using onion skinning, Drawing vector shapes, Controlling color, Embedding fonts in movies, Using Flash Movies, Sound and Synchronization, Using Video, Navigation and User Interaction, **Writing Scripts with Lingo**, Scripting basics, Performing common tasks, 3D Basics, The 3D Cast Member, 3D Text, and 3D Behaviors, Working with Models and Model Resources, Controlling the 3D World, Movies in a Window, Making Director Movies Accessible, How Director unloads items from memory, Loading and unloading individual cast members, Managing and Testing Director Projects, Packaging Movies for Distribution, Using Shockwave Player, About streaming movies, About network operations, Setting movie playback options, **Setting Shockwave playback options**, About creating multi-user applications, About streaming with the Score and behaviors, Looping behaviors, Jumping behaviors, Checking whether media elements are loaded with Lingo, Checking whether a cast member or sprite is loaded.

Books Ref:-

Using Director MX
Publisher: Macromedia

Total assessment = 100
External = 75
Internal = 25

M.Sc (MM) 404 - Project
Fourth semester

- I. Complete Animation film
- II. Product Advertisement
- III. Complete Multimedia CD

Reference: (Must watch movies)

1. Shrek
2. The incredible
3. Ice age

Total assessment = 100
External = 75
Internal = 25

M.Sc (MM) 405 - Practical
Fourth semester

Practical on all subjects of 4th semester

Reference: (Must watch movies)

4. Shrek
5. The incredible
6. Ice age

