

## **Bachelor of Design Multimedia (BMM)**

### **PROGRAM OUTCOMES (PO)**

**PO1:** Produce a portfolio of artwork that is research and development oriented, and that integrates the principles, techniques and skills acquired in the coursework.

**PO2:** Develop introductory level competencies in the areas of character and location design, life-drawing and animation.

**PO3:** Gain real world project experience throughout their learning cycle, that helps them to better understand the roles and processes in wide range of computer generated design and animation careers.

**PO4:** Demonstrate the knowledge, dedication and work ethic required to be a successful member of a creative team.

**PO5:** Enhance career prospects based on skill areas and make them employable in different segments of Media and Entertainment industry.

### **PROGRAM SPECIFIC OUTCOMES (PSO)**

**PSO1:** Entrepreneurship development. Student can gain the skills of setting up their own business.

**PSO2:** Develops proficient skills in the field of computer graphics for still and animated contents with the use of latest creative technologies in Media and Entertainment industry.

**Semester: I**

**Course Name:** 1. Drawing & Colour–I (Practical)

**Class:** Bachelor of Design Multimedia (BMM)

**Semester: I**

Objectives of the Course:

- An understanding of basic principles of drawing, colors medium and techniques, concepts, and the ability to apply them to a specific aesthetic intent. This includes functional knowledge of the traditions, conventions, and evolutions of the discipline as related to issues of representation, illusion, and meaning. The development of solutions to aesthetic and design problems should continue throughout the degree program.
- The ability to synthesize the use of drawing, perspective, two-dimensional design, and color, beginning with basic studies and continuing throughout the degree program toward the development of advanced capabilities.
- Knowledge and skills in the use of basic tools, techniques, and processes sufficient to work from concept to finished product, including knowledge of paints, texture and surfaces.
- The ability to explore the expressive possibilities of various media, and the diverse conceptual modes available to the painter. This may deal with direct painting from nature or with alternative approaches to the making of traditional or innovative twoand, at times, three-dimensional images.
- Progress toward developing a consistent, personal direction and style.
- The ability to work independently.

**Program Learning Outcomes:**

Practical Assignments:

- Assignment on study of metallic/glass/wooden objects.
- Assignment on water colour/poster colour/oil colour/ mixed media
- Assignment on primary,secondary and tertiary colour.
- Assignment on 2D and 3D view points.
- Assignment on HUE, VALUE, TINT&SHADE.
- Assignment on landscape and collage.

**Course Name :** 2. Introduction to 3D–I (Practical)

**Class :** Bachelor of Design Multimedia (BMM)

**Semester: I**

**Objectives of the Course:**

This course aims at learning of 3D tool (Maya) in practical way. In this work on Basic tools of software such as interface of software, viewports of Maya and how to control pivot points and use basic animation tools such as move, rotate, scale the object. In this tells about types of modeling used to create objects. Along with this 3D software also work on photoshop 3D components.

**Program Learning Outcomes:**

Practical Assignments:

- Create a Dice
- Create an object such as chair, table etc.
- Create an interior such as computer lab or room.
- Create an exterior scene.
- Written file assignment:
- What is Autodesk Maya? Write down its extension.
- What is Interface of Maya? Explain it with diagram.
- 3D Modeling. Explain NURBS modeling, Polygon Modeling and Subdivision modeling
- 3D Computer graphics
- Explain Viewports of Maya
- What is Gizmo
- Polygon Components
- Normals
- Shortcut keys of selecting objects.
- Shortcut keys of : Duplicate Special, Group, Parent and Unparent, Set
- Key, Show or hide menu, Snap to grid, hotbox display
- What is Mesh, Channel box, Layer editor Hotbox and Autosave
- How to create Maya Project?
- What is Planar, Extrude, Bevel, Boolean.
- For what these keys used: 1,2,3,4,5,6,7, cntrl H, Shift H, Alt H

**Course Name : 3. Workshop–I (Practical)**

**Class : Bachelor of Design Multimedia (BMM)**

**Semester: I**

**Objectives of the Course:** The aim of this course includes:

- The students to experience different art activities, build confidence and awareness of their individual strengths, and learn about widely influential artists.
- To innovate the students to record from first-hand experience and from imagination, and to select their own ideas to use in their work.
- To develop creativity and imagination through a range of complex activities.
- Improving the ability to control materials, tools and techniques.
- To increase their critical awareness of the roles and purposes of art and design in different times and cultures.
- To develop increasing confidence in the use of visual and tactile elements and materials.

**Program Learning Outcomes:**

5 Practical projects :

- Project on clay modeling.
- Project on plaster of paris.
- Project on thermocoal.
- Project on waste material
- Project on paper mache.

**Course Name : 4. Elements of Art and Multimedia (THEORY)**

**Class : Bachelor of Design Multimedia (BMM) Semester: I**

**Objectives of the Course:**

The aim of this course is to give fundamental knowledge about the various fields related to multimedia technology. This course provides the information about several other fields such as LCD, PDP, color mixing, overview of tools like adobe premiere etc. Understanding, need and type of compression will also be discussed in this subject.

Understanding multimedia technology is very important for students, because this will provide them knowledge about all the aspects of multimedia.

**Learning Outcomes:**

**Knowledge and Understanding:**

Students will

- Understand the basic concepts of multimedia technology. Which will help them to get started easily in multimedia,
- Get knowledge about various terms like, images, text, fonts, file formats. Understanding these things is very necessary.
- Know about the various compression techniques, types of compressions etc.
- Will be able to understand design process, image processing, adobe premiere. Design process is very important process for those who want to learn properly about designing.

**Semester: II**

**Course Name : 1. Drawing & Colour–II Practical**

**Class : Bachelor of Design Multimedia (BMM) Semester: II**

**Objectives of the Course:**

- An understanding of basic principles of drawing and color, concepts, media and formats, and the ability to apply them to a specific aesthetic intent. This includes functional knowledge of the traditions, conventions, and evolutions of the discipline as related to issues of representation, illusion, and meaning. The development of solutions to aesthetic and design problems should continue throughout the degree program.
- The ability to synthesize the use of drawing, two-dimensional design, and color, beginning with basic studies and continuing throughout the degree program toward the development of advanced capabilities.
- Knowledge and skills in the use of basic tools, techniques, and processes sufficient to work from concept to finished product, including knowledge of paints and surfaces.
- The ability to explore the expressive possibilities of various media, and the diverse conceptual modes available to the painter. This may deal with direct painting from nature

or with alternative approaches to the making of traditional or innovative two- and, at times, three-dimensional images.

- Progress toward developing a consistent, personal direction and style.
- The ability to work independently.

### **Program Learning Outcomes:**

Practical Assignments:

- Assignment on Human skeleton.
- Assignment on Human figure (male/female).
- Assignment on different parts and postures of body with the help of brush, pen, ink.
- Create animation based on running/walking with following the elements of animation.
- Assignment on storyboard.

**Course Name :** 2. Introduction to 3D–II Practical

**Class :** Bachelor of Design Multimedia (BMM)

**Semester: II**

### **Objectives of the Course:**

This course aims at learning of 3D tool (Maya) in practical way. In this tool work on Nodes, Shaders, Animation with complete knowledge of Key frames and Graph editor , UV's and Textures and Lighting. In the course also work on Photoshop with 3D content.

### **Program Learning Outcomes:**

Practical Assignments:

- Assignment based on Parent and Child Command using hierarchy and nodes.
- Create an object and apply texture/shader on it using uv's.
- Create an animation of any object (Ball, Walk, Run) using keyframes and graph editor.
- Create interior scene of Room and work on lighting in it based on morning, afternoon or evening time. Camera should also apply.

Written file assignment:

- Knowledge about 2D and 3D modeling.
- Understanding of Hierarchy
- Nodes
- Purpose to use Parent and Child command
- Understanding Shading
- Shaders and its type.
- Animation and its types.
- UV's and how to used it.
- Camera
- Textures
- Lights: Spot light, Area light, Directional light.

**Course Name :** 3. Theory of Media(Print Media & Scriptwriting)

**Class : Bachelor of Design Multimedia (BMM)**

**Semester: II**

**Objectives of the Course:**

This course aims at acquainting students with the deep study of Print Media. It also aims at acquainting students with the different innovations of printing. Along with various tools of print media its explains the various advertising.

**Program Learning Outcomes:**

**(Knowledge and Understanding, Intellectual Skills, practical Skills, Transferable skills).**

**Learning Outcomes:**

**A. Knowledge and Understanding):**

Students will

- Know how to define the Print Media, they understand and explain the basic concepts associated with the types of printing. Students will understand and be able to describe the differences between the traditional printing forms and modern printing forms. Students will be able to examine the different types of Script Writing.

**B. Intellectual ( Cognitive/ Analytical) Skills:**

Students will be able to

- Identify the difference between traditional printing techniques.
- Analyze the various forms of modern printing.
- analyze the units of Script Writing(Terminology, Concepts, Themes & Loglines)
- Determine the flexibility of advertisement.

**D. Transferable Skills :**

Students will be able to

- use of printing techniques more effectively,
- learn to think more creatively as well as comparatively, and
- Display the various types of advertisement.
- Script Writing Techniques.

**Course Name : 4. Workshop–II(Photography & Adobe Light room) Practical**

**Class : Bachelor of Design Multimedia (BMM)**

**Semester: II**

**Objectives of the Course:**

The aim of this course is to give students knowledge about field of photography. In this course, they will learn from very basic to advance camera techniques, which will help them to improve their photography skills and to be a good photographer in future. Things like camera types, types of lenses, working with lights, indoor-outdoor photography, fashion photography and many other topics will be covered.

Apart from photography techniques, students will learn how to edit their photographs in Adobe Lightroom. This software will help them to make their photographs more attractive and standout.

**Program Learning Outcomes:**

Students will

- Understand different kind of cameras, lenses and lights. Because there are many different types of camera available in market.

- Learn different camera functions like ISO, shutter speed, aperture. These three things are called Exposure triangle and is very necessary to understand if a person wants to be a good photographer.
- Learning different camera angles and lights, will help them a lot to improve their photography.
- Different types of photography like Fashion, Indoor-outdoor, art, table top photography techniques will be taught to the students. One will choose their favorite field in photography and work accordingly to improve in that field.

Adobe lightroom is there to help them edit their clicked photographs. This software is loaded with many editing techniques.

**Course Name :** 5. Adobe Illustrator Practical

**Class :** Bachelor of Design Multimedia (BMM)

**Semester:** II

**Objectives of the Course:**

The objective of this course is to familiarize students with Adobe Illustrator. We will cover, in depth, all the basics which will allow you to start making professional looking graphics immediately.

**Program Learning Outcomes:**

Students will

- Design Logos
- Layout Designing
- Design Newspaper and Magazines Ads
- Creation of CD covers and packaging
- Product stickers and labels Through knowledge of Color separation techniques
- Prepare files for printing

**Semester: III**

**Course Name :** 1. Film Appreciation–I Theory

**Class :** Bachelor of Design Multimedia (BMM)

**Semester:** III

**Objective of the course:** The course helped our students learn the Grammar and Styles of cinema from around the world. It began with the history of cinema and its evolution associated with it.

**Course Outcomes:**

1. Recognize types of films, their impact on society, and their roles in our lives
2. Recall the concepts behind storytelling, Mise en Scène, and cinematography
3. Identify ways sound contributes to movies
4. List the roles of directors and critics in the film industry
5. Identify types of movie genres and various editing styles

6. Brief introduction to Performing Art

7. History of Indian Cinema

**Course Name :** 2. Drawing in 3D Practical.

**Class :** Bachelor of Design Multimedia (BMM)

**Semester:** III

**Objectives of the Course:**

This course aims at learning of 3D tool (Maya) in practical way. In this tool work on Basic of character modeling and types of modeling, In this work on Human character modeling and create body parts of human. Also work on rigging which means to put bones in model then animate it to follow rules of Animation. To take final output, to work on Rendering.

**Program Learning Outcomes:**

**Practical Assignments:**

- Assignment based on Character model in blocks.
- Create Ear and Eyes
- Model the arms, leg, foot, hand etc. in detail
- Create full body with details
- Rigged the body using kinematics, deformers
- Render the object in 3D
- Create animation using principles such as walk cycle, Run cycle, Jump and Push.

**Course Name:** 3. Bachelor of Design Multimedia (BMM)

**Class:** Adobe Photoshop

**Semester:** III

**Objectives of the Course:**

This course of Adobe Photoshop (theory) is based on giving the vast knowledge about the Software Photoshop. Adobe Photoshop is a raster graphics editor developed and published by Adobe. It is most common software used in Photo editing and Designing Industry. Photoshop can edit and compose raster images in multiple layers and supports masks, alpha compositing, and several color models including RGB, CMYK, CIELAB, spot color, and duotone. Photoshop uses its own PSD and PSB file formats to support these features. Photoshop's naming scheme was initially based on version numbers. However, in October 2002, each new version of Photoshop was designated with "CS" plus a number.

**Program Learning Outcomes:**

Students will

- Learn new get to learn new software Photoshop.



- Understand the difference types of graphics.
- Learn about various tools of Photoshop like, Lasso, stamp, brush etc.
- Get knowledge about different types of editing techniques in Photoshop.

**Course Name :** 4. HTML 5 Theory

**Class :** Bachelor of Design Multimedia (BMM)

**Semester:** III

**Objectives of the Course:**

HTML is the standard markup language for creating Web pages. The objective of this course is to help the students to learn HTML 5. This is very helpful in creating Web Pages. HTML stands for Hyper Text Markup Language. It describes the structure of Web pages using markup. Browsers do not display the HTML tags, but use them to render the content of the page.

**Program Learning Outcomes:**

Students will

- Get to learn basic use of HTML.
- Create websites/pages of their own
- By using HTML 5, they will get familiar with Coding.
- Understand the problem which comes during creating Web pages.

**Course Name :** 5 Corel Draw Practical

**Class :** Bachelor of Design Multimedia (BMM)

**Semester:** III

**Objectives of the Course:**

This course aims at learning of Corel draw tool in which works on designs. Corel draw is a designing based software in which we design logos, pamphlets, brochures, visiting cards etc.

**Program Learning Outcomes:**

Practical Assignments:

1. Create two Business cards
2. Create two Pamphlets
3. Create two Banners
4. Create two News papers
5. Create two front pages of book

**Course Name:** Project–V

**Class:** B. Design (Multimedia)

**Semester:** III

**Objectives of the Course:**

In this course, students will get knowledge about two different software's, Maya and Mudbox. These two softwares have their own different use. Autodesk Maya, commonly shortened to Maya, is a 3D computer graphics application that runs on Windows, macOS and Linux, originally developed by Alias Systems Corporation and currently owned and developed by

Autodesk, Inc. It is used to create interactive 3D applications, including video games, animated film, TV series, or visual effects.

Mudbox is a proprietary computer-based 3D sculpting and painting tool. Currently developed by Autodesk, Mudbox was created by Skymatter. It was first used to produce the 2005 Peter Jackson remake of King Kong. Mudbox's primary application is high-resolution digital sculpting, texture painting, and displacement and normal map creation, although it is also used as a design tool.

### **Program Learning Outcomes:**

Students will

- Learn two different softwares.
- In Maya, they will get knowledge about creating different 3D models and objects.
- In Mudbox, they will get to know about sculpting.
- Understand how 3D objects are made and sculpted, which are commonly used in VFX, games and many other fields.
- Having knowledge of 3D field helps them be better in their field.

**Semester: IV**

**Course Name : 1. Flash (Theory )**

**Class : Bachelor of Design Multimedia (BMM)**

**Semester: IV**

### **Objectives of the Course:**

This course aims at learning of Flash is that students come to know how graphics can create; 2D animation can do and also do work of website buttons and pages. In the software student can learn basic knowledge of animation with work on timeline. In flash software student can learn to design cartoon characters, buttons etc. along with work on library.

### **Program Learning Outcomes:**

#### **Knowledge & Understanding**

- Know about work on Graphics and Motion Graphics
- Know about to work on animation with timeline
- Know about to design character in 2D with animation
- Know about how to work on Action Script and apply script on buttons
- Work on handling the Camera in 3D
- Learn about to create and work on library
- Work on audio in which import the audio and work on it.

**Course Name : 1. Flash (Practical )**

**Class : Bachelor of Design Multimedia (BMM)**

**Semester: IV**

### **Objectives of the Course:**

This course aims at learning of Flash is that students come to know how graphics can create; 2D animation can do and also do work of website buttons and pages. In the software student can learn basic knowledge of animation with work on timeline. In flash software student can learn to design cartoon characters, buttons etc. along with work on library.

**Program Learning Outcomes:**

Practical Written file Assignments:

1. Create basic shapes and used tweening on it.
2. Create a Cartoon Character
3. Create a animation using motion path such as butterfly animation
4. Create different -2 expression of your character face that you already create in software
5. Create lipsing using audio
6. Create animation using timeline and follows principles of animation
7. Create Buttons and apply action script such as start, pause and stop etc.

**Course Name : 2. PHP Practical**

**Class : Bachelor of Design Multimedia (BMM)**

**Semester: IV**

**Objectives of the Course:**

- Understand how server-side programming works on the web.
- PHP Basic syntax for variable types and calculations.
- Creating conditional structures
- Storing data in arrays
- Using PHP built-in functions and creating custom functions
- Understanding POST and GET in form submission.
- How to receive and process form submission data.
- Reading and writing cookies.
- Security tips (i.e. SQL Injection)
- Create a database in phpMyAdmin.
- Read and process data in a MySQL database.

**Program Learning Outcomes:**

- Create PHP projects and earn money by selling them

**Course Name : 3. Dream Weaver Practical.**

**Class : Bachelor of Design Multimedia (BMM)**

**Semester: IV**

**Objective of the course:**The course helped our students to Understand the basic concepts of editing video, use the Adobe Premiere interface with confidence, Produce professional quality videos for a range of outputs, use compositing video layers

**Course Outcomes:**

- Edit a whole video clip from starting to finish, utilizing expert and also effective strategies.
- Modify your video clips, as well as make them a lot more vibrant with cutaway video footage and also images.

- Design clean as well as expert titles for your video clips.
- Color correct your video clip to repair problems with white balance and also direct exposure.
- Learn how to modify videos on the phones
- Understand How to share your video clips to Social media

**Course Name :** 4. Film Appreciation–II Theory

**Class :** Bachelor of Design Multimedia (BMM)

**Semester:** IV

**Objectives of the Course:**

This course aims at learning of Film Appreciation is that students come to know how motion picture industry of India works. The various stages through the films/pictures go through to get final touch or the way of film making in industry. Secondly how the movies distribute and release and come in theatres to watch.

**Program Learning Outcomes:**

Practical Written file Assignments:

- Create own short story.
- Write down the script of own story
- Write a note on Art & Techniques of motion pictures.
- Explain the stages of film production.
- What do you mean by: Aspect ratio, Costumes, Sound , Film stock, Censorship
- Explain Camera angles and Camera shots.
- What is composition? What is the role of composition in film?
- Define Editing and Compositing. Is there any difference between them? Discuss.
- Explain: Special effects, Sound Effects
- Define terms:Distributor, Exhibitor, Producer, Film Promotion, Budget of film, Director.

**Course Name: 5. Project**

**Class:**BDM

**Semester:** IV

**Objectives of the Course:**

The objective of the production management is 'to produce goods services of right quality and quantity at the right time and right manufacturing cost'. The quality of product is established based upon the customer's needs.This course aims at learning of 3D tools (Maya, Flash.)

Project management objectives are the successful development of theproject's procedures of initiation, planning, execution, regulation and closure as well as the guidance of the project team's operations towards achieving all the agreed upon goals within the set scope, time, quality and budget standards. Students come to know how to work on it and for what purpose it is used.Thus operation management is concerned with managing inputs (resources) through transformation processes to deliver outputs (service or products).

**Program Learning Outcomes:**

- They can learn how to work on project.
- They can solve some problems about whole projects.
- Learn and work on 3d and 2d animation software.

## **Semester: V**

**Course Name :** 1. Adobe Premiere Pro.

**Class :** Bachelor of Design Multimedia (BMM)

**Semester: V**

**Objective of the course:**The course helped our students to Understand the basic concepts of editing video,use the Adobe Premiere interface with confidence,Produce professional quality videos for a range of outputs,use compositing video layers

### **Course Outcomes:**

- Edit a whole video clip from starting to finish, utilizing expert and also effective strategies.
- Modify your video clips, as well as make them a lot more vibrant with cutaway video footage and also images.
- Design clean as well as expert titles for your video clips.
- Color correct your video clip to repair problems with white balance and also direct exposure.
- Learn how to modify videos on the phones
- Understand How to share your video clips to Social media

**Course Name :** 2. Adobe After Effects Theory

**Class :** Bachelor of Design Multimedia (BMM)

**Semester: V**

### **Objectives of the Course:**

This course aims at learning of Adobe After Effects is that students come to know how motion graphics and effects works in picture industry. The various stages through the films/pictures go through to get final touch or the way of film making in industry. Secondly how the final touch or compositions of movies or advertisements etc, create in after effects using effects, Chroma and Motion Graphics.

### **Program Learning Outcomes:**

Practical Written file Assignments:

- Create a motion graphics on any topic ( to create resume, portfolio etc.)using masking and stroke.
- Create an advertisement on any product.
- Work on Chroma and create a scene.
- Write a name in 3d and animate it different camera angles.

- Create a logo with particles.

**Course Name :** 3. Workshop–III Practical.

**Class :** Bachelor of Design Multimedia (BMM)

**Semester:** V

Objectives of the Course:

Workshop III is the course, which covers lots of different and useful topics related to Film/Movie production. This course covers all topics of production process. These topics are, Pre-production, Production & Post-Production. All these 3 topics are linked to each other. Without any 1 from these, 2 other are useless. Each of these topics covers many different kinds of topics like, Script writing, camera angles, editing, recording, frame rate and lots of other topics. If anyone is interested in production, that person should study this course very seriously to get deep knowledge about the production process.

**Program Learning Outcomes:**

**Students will**

- Get knowledge about production process
- Learn 3 different kinds of production processes.
- Understand that these 3 topics are linked to each other, without 1 of them, 2 others are of no use.
- Learn about different kinds of topics like frame rate, storyboard, camera angles, exposure and many other things.

**Course Name:** 4 Sound Editing and Recording Practical

**Class:** Bachelor of Design Multimedia (BMM)

**Semester:** V

**Objectives of the Course:**

This course aims at learning about Adobe Audition (formerly Cool Edit Pro) is a digital audio workstation from Adobe Systems featuring both a multi-track, non-destructive mix/edit environment and a destructive-approach waveform editing view. Adobe Audition Creative Cloud is incredibly powerful. Not only does it have all of the functionality of an audio editing program, but it also has the multi-track recording and editing capabilities that are associated with digital audio workstations (DAWs). The full version was useful and flexible, particularly for its time. Syntrillium later released Cool Edit Pro, which added the capability to work with multiple tracks, as well as other features. Audio processing, however, was done in a destructive manner (at the time, most computers were not powerful enough in terms of processor performance and memory capacity to perform non-destructive operations in real time). Cool Edit Pro v2 added support for real-time nondestructive processing, and v2.1 added support for surround sound mixing and unlimited simultaneous tracks (up to the limit imposed by the actual computer hardware). Cool Edit also included plugins such as noise reduction and FFT equalization.

### **Course Outcomes:**

The course provides an introduction about:

- Introduction to audio, Opening a file, closing a file, Saving a file Extracting audio from CDs.
- Working with video, Attaching & detaching a video, Show & hide video strip, Display frame number, Recording, Monitor input levels, choose an input device & adjust levels.
- Basic editing , editing tools, Play the content of the clip board, Paste data from the clipboard Trim/ crop all data in a window except the current selection, Repeat an edit operation.
- Working with All Effects, Sampling Sound, MIDI synchronization.
- Introduction to Steinberg Cu–Base, Loop, Effects ,Equaliser ,Mixer , MIDI Recording.

**Course Name :** 5 Technical Theory of Media – II (Electronic Media) Theory

**Class :** Bachelor of Design Multimedia (BMM) **Semester:** V

### **Objectives of the Course:**

To introduce the students to the basics of electronic media. To enable students to write electronic media scripts and prepare news reports. Students has to understand the importance of new media technology. To introduce the students to the basics of Computers and its application related to electronic media.

### **Program Learning Outcomes:**

Students will

- The student should be able to use the skills in the creative industry – be it television channels, information technology, public relations, or corporate communication.
- The students should be able to produce independently content for electronic media.

- The students should be able to simplify technical content in simple language and multimedia as part of technical communication. The students should be well-equipped to be media teachers and researchers.
- The students should be equipped with lots of soft skills required of many of the managerial. and high-profile jobs. The students can plan, develop and implement communication for development projects at local, regional and global levels.

### **Semester: VI**

**Course Name :** 1 3D Studio Max Practical

**Class :** Bachelor of Design Multimedia (BMM)

**Semester: VI**

#### **Objectives of the Course:**

This course gives the knowledge about 3D software called, Autodesk 3D Max. As its name tells, the work of this software is creating 3D models, objects, structures etc. Students can start learning from very fundamental techniques like learning about basic 3D to many other things like creating realistic looking 3D models in this software. These days 3D work is in demand, so students are taking showing a lot of interest in 3D software. Learning 3D modeling will help them to get placement in some famous studios like Disney, Pixar studios.

They will learn to create many different types of 3D objects for eg. 3d houses, building, cars and will get to learn about the interface of this very interesting software.

#### **Program Learning Outcomes:**

Students will

- Get knowledge about the interface of 3D Max.
- Then start to learn modeling with the help of modifiers
- Learn cloning objects and objects array's, grouping and linking objects.
- Learn working with Nurbs, which will help them to create more smooth and attractive models.
- Get to know many different mapping techniques and many kind of materials.
- They will also get in depth knowledge about animation in 3D Max, animating an object will improve their work a lot more and help them to get in 3D field.



**Course Name : 2 Introduction to 3D Theory**

**Class : Bachelor of Design Multimedia (BMM)**

**Semester: VI**

**Objectives of the Course:**

This course aims at learning of 3D theoretically. In this learn on basic 12 Principles of Animation, Introduction to 3D and what is it? In this focus on 3D tools those are used in softwares such as interface of software, viewports, techniques of 3D and how to control pivot points and use basic animation tools such as move, rotate, scale the object. In this tells about types of modeling used to create objects. Also learn about lighting, animation and camera working. In this course work also concentrate on Rigging, in this learn about solvents, kinematics and skinning. This course aims on rendering from where we take final output.

**Program Learning Outcomes:**

**Knowledge & Understanding**

- Know about work on 2D and 3D and its difference
- Know about to Softwares of 3D
- Know about to how to work in 3D
- Know about types of modeling to use in creating models
- Learn about 12 basic principles of animation
- Learn about Viewport that is the workspace, Camera, Lighting and its type, modifiers and compound objects.
- Know about Mapping and texturing
- Learn about rigging and animation
- Final one is rendering

**Course Name : 3 Drawing & Illustration Practical**

**Class : Bachelor of Design Multimedia (BMM)**

**Semester: VI**

**Objectives of the Course:**

- An understanding of basic principles of drawing and color, concepts, media and formats, and the ability to apply them to a specific aesthetic intent. This includes functional knowledge of the traditions, conventions, and evolutions of the discipline as related to issues of representation, illusion, and meaning. T.
- The ability to synthesize the use of drawing, two-dimensional design, and color, beginning with basic studies and continuing throughout the degree program toward the development of advanced capabilities.
- Knowledge and skills in the use of basic tools, techniques, and processes sufficient to work from concept to finished product, including knowledge of paints and surfaces.
- An understanding of different styles of illustration like flat, realistic & stylish etc.
- The ability to work independently.
- Use drawing and illustration skill to visually communicate abstract concepts.
- Make informed choices in drawing tools and materials apply a visual vocabulary of marks to achieve expressive outcomes.

- Describe his/her philosophy of drawing Critique works based on technical, aesthetic, and philosophical considerations.

**Program Learning Outcomes:**

Practical Assignments:

- Assignment on furniture, buildings, and automobiles drawing.(each)
- Assignment on wooden, glass, metal objects.(each)
- Assignment on 3d objects drawing.(top, front, side, and perspective)
- Assignments on story narration through illustration. (realistic, flat, stylish)

**Course Name :** 4 Workshop–IV: (Stop Motion) Practical.

**Class :** Bachelor of Design Multimedia (BMM)

**Semester:** VI

**Objective of the course:** Students will be able to list the steps in making a Stop-Motion animation. Students will demonstrate knowledge of video editing software and stop motion animation. Students will recognize that Stop-Motion animation is an art form that comes only from good planning; story writing and great productions are the result of solid storyboards.

**Course Outcomes:**

Calculate and apply appropriate frame rates

- Manipulate animation production equipment
- Create accurate and aesthetically appealing stop motion animation
- Describe characteristics of well-designed and executed animation
- Relate some knowledge of the history of animation
- Assess and critique past and current animation trends
- Demonstrate progress in basic sculpting, puppet making and animation skills
- Critically analyze your creative work and the work of others

**Course Name:** 5 Blender

**Class:** Bachelor of Design Multimedia (BMM)

**Semester:** VI

**Objectives of the Course:**

This course aims at learning of 3D tool (Blender) is that students come to know how to work on it and for what purpose it is used. Blender is a free and open-source 3D computer graphics software toolset used for creating animated films, visual effects, art, 3D printed models, interactive 3D applications and video games. Blender's features include 3D modeling, UV unwrapping, texturing, raster graphics editing, rigging and skinning, fluid and smoke simulation, particle simulation, soft body simulation, sculpting, animating, match moving, rendering, motion graphics, video editing and compositing.

**Program Learning Outcomes:**

- Create a dice, chair, table and sofa with proper detail
- Create a scene of Lab (Interior)
- Create an exterior scene of any building
- Use Camera and lights in Interior (lab)

- Create a character based on cartoon or semi-cartoon along with rigging using constraints and armature
- Create a animation of different types of ball using keyframes and graph- editor

**Course Name: Project**

**Class:BDM**

**Semester: VI**

**Objectives of the Course:**

The objective of the production management is 'to produce goods services of right quality and quantity at the right time and right manufacturing cost'. The quality of product is established based upon the customer's needs. This course aims at learning of 3D tools (Maya, Blender, Premier, After Effect.) Project management objectives are the successful development of the project's procedures of initiation, planning, execution, regulation and closure as well as the guidance of the project team's operations towards achieving all the agreed upon goals within the set scope, time, quality and budget standards. Students come to know how to work on it and for what purpose it is used.

**Program Learning Outcomes:**

- They can learn how to work on project.
- They can solve some problems about whole projects.
- Learn and work on 3d and 2d animation software.

**Semester: VII**

**Course Name: Maya**

**Programme : B. Design (Multimedia)**

**Semester: VII**

**Objectives of the Course:**

This course aims at learning of 3D tool (Maya) in practical way. In this tool work on Basic of character modeling and types of modeling, In this work on Human character modeling and create body parts of human. Also work on rigging which means to put bones in model then animate it to follow rules of Animation. To take final output, to work on Rendering.

**Program Learning Outcomes:**

Practical Assignments:

- Assignment based on Character model in blocks.
- Create Ear and Eyes
- Model the arms, leg, foot, hand etc. in detail
- Create full body with details
- Rigged the body using kinematics, deformers
- Render the object in 3D
- Create animation using principles such as walk cycle, Run cycle, Jump and Push.

**Course Name: Mudbox**

**Programme : B. Design (Multimedia)**

**Semester: VII**

**Objectives of the Course:**

To introduce the students to the basics of electronic media. To enable students to write electronic media scripts and prepare news reports. Students has to understand the importance of new media technology. To introduce the students to the basics of Computers and its application related to electronic media.

### **Program Learning Outcomes:**

Students will

- The student should be able to use the skills in the creative industry – be it television channels, information technology, public relations, or corporate communication.
- The students should be able to produce independently content for electronic media.
- The students should be able to simplify technical content in simple language and multimedia as part of technical communication. The students should be well-equipped to be media teachers and researchers.
- The students should be equipped with lots of soft skills required of many of the managerial. and high-profile jobs. The students can plan, develop and implement communication for development projects at local, regional and global levels.

**Course Name: B. Design (Multimedia)**

**Programme : Project–V**

**Semester: VII**

### **Objectives of the Course:**

In this course, students will get knowledge about two different software's, Maya and Mudbox. These two softwares have their own different use. Autodesk Maya, commonly shortened to Maya, is a 3D computer graphics application that runs on Windows, macOS and Linux, originally developed by Alias Systems Corporation and currently owned and developed by Autodesk, Inc. It is used to create interactive 3D applications, including video games, animated film, TV series, or visual effects.

Mudbox is a proprietary computer-based 3D sculpting and painting tool. Currently developed by Autodesk, Mudbox was created by Skymatter. it was first used to produce the 2005 Peter Jackson remake of King Kong. Mudbox's primary application is high-resolution digital sculpting, texture painting, and displacement and normal map creation, although it is also used as a design tool.

### **Program Learning Outcomes:**

Students will

- Learn two different softwares.
- In Maya, they will get knowledge about creating different 3D models and objects.
- In Mudbox, they will get to know about sculpting.
- Understand how 3D objects are made and sculpted, which are commonly used in VFX, games and many other fields.

- Having knowledge of 3D field helps them be better in their field.

**Semester: VIII**

**Course Name: 3D and Animation in Photoshop (Theory)**

**Class: BMM**

**Semester: VIII**

**Objectives of the Course:**

This course aims at learning of 3D tools (Photoshop). Importing models created in other modeling software packages opens the door to real possibilities. The modeling tools within Photoshop are very limited in scope. Adobe Photoshop is a complex graphics and image editing software and paint program. Chances are, you've heard of Photoshop frequently in the past even if this will be the very first time that you use the program. Adobe's Photoshop program has become a mainstay with graphics designers, professional photographers, and even hobbyists to edit graphics as well as create and manipulate images. Photoshop workspace and explain the function of each: Menu bar and context menus, Options bar, Toolbox, palettes, and document window

**Program Learning Outcomes:**

- They can learn how to work on project.
- They can solve some problems about whole projects.
- Learn and work on 3d and 2d animation software.

**Course Name: 3D and Animation in Photoshop (Practical)**

**Programme: B.Design (Multimedia)**

**Semester: VIII**

**Objectives of the Course:**

The objective of the production management is 'to produce goods services of right quality and quantity at the right time and right manufacturing cost'. The quality of product is established based upon the customer's needs. This course aims at learning of 3D tools (Maya, Blender, Flash, Premier) Project management objectives are the successful development of the project's procedures of initiation, planning, execution, regulation and closure as well as the guidance of the project team's operations towards achieving all the agreed upon goals within the set scope, time, quality and budget standards. Students come to know how to work on it and for what purpose it is used. Thus operation management is concerned with managing inputs (resources) through transformation processes to deliver outputs (service or products).

**Program Learning Outcomes:**

- They can learn how to work on project.
- They can solve some problems about whole projects.
- Learn and work on 3d and 2d animation software.

**Course Name: MOTION GRAPHICS FOR COMMERCIALS (Theory)**

**Class: B. Design (multimedia)**

**Semester: VIII**

**Objectives of the Course:**

This course of Motion Graphics (theory) for Commercials is based on to teach the students about the need and use to Motion graphics in commercial field. This course will provide them Theoretical knowledge. In theoretical part, they will get knowledge how and where to use motion graphics in films, T.V., commercials & Music videos. They will get to learn many different things like animation process, different kind of animation, alpha channel, mattes. Animation process is very important for learning and understanding the fundamentals of motion graphics.

**Program Learning Outcomes:**

Students will

- Learn use of motion graphics in various fields like in T.V., commercials, videos and many different kind of productions, how they use motion graphics along with other things to make their product/film/video love more attractive.
- Know the proper use of motion graphics on the web, because motion graphics is the major part of web. Developers use motion graphics with other techniques to make their websites and web pages standout.
- Understand Animation process, because understanding basic animation process can help them to make their animation more realistic and more attractive.
- Getting knowledge about motion graphic composition will also help them in improving their work flow, which will make them work faster and accurately.

**Course Name: MOTION GRAPHICS FOR COMMERCIALS (practical)**

**Class: B. Design (Multimedia)**

**Semester: VIII**

**Objectives of the Course:**

This course of Motion Graphics (Practical) for Commercials is based on to teach the students about the need and use to Motion graphics in commercial field. This course will provide them all the necessary practical knowledge and understanding of motion graphics in Adobe after Effects. Use of after effects is very easy. Interface is very easy to understand. Motion graphics help students to improve their video work.

**Program Learning Outcomes:**

Students will

- Learn use of motion graphics in various fields like in T.V., commercials, videos and many different kind of productions, how they use motion graphics along with other things to make their product/film/video love more attractive.
- Know the proper use of motion graphics on the web, because motion graphics is the major part of web. Developers use motion graphics with other techniques to make their websites and web pages standout.
- Understand Animation process, because understanding basic animation process can help them to make their animation more realistic and more attractive.
- Getting knowledge about motion graphic composition will also help them in improving their work flow, which will make them work more faster and accurately.

**Course Name: 3D Human Modeling & Animation**

**Class: Bachelor of Design Multimedia (BMM)**

**Semester: VIII**

**Objectives of the Course:**

This course aims at learning of 3D tool (Maya) in practical way. In this tool work on Human modeling and study of human body anatomy with proper proportion. In 3D modeling use Splines, NURBS, Polygons. Along with working on lighting , storyboarding, rotoscoping and Animation with proper detail.

**Program Learning Outcomes:**

Practical Assignments:

- Assignment on 3D Human face model.
- Assignment on 3D Human body with details.
- Create interior/exterior scene of building and apply lights on in it based on morning, afternoon or evening time.
- Create animation based on running/walking with following the elements of animation.

**Course Name: Industrial Training**

**Class: Bachelor of Design Multimedia (BMM)**

**Semester: VIII**

**Objectives of the Course:**

The objective of this course is students will successfully identify and use the elements and principles of design in multimedia. Successful students will be able to identify terminology associated with the concepts, techniques, and processes used throughout the multimedia environment. Present, evaluate, and communicate, or receive, constructive feedback in response to an objective set of criteria for any given work of multimedia design. Successful students will have knowledge of creating a compelling story.

**Program Learning Outcomes:**

Students will

- Execute the operation of equipment and/or procedures associated with multiple facets of multimedia. These may include: digital-photography, page layout, typography, video, audio, interactive media, and web design.
- Gain experience with multimedia processes using current, recognized, industry-standard software as well as computer hardware and software associated in both Mac and Windows platforms.
- Demonstrate an advanced knowledge of photo editing including: image manipulation, color correction, compositing, toning, and preparing for distribution.

- Assemble video projects in professional non-linear editing software showing proficiency in importing, exporting, effects, transitions, color correcting, and flow.
- Demonstrate proper knowledge of recording, editing and producing on-air audio content for professional use.
- Students will demonstrate the phases of the production cycle and how it relates each area of multimedia.