# Post Graduate Department of Multimedia
## Name of Programme: B. Design (Multimedia)

### Programme Outcomes

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

**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 indifferent 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.

### Mapping of Course Outcomes

**Semester: I**
**Paper: Drawing & Colour–I**

|  | Course Outcome | Skill | PO | Bloom's Taxonomy Level | Assessment Tools |
|---|---|---|---|---|---|
| CO1 | Ability to synthesize the use of drawing, perspective, two-dimensional design, and color. | Understanding | PO1 | L2 | Assignment |
| CO2 | Understanding of basic principles of drawing, colors medium and techniques, concepts, and the ability to apply them to a specific aesthetic intent. | Apply | PO3 | L3 | Assignment |
| CO3 | Create landscape and collage | Design | PO5 | L6 | Assignment |
| CO4 | Explore the expressive possibilities of various media, and the diverse conceptual modes available to the painter. | Evaluating | PO2 | L5 | Assignment |

**Semester: I**
**Paper: Introduction to 3D–I**

|  | Course Outcome | Skill | PO | Bloom's Taxonomy Level | Assessment Tools |
|---|---|---|---|---|---|
| CO1 | Understand Key, Show or hide menu, Snap to grid, hot box display. | Understanding | PO1 | L2 | Assignment |
| CO2 | Explain Viewports of Maya. | Evaluating | PO3 | L2 | Assignment |
| CO3 | Explain Mesh, Channel box, Layer editor Hotbox and Autosave. | Remembering/ Understanding | PO1 | L1/L2 | Assignment |
| CO4 | Develop and create an exterior scene. | Remembering/ Understanding | PO1 | L1/L2 | Assignment |

**Semester:I**
**Paper: Workshop–I**

|  | Course Outcome | Skill | PO | Bloom's Taxonomy Level | Assessment Tools |
|---|---|---|---|---|---|
| CO1 | Improving the ability to control materials, tools and techniques. | Analyze | PO3 | L4 | Assignment |
| CO2 | Innovate first-hand experience and from imagination, and to select their own ideas to use in their work. | Apply | PO4 | L3 | Assignment |
| CO3 | develop creativity and imagination through a range of complex activities | Design | PO3 | L6 | Assignment |
| CO4 | Develop increasing confidence in the use of visual and tactile elements and materials. | Design | PO4 | L6 | Assignment |

**Semester: I**
**Paper: Elements of Art and Multimedia**

|  | Course Outcome | Skill | PO | Bloom's Taxonomy Level | Assessment Tools |
|---|---|---|---|---|---|
| CO1 | Understand the basic concepts of multimedia technology which will help them to get started easily in multimedia. | Remembering/ Understanding | PO2 | L1/L2 | Exam/Assignment |
| CO2 | Get knowledge about various terms like, images, text, fonts, file formats. | Remembering/ Understanding | PO2 | L1/L2 | Exam/Assignment |
| CO3 | Know about the various compression techniques, types of compressions etc | Apply | PO3 | L3 | Exam/Assignment |
| CO4 | Design process is very important process for those who want to learn properly about designing. | Design | PO4 | L6 | Exam/Assignment |

**Semester: II**
**Paper: Drawing & Colour–II**

|  | Course Outcome | Skill | PO | Bloom's Taxonomy Level | Assessment Tools |
|---|---|---|---|---|---|
| CO1 | Knowledge of the traditions, conventions, an devolutions of the discipline as related to issues of representation, illusion, and meaning. | Remembering/Understanding | PO1 | L1/L2 | Assignment |
| CO2 | 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. | Remembering/Understanding | PO2 | L1/L2 | Assignment |
| CO3 | Ability to apply them to a specific aesthetic intent | Apply | PO3 | L3 | Assignment |
| CO4 | Create animation based on running/ walking with following the elements of animation. | Design | PO5 | L6 | Assignment |

**Semester: II**
**Paper: Introduction to 3D–II**

| | Course Outcome | Skill | PO | Bloom's Taxonomy Level | Assessment Tools |
|---|---|---|---|---|---|
| CO1 | Understand Shaders and its type. | Remembering/Understanding | PO1 | L1/L2 | Assignment |
| CO2 | Get knowledge about purpose to use Parent and Child command | Remembering/Understanding | PO1 | L1/L2 | Assignment |
| CO3 | Analyze the Hierarchy of 3D. | Analyze | PO3 | L4 | Assignment |
| CO4 | Create an animation of any object (Ball, Walk, Run) using keyframes and graph editor. | Design | PO4 | L6 | Assignment |

**Semester: II**
**Paper: Theory of Media(Print Media & Script writing)**

| | Course Outcome | Skill | PO | Bloom's Taxonomy Level | Assessment Tools |
|---|---|---|---|---|---|
| CO1 | Identify the difference between traditional printing techniques. | Remembering/Understanding | PO3 | L1/L2 | Exam/Assignment |
| CO2 | Determine the flexibility of advertisement | Remembering/Understanding | PO2 | L1/L2 | Exam/Assignment |
| CO3 | Analyze the various forms of modern printing.. | Analyze | PO1 | L4 | Exam/Assignment |
| CO4 | Critically analyze the units of Script Writing (Terminology, Concepts, Themes & Loglines) | Analyze | PO4 | L4 | Exam/Assignment |

**Semester: II**
**Paper: Workshop–II (Photography & Adobe Lightroom)**

| | Course Outcome | Skill | PO | Bloom's Taxonomy Level | Assessment Tools |
|---|---|---|---|---|---|
| CO1 | Understand different kind of cameras, lenses and lights | Remembering/Understanding | PO1 | L1/L2 | Assignment/Project |
| CO2 | Learn different camera functions like ISO, shutter speed, aperture | Remembering/Understanding | PO1 | L1/L2 | Assignment/Project |
| CO3 | Create dynamic styles | Design | PO4 | L6 | Assignment/Project |
| CO4 | Create artificial lens flare for photos. | Design | PO2 | L6 | Assignment/Project |

**Semester: II**
**Paper: Adobe Illustrator**

| | Course Outcome | Skill | PO | Bloom's Taxonomy Level | Assessment Tools |
|---|---|---|---|---|---|
| CO1 | Get familiarizes students with Adobe Illustrator. | Remembering/Understanding | PO1 | L1/L2 | Assignment |
| CO2 | Learn different types of effects used in Graphic Designing. | Remembering/Understanding | PO1 | L1/L2 | Assignment |
| CO3 | Analyze designs and their processes. | Analyze | PO4 | L4 | Assignment |
| CO4 | Design their own publishing | Design | PO3 | L6 | Assignment |

**Semester: III**
**Paper: Film Appreciation–I**

| | Course Outcome | Skill | PO | Bloom's Taxonomy Level | Assessment Tools |
|---|---|---|---|---|---|
| CO1 | Identify ways sound contributes to movies. | Analyze | PO4 | L4 | Assignment/Project |
| CO2 | Get Knowledge about Performing Art. | Remembering/Understanding | PO2 | L1/L2 | Assignment/Project |
| CO3 | Understand History of Indian Cinema | Remembering/Understanding | PO1 | L1/L2 | Assignment/Project |
| CO4 | Analyze concepts behind storytelling, Miseen Scène, and cinematography. | Analyze | PO4 | L4 | Assignment/Project |

**Semester: III**
**Paper: Animation in 3D**

| | Course Outcome | Skill | PO | Bloom's Taxonomy Level | Assessment Tools |
|---|---|---|---|---|---|
| CO1 | Understand Basic of Character modeling and types of modeling | Remembering/Understanding | PO1 | L1/L2 | Assignment |
| CO2 | Analyze the arms, leg and foot models. | Analyze | PO4 | L4 | Assignment |
| CO3 | Evaluate Rendered object in 3D. | Evaluating | PO3 | L5 | Assignment |
| CO4 | Create Human character modeling and create body parts of human. | Design | PO5 | L6 | Assignment |

**Semester: III**
**Paper: Adobe Photoshop**

| | Course Outcome | Skill | PO | Bloom's Taxonomy Level | Assessment Tools |
|---|---|---|---|---|---|
| CO1 | Understand the difference types of graphics. | Remembering/Understanding | PO3 | L1/L2 | Assignment |
| CO2 | Gaining Knowledge about Image Formats and Pixalisation. | Remembering/Understanding | PO1 | L1/L2 | Assignment |
| CO3 | Enable them to use various tools of Photoshop. | Apply | PO3 | L3 | Assignment |
| CO4 | Get knowledge about different types of editing techniques in Photoshop. | Remembering/Understanding | PO1 | L1/L2 | Assignment |
| CO5 | Develop different photo manipulations. | Design | PO4 | L6 | Assignment |

**Semester: III**
**Paper: HTML5**

| | Course Outcome | Skill | PO | Bloom's Taxonomy Level | Assessment Tools |
|---|---|---|---|---|---|
| CO1 | Utilize web technologies. | Evaluating | PO4 | L5 | Exam/Assignment |
| CO2 | Administer and maintain a website. | Analyze | PO2 | L4 | Exam/Assignment |
| CO3 | Learn techniques of responsive web design, including media queries. | Remembering/ Understanding | PO1 | L1/L2 | Exam/Assignment |
| CO4 | Develop, administer, and maintain a web programming system solution. | Design | PO5 | L6 | Exam/Assignment |

**Semester: III**
**Paper: CorelDraw**

| | Course Outcome | Skill | PO | Bloom's Taxonomy Level | Assessment Tools |
|---|---|---|---|---|---|
| CO1 | Utilize graphic designing techniques. | Evaluating | PO4 | L5 | Assignment/Project |
| CO2 | Administer thoughts into graphics. | Analyze | PO2 | L4 | Assignment/Project |
| CO3 | Learn techniques of attractive web designs. | Remembering/ Understanding | PO1 | L1/L2 | Assignment/Project |
| CO4 | Develop calendars, event planners and other graphic designs. | Design | PO65 | L6 | Assignment/Project |

**Semester: III**
**Paper: Project - V**

|  | Course Outcome | Skill | PO | Bloom's Taxonomy Level | Assessment Tools |
|---|---|---|---|---|---|
| CO1 | Utilize their skills to develop a combination of web technology and graphic designing. | Apply | PO3 | L3 | Assignment |
| CO2 | Learn migrating graphic into websites. | Analyze | PO2 | L4 | Assignment |
| CO3 | Learn techniques of attractive web designs. | Remembering/ Understanding | PO1 | L1/L2 | Assignment |
| CO4 | Develop own online portfolios. | Design | PO5 | L6 | Assignment |

**Semester: IV**
**Paper: Adobe Flash**

|  | Course Outcome | Skill | PO | Bloom's Taxonomy Level | Assessment Tools |
|---|---|---|---|---|---|
| CO1 | Create basic shapes and used Tweening on it. | Design | PO6 | L6 | Exam/Assignment |
| CO2 | Build Small Animations using timeline | Apply | PO4 | L3 | Exam/Assignment |
| CO3 | Execute Expressions on Keyframes | Evaluating | PO2 | L5 | Exam/Assignment |
| CO4 | Create e-cards with sound. | Design | PO6 | L6 | Exam/Assignment |

**Semester: IV**
**Paper: PHP**

|  | Course Outcome | Skill | PO | Bloom's Taxonomy Level | Assessment Tools |
|---|---|---|---|---|---|
| CO1 | Understanding POST and GET in form submission. | Remembering/ Understanding | PO2 | L1/L2 | Exam/Assignment |
| CO2 | Enable them to read and write cookies. | Apply | PO3 | L3 | Exam/Assignment |
| CO3 | Use PHP built-in functions and creating custom functions. | Evaluating | PO4 | L5 | Exam/Assignment |
| CO4 | Get knowledge about databases of php my Admin portal. | Understanding/Design | PO2 | L1/L2 | Exam/Assignment |

**Semester: IV**
**Paper: Dream Weaver**

| | Course Outcome | Skill | PO | Bloom's Taxonomy Level | Assessment Tools |
|---|---|---|---|---|---|
| CO1 | Understand the working of websites in the real world | Remembering/ Understanding | PO1 | L1/L2 | Exam/Assignment |
| CO2 | Steps encountered during making any website live | Evaluating | PO3 | L5 | Exam/Assignment |
| CO3 | Analyze and assume an idea about developing website. | Analyze | PO5 | L4 | Exam/Assignment |
| CO4 | Create websites and web portals for professional and personal uses | Design | PO6 | L6 | Assignment/Project |

**Semester: IV**
**Paper: Film Appreciation–II**

| | Course Outcome | Skill | PO | Bloom's Taxonomy Level | Assessment Tools |
|---|---|---|---|---|---|
| CO1 | Understand how motion picture industry of India works | Remembering/ Understanding | PO4 | L1/L2 | Assignment/Project |
| CO2 | Analyze how the movies are being distributed. | Analyze | PO4 | L4 | Assignment/Project |
| CO3 | Explain the stages of film production | Understanding | PO2 | L2 | Assignment/Project |
| CO4 | Create own short story | Design | PO1 | L6 | Assignment/Project |

**Semester: IV**
**Paper: Project– II**

| | Course Outcome | Skill | PO | Bloom's Taxonomy Level | Assessment Tools |
|---|---|---|---|---|---|
| CO1 | Learn and work on 3d and 2d animation software | Remembering/ Understanding | PO1 | L1/L2 | Assignment |
| CO2 | Develop skill of initiation, planning, execution, regulation and closure | Design | PO3 | L6 | Assignment |
| CO3 | Analyze the workflow of the project. | Analyze | PO2 | L4 | Assignment |
| CO4 | Explain how quality of product is established based upon the customer's needs | Apply | PO4 | L3 | Assignment/Project |

**Semester: V**
**Paper: Adobe Premiere Pro**

| | Course Outcome | Skill | PO | Bloom's Taxonomy Level | Assessment Tools |
|---|---|---|---|---|---|
| CO1 | Design clean as well as expert titles for your video clips | Design | PO6 | L6 | Assignment |
| CO2 | Edit a whole video clip from starting to finish, utilizing expert and also effective strategies. | Evaluating | PO5 | L5 | Assignment |
| CO3 | Color corrects your video clip to repair problems with white balance and also direct exposure. | Apply | PO2 | L3 | Assignment |
| CO4 | Modify your video clips, as well as make them a lot more vibrant with cutaway video footage and also images | Design | PO1 | L6 | Assignment/Project |

**Semester: V**
**Paper: Adobe After Effects**

| | Course Outcome | Skill | PO | Bloom's Taxonomy Level | Assessment Tools |
|---|---|---|---|---|---|
| CO1 | Describe characteristics of well-designed and executed animation. | Understanding | PO1 | L2 | Assignment |
| CO2 | Assess and critique past and current animation trends | Analyze | PO5 | L4 | Assignment |
| CO3 | Demonstrate progress in basic sculpting, puppet making and animation skills | Evaluating | PO4 | L5 | Assignment |
| CO4 | Create Motion Graphics. | Design | PO3 | L6 | Assignment/Project |

**Semester: V**
**Paper: Workshop–III**

| | Course Outcome | Skill | PO | Bloom's Taxonomy Level | Assessment Tools |
|---|---|---|---|---|---|
| CO1 | Get knowledge about production process | Remembering/ Understanding | PO1 | L1/L2 | Assignment |
| CO2 | Learn 3 different kinds of production processes | Remembering/ Understanding | PO2 | L1/L2 | Assignment |
| CO3 | Learn about different kinds of topics like frame rate, storyboard, camera angles, exposure and many other things. | Remembering/ Understanding | PO1 | L1/L2 | Assignment |
| CO4 | Develop their own documentary. | Design | PO5 | L6 | Assignment/Project |

**Semester: V**
**Paper: Sound Editing and Recording**

| | Course Outcome | Skill | PO | Bloom's Taxonomy Level | Assessment Tools |
|---|---|---|---|---|---|
| CO1 | Working with video, Attaching & detaching a video | Remembering/ Understanding | PO3 | L1/L2 | Assignment |
| CO2 | Understand Basic editing, editing tools, Play the content of the clipboard | Remembering/ Understanding | PO1 | L1/L2 | Assignment |
| CO3 | Working with All Effects, Sampling Sound, MIDI synchronization | Apply | PO3 | L3 | Assignment |
| CO4 | Create their own mashups and mix Audio | Design | PO5 | L6 | Assignment/Project |

**Semester:V**
**Paper: Technical Theory of Media – II (Electronic Media)**

| | Course Outcome | Skill | PO | Bloom's Taxonomy Level | Assessment Tools |
|---|---|---|---|---|---|
| CO1 | Able to use the skills in the creative industry – be it television channels, information technology, public relations, or corporate communication. | Apply | PO2 | L3 | Assignment |
| CO2 | simplify technical content in simple language and multimedia as part of technical communication | Remembering/ Understanding | PO1 | L1/L2 | Assignment |
| CO3 | Get equipped with lots of soft skills required of many of the managerial and high-profile jobs | Remembering/ Understanding | PO1 | L1/L2 | Assignment |
| CO4 | Develop and implement communication for development projects at local, regional and global levels | Design | PO5 | L6 | Assignment/Project |

**Semester: V**
**Paper: Project–III**

| | Course Outcome | Skill | PO | Bloom's Taxonomy Level | Assessment Tools |
|---|---|---|---|---|---|
| CO1 | Use adobe Premiere, aftereffects and Sound forge. | Apply | PO4 | L3 | Assignment |
| CO2 | Create visual outputs. | Design | PO3 | L6 | Assignment |
| CO3 | Handling different Extensions for Deferent platforms | Evaluating | PO2 | L5 | Assignment |
| CO4 | Executing software integration and Project Rendering | Apply | PO6 | L3 | Assignment/Project |

**Semester: VI**
**Paper: 3D Studio Max**

|  | Course Outcome | Skill | PO | Bloom's Taxonomy Level | Assessment Tools |
|---|---|---|---|---|---|
| CO1 | Gain knowledge about the interface of 3D Max | Remembering/ Understanding | PO1 | L1/L2 | Assignment |
| CO2 | Learn working with Nurbs, which will help them to create more smooth and attractive models | Remembering/ Understanding | PO2 | L1/L2 | Assignment |
| CO3 | Understand many different mapping techniques and many kind of materials. | Remembering/ Understanding | PO2 | L1/L2 | Assignment |
| CO4 | Design their own 3d Models of different characters. | Design | PO5 | L6 | Assignment/Project |

**Semester: VI**
**Paper: Introduction to 3D**

|  | Course Outcome | Skill | PO | Bloom's Taxonomy Level | Assessment Tools |
|---|---|---|---|---|---|
| CO1 | Know about types of modeling to use in creating models. | Remembering/ Understanding | PO1 | L1/L2 | Assignment |
| CO2 | Understand 12 basic principles of animation | Understanding | PO1 | L2 | Assignment |
| CO3 | Analyze Mapping and texturing | Analyze | PO4 | L4 | Assignment |
| CO4 | Develop their own 3d Object Model | Design | PO5 | L6 | Assignment/Project |

**Semester: VI**
**Paper: Drawing & Illustration**

|  | Course Outcome | Skill | PO | Bloom's Taxonomy Level | Assessment Tools |
|---|---|---|---|---|---|
| CO1 | Understanding of basic principles of drawing and color, concepts | Remembering/ Understanding | PO1 | L1/L2 | Assignment |
| CO2 | Ability to synthesize the use of drawing, two-dimensional design, and color, beginning with basic studies and continuing | Apply | PO3 | L3 | Assignment |
| CO3 | 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 | Remembering/ Understanding | PO2 | L1/L2 | Assignment |
| CO4 | Use drawing and illustration skill to visually communicate abstract concepts. | Design | PO4 | L6 | Assignment/Project |

**Semester: VI**
**Paper: Workshop–IV: (Stop Motion)**

|  | Course Outcome | Skill | PO | Bloom's Taxonomy Level | Assessment Tools |
|---|---|---|---|---|---|
| CO1 | Create accurate and aseptically appealing stop motion animation | Design | PO5 | L6 | Assignment |
| CO2 | Describe characteristics of well-designed and executed animation | Evaluating | PO3 | L5 | Assignment |
| CO3 | Demonstrate progress in basic sculpting, puppet making and animation skills. | Apply | PO2 | L3 | Assignment |
| CO4 | Critically analyze your creative work and the work of others | Analyze | PO3 | L4 | Assignment/Project |

**Semester: VI**
**Paper: Blender**

|  | Course Outcome | Skill | PO | Bloom's Taxonomy Level | Assessment Tools |
|---|---|---|---|---|---|
| CO1 | Create animation of different types of ball using key frames and graph- editor | Design | PO5 | L6 | Assignment |
| CO2 | Create an exterior scene of any building | Design | PO4 | L6 | Assignment |
| CO3 | Use Camera and lights in Interior (lab) | Apply | PO3 | L3 | Assignment |
| CO4 | Create a dice, chair, table and sofa with proper detail | Design | PO3 | L6 | Assignment/Project |

**Semester: VI**
**Paper: Project – IV**

|  | Course Outcome | Skill | PO | Bloom's Taxonomy Level | Assessment Tools |
|---|---|---|---|---|---|
| CO1 | Understanding software integration. | Remembering/ Understanding | PO1 | L1/L2 | Assignment |
| CO2 | Create time laps video. | Design | PO4 | L6 | Assignment |
| CO3 | Modify 3d objects using blender. | Evaluating | PO5 | L5 | Assignment |
| CO4 | Create output using 3d. | Design | PO2 | L6 | Assignment/Project |

**Semester: VII**
**Paper: Maya**

|  | Course Outcome | Skill | PO | Bloom's Taxonomy Level | Assessment Tools |
|---|---|---|---|---|---|
| CO1 | Model the arms, leg, foot, hand etc. in detail | Apply | PO3 | L3 | Assignment |
| CO2 | Rigged the body using kinematics, deformers | Apply | PO3 | L3 | Assignment |
| CO3 | Create Ear and Eyes | Design | PO4 | L6 | Assignment |
| CO4 | Create animation using principles such as walk cycle, Run cycle, Jump and Push. | Design | PO5 | L6 | Assignment |

**Semester: VII**
**Paper: Mudbox**

|  |  | Course Outcome | Skill | PO | Bloom's Taxonomy Level | Assessment Tools |
|---|---|---|---|---|---|---|
| CO1 | | Get knowledge about creating different 3D models and objects | Remembering/ Understanding | PO1 | L1/L2 | Assignment |
| CO2 | | Understand how 3D objects are made and sculpted, which are commonly used in VFX, games and many other fields. | Remembering/ Understanding | PO1 | L1/L2 | Assignment |
| CO3 | | 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 | Apply | PO3 | L3 | Assignment |
| CO4 | | Create different textured models. | Design | PO5 | L6 | Assignment/Project |

**Semester: VII**
**Paper: Project–V**

|  |  | Course Outcome | Skill | PO | Bloom's Taxonomy Level | Assessment Tools |
|---|---|---|---|---|---|---|
| CO1 | | Understand how 3D objects are made and sculpted, which are commonly used in VFX, games and many other fields. | Remembering/ Understanding | PO1 | L1/L2 | Assignment |
| CO2 | | In Maya, they will get knowledge about creating different 3D models and objects | Remembering/ Understanding | PO2 | L1/L2 | Assignment |
| CO3 | | In Mudbox, they will get to know about sculpting | Remembering/ Understanding | PO1 | L1/L2 | Assignment |
| CO4 | | Create their own interior and exterior designs | Design | PO4 | L6 | Assignment/Project |

**Semester: VIII**
**Paper: 3D and Animation in Photoshop**

|  |  | Course Outcome | Skill | PO | Bloom's Taxonomy Level | Assessment Tools |
|---|---|---|---|---|---|---|
| CO1 | | Understanding 3d in Photoshop. | Remembering/ Understanding | PO1 | L1/L2 | Assignment |
| CO2 | | Understanding features of extended version. | Remembering/ Understanding | PO2 | L1/L2 | Assignment |
| CO3 | | Creating 3d Text using Extrude and postcard feature. | Design | PO5 | L6 | Assignment |
| CO4 | | Create and Rendering 3d Logos | Design | PO4 | l6 | Assignment |

**Semester: VIII**
**Paper: Motion Graphics for Commercials**

| | Course Outcome | Skill | PO | Bloom's Taxonomy Level | Assessment Tools |
|---|---|---|---|---|---|
| CO1 | 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. | Remembering/ Understanding | PO1 | L1/L2 | Assignment |
| CO2 | Understand Animation process, because understanding basic animation process can help them to make their animation more realistic and more attractive | Remembering/ Understanding | PO1 | L1/L2 | Assignment |
| CO3 | 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 | Apply | PO5 | L3 | Assignment |
| CO4 | Getting knowledge about motion graphic composition will also help them in improving their work flow, which will make them work faster and accurately. | Remembering/ Design | PO5 | L1/L2 | Assignment/Project |

**Semester: VIII**
**Paper: 3D Human Modeling and Animation**

| | Course Outcome | Skill | PO | Bloom's Taxonomy Level | Assessment Tools |
|---|---|---|---|---|---|
| CO1 | Get to know many different mapping techniques and many kind of materials. | Remembering/ Understanding | PO3 | L1/L2 | Assignment |
| CO2 | Learn cloning objects and objects array's, grouping and linking objects. | Remembering/ Understanding | PO2 | L1/L2 | Assignment |
| CO3 | Get in depth knowledge about animation in 3DMax, animating an object | Understanding | PO4 | L2 | Assignment/Project |
| CO4 | Develop their work to gain position in 3D field. | Design | PO5 | L6 | Assignment/Project |

**Semester: VIII**
**Paper: Industrial Training**

| | Course Outcome | Skill | PO | Bloom's Taxonomy Level | Assessment Tools |
|---|---|---|---|---|---|
| CO1 | 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.. | Evaluate | PO5 | L5 | Assignment/Project |
| CO2 | 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. | Apply | PO5 | L3 | Assignment/Project |
| CO3 | Demonstrate an advanced knowledge of photo editing including: image manipulation, color correction, compositing, toning, and preparing for distribution. | Remembering/ Understanding | PO1 | L1/L2 | Assignment/Project |
| CO4 | Assemble video projects in professional non-linear editing software showing proficiency in importing, exporting, effects, transitions, color correcting, and flow. | Design | PO6 | L6 | Assignment/Project |

## Name of Programme: B.Voc (Web Technology and Multimedia)

### Programme Outcomes

**PO1:** This B.Voc. programme is focused on providing undergraduate which would help them incorporate specific job roles and their NOSs along with broad based general education..

**PO2:** This would enable the graduates completing B.Voc. to make a meaningful participation in accelerating India's economy by gaining appropriate employment, becoming entrepreneurs and creating appropriate knowledge

**PO3:** .Bachelor of Vocation (B.Voc.) Degree in Web Technology and Multimedia will train students in areas such as – markup languages, programming fundamentals, database management, operating system, scripting language etc.

**PO4:** Gain real world project experience throughout their learning cycle that helps them to better understand the roles and processes in the field of web designing and development.

**PO5:** Develop introductory level competencies in the areas of web technologies, animation, programming and database management.

**PO6:** 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.

### Mapping of Course Outcomes

**Semester: I**
**Paper: Computer Fundamentals and MS Office**

|  | Course Outcome | Skill | PO | Bloom's Taxonomy Level | Assessment Tools |
|---|---|---|---|---|---|
| CO1 | Understand how the computers have evolved over the decade.. | Remembering/ Understanding | PO3 | L1/L2 | Assignment |
| CO2 | learn the detailed Concepts of Computer Hardware and Software. | Understanding | PO1 | L2 | Exam/Assignment |
| CO3 | Understand the relation between WWW and Internet. | Apply | PO5 | L3 | Exam/Assignment |
| CO4 | Understand the working of Microsoft Office Suite. | Understanding | PO1 | L6 | Quiz/Seminar |
| CO5 | Create documents of different types using the hardware and software. | Design | PO5 | L6 | Exam/Assignment |

**Semester: I**
**Paper: Markup Languages ( HTML,HTML5, and CSS)**

|  | Course Outcome | Skill | PO | Bloom's Taxonomy Level | Assessment Tools |
|---|---|---|---|---|---|
| CO1 | Utilize web technologies. | Evaluating | PO4 | L5 | Exam/Assignment |
| CO2 | Administer and maintain a website. | Analyze | PO2 | L4 | Exam/Assignment |
| CO3 | Learn techniques of responsive web design, including media queries. | Remembering/ Understanding | PO1 | L1/L2 | Exam/Assignment |
| CO4 | Develop, administer, and maintain a web programming system solution.. | Design | PO6 | L6 | Exam/Assignment |

**Semester: I**
**Paper: Programming Fundamentals ( C& C++ )**

|  | Course Outcome | Skill | PO | Bloom's Taxonomy Level | Assessment Tools |
|---|---|---|---|---|---|
| CO1 | Understand basics of Programming. | Understanding | PO1 | L2 | Exam/Assignment |
| CO2 | Demonstrate problem-solving skills. | Apply | PO5 | L3 | Exam/Assignment |
| CO3 | Apply logical skills to programming in a variety of languages. | Apply | PO4 | L3 | Exam/Assignment |
| CO4 | Gaining knowledge about the dynamic behavior of memory by the use of pointers. | Design | PO6 | L6 | Exam/Assignment |

**Semester: I**
**Paper: Adobe Photoshop**

|  | Course Outcome | Skill | PO | Bloom's Taxonomy Level | Assessment Tools |
|---|---|---|---|---|---|
| CO1 | Understand the difference types of graphics. | Remembering/Understanding | PO3 | L1/L2 | Exam/Assignment |
| CO2 | Gaining Knowledge about Image Formats and Pixalisation. | Understanding | PO2 | L2 | Exam/Assignment |
| CO3 | Enable them to use various tools of Photoshop. | Apply | PO4 | L3 | Exam/Assignment |
| CO4 | Get knowledge about different types of editing techniques in Photoshop. | Understanding | PO1 | L2 | Exam/Assignment |
| CO5 | Develop different photo manipulations. | Design | PO6 | L6 | Exam/Assignment |

**Semester: II**
**Paper: Web Programming with PHP-I**

|  | Course Outcome | Skill | PO | Bloom's Taxonomy Level | Assessment Tools |
|---|---|---|---|---|---|
| CO1 | Understanding POST and GET in form submission. | Remembering/ Understanding | PO2 | L1/L2 | Exam/Assignment |
| CO2 | Enable them to read and write cookies. | Apply | PO3 | L3 | Exam/Assignment |
| CO3 | Use PHP built-in functions and creating custom functions. | Evaluating | PO4 | L5 | Exam/Assignment |
| CO4 | Get knowledge about databases of php my Admin portal. | Understanding/Design | PO2 | L1/L2 | Exam/Assignment |

**Semester: II**
**Paper: Design & Layout (Dreamweaver)**

|  | Course Outcome | Skill | PO | Bloom's Taxonomy Level | Assessment Tools |
|---|---|---|---|---|---|
| CO1 | Understand the working of websites in the real world. | Remembering/ Understanding | PO1 | L1/L2 | Exam/Assignment |
| CO2 | Steps encountered during making any website live | Evaluating | PO3 | L5 | Exam/Assignment |
| CO3 | Analyze and Assume an idea about developing website. | Analyze | PO5 | L4 | Exam/Assignment |
| CO4 | Create websites and web portals for professional and personal uses | Design | PO6 | L6 | Exam/Assignment |

**Semester: II**
**Paper: Analysis and Design for Web Applications**

|  | Course Outcome | Skill | PO | Bloom's Taxonomy Level | Assessment Tools |
|---|---|---|---|---|---|
| CO1 | Categorize the websites on the basis of their development ideas. | Analyze | PO6 | L4 | Exam/Assignment |
| CO2 | Understand Website Requirements and Paper Work behind any website | Understanding | PO2 | L2 | Exam/Assignment |
| CO3 | Analyze the websites. | Analyze | PO3 | L4 | Exam/Assignment |
| CO4 | Critically analyze the already developed websites. | Analyze | PO3 | L4 | Exam/Assignment |

**Semester: II**
**Paper: JavaScript-I**

|  | Course Outcome | Skill | PO | Bloom's Taxonomy Level | Assessment Tools |
|---|---|---|---|---|---|
| CO1 | Use operators, variables, arrays, control structures, functions and objects in JavaScript. | Understanding/Apply | PO2 | L1/L2 | Exam/Assignment |
| CO2 | Classify popular JavaScript Libraries | Evaluating | PO4 | L5 | Exam/Assignment |
| CO3 | Create dynamic styles | Design | PO5 | L6 | Exam/Assignment |
| CO4 | Evaluate different JavaScript Events. | Evaluating | PO2 | L5 | Exam/Assignment |

**Semester: III**
**Paper: Java Script II**

|  | Course Outcome | Skill | PO | Bloom's Taxonomy Level | Assessment Tools |
|---|---|---|---|---|---|
| CO1 | Explain separation of concerns and identify all the dynamic websites. | Remembering/ Understanding | PO4 | L1/L2 | Exam/Assignment |
| CO2 | Identify advanced JavaScript Array Methods | Analyze | PO3 | L4 | Exam/Assignment |
| CO3 | Use regular expressions for form validation. | Apply | PO5 | L3 | Exam/Assignment |
| CO4 | Create develop Error free website. | Design | PO6 | L6 | Exam/Assignment |
| CO5 | Modify the events used in the dynamic websites. | Design | PO6 | L6 | Exam/Assignment |

**Semester: III**
**Paper: Operating System**

|     | Course Outcome | Skill | PO | Bloom's Taxonomy Level | Assessment Tools |
|-----|----------------|-------|-----|------------------------|------------------|
| CO1 | Describe the important computer system resources and therole of operating system in their management policiesand algorithms. | Understanding | PO1 | L2 | Exam/Assignment |
| CO2 | Understand the process management policies and scheduling of processes by CPU | Understanding | PO2 | L2 | Exam/Assignment |
| CO3 | Evaluate the requirement for process synchronization and coordination handled by operating system. | Evaluating | PO4 | L5 | Exam/Assignment |
| CO4 | Identify the need to create the special purpose operating system | Apply | PO5 | L3 | Exam/Assignment |
| CO5 | Compile the different commands of Operating System. | Design | PO6 | L6 | Exam/Assignment |

**Semester: III**
**Paper: Java Programming**

|     | Course Outcome | Skill | PO | Bloom's Taxonomy Level | Assessment Tools |
|-----|----------------|-------|-----|------------------------|------------------|
| CO1 | Implement Object Oriented programming concept using basic syntaxes of control Structures, strings and function for developing skills of logic building activity. | Design | PO6 | L6 | Exam/Assignment |
| CO2 | Identify classes, objects, members of a class and the relationships among them needed for a finding the solution to specific problem | Evaluating | PO5 | L5 | Exam/Assignment |
| CO3 | Demonstrate understanding and use of different exception handling mechanisms and concept of multithreading for robust faster and efficient application development | Apply | PO5 | L3 | Exam/Assignment |
| CO4 | Demonstrates how to achieve reusability using inheritance, interfaces and packages and describes faster application development can be achieved. | Analyze | PO5 | L4 | Exam/Assignment |

**Semester: III**
**Paper: Wordpress**

| | Course Outcome | Skill | PO | Bloom's Taxonomy Level | Assessment Tools |
|---|---|---|---|---|---|
| CO1 | Creating a dynamic space for multimedia (blogs, podcasts, video resources, etc) | Design | PO6 | L6 | Exam/Assignment |
| CO2 | Engaging and working within a chosen theme | Evaluating | PO5 | L5 | Exam/Assignment |
| CO3 | An understanding of the importance of Universal Design and accessibility when designing for the Web | Understanding | PO3 | L2 | Exam/Assignment |
| CO4 | Engagement with the affordances of WordPress (.css, .php, other) based on the needs and desires of the faculty member | Design | PO4 | L6 | Exam/Assignment |

**Semester: IV**
**Paper: Database System**

| | Course Outcome | Skill | PO | Bloom's Taxonomy Level | Assessment Tools |
|---|---|---|---|---|---|
| CO1 | Understand the features of database management systems and Relational database. | Remembering/ Understanding | PO2 | L1/L2 | Exam/Assignment |
| CO2 | Design conceptual models of a database using ER modeling for real life applications and also construct queries in Relational Algebra | Design | PO6 | L6 | Exam/Assignment |
| CO3 | Analyze the existing design of a database schema and apply concepts of normalization to design an optimal database. | Analyze | PO5 | L4 | Exam/Assignment |
| CO4 | Retrieve any type of information from a data base by formulating complex queries in SQL. | Apply | PO5 | L3 | Exam/Assignment |
| CO5 | Use the SQL in Procedural Language for simple applications. | Apply | PO5 | L3 | Exam/Assignment |

**Semester: IV**
**Paper: Software Engineering**

| | Course Outcome | Skill | PO | Bloom's Taxonomy Level | Assessment Tools |
|---|---|---|---|---|---|
| CO1 | Explain needs for software specifications also they can classify different types of software requirements and their gathering techniques. | Understanding/ Remembering | PO1 | L1/L2 | Exam/Assignment |
| CO2 | Define various software application domains and remember different process model used in software development | Apply | PO3 | L3 | Exam/Assignment |
| CO3 | Generate project schedule and can construct, design and develop network diagram for different type of Projects. They can also organize different activities of project as per Risk impact factor. | Design | PO6 | L6 | Exam/Assignment |
| CO4 | Justify role of SDLC in Software Project Development and they can evaluate importance of Software Engineering in PLC. | Analyze | PO5 | L4 | Exam/Assignment |

**Semester:IV**
**Paper: PHP–II**

|  | Course Outcome | Skill | PO | Bloom's Taxonomy Level | Assessment Tools |
|---|---|---|---|---|---|
| CO1 | Build Dynamic web site using server side PHP Programming and Database connectivity. | Design | PO6 | L6 | Exam/Assignment |
| CO2 | Outline the principles behind using MySQL as a backend DBMS with PHP | Analyze | PO2 | L4 | Exam/Assignment |
| CO3 | Understand the differences between LAMP, WAMP, and MAMP. | Understanding | PO4 | L2 | Exam/Assignment |
| CO4 | Compile the working of programming language and a scripting language. | Evaluating | PO5 | L5 | Exam/Assignment |

**Semester:IV**
**Paper: Adobe Flash**

|  | Course Outcome | Skill | PO | Bloom's Taxonomy Level | Assessment Tools |
|---|---|---|---|---|---|
| CO1 | Create basic shapes and used Tweening on it. | Design | PO6 | L6 | Exam/Assignment |
| CO2 | Build Small Animations using timeline | Apply | PO4 | L3 | Exam/Assignment |
| CO3 | Execute Expressions on Keyframes | Evaluating | PO2 | L5 | Exam/Assignment |
| CO4 | Create e-cards with sound. . | Design | PO6 | L6 | Exam/Assignment |

**Semester:V**
**Paper: Software Re-Engineering**

|  | Course Outcome | Skill | PO | Bloom's Taxonomy Level | Assessment Tools |
|---|---|---|---|---|---|
| CO1 | Assess which parts should be reengineered first. | Analyze | PO6 | L4 | Exam/Assignment |
| CO2 | Extract coarse-grained and fine-grained design models | Apply | PO5 | L3 | Exam/Assignment |
| CO3 | Identify the risks and opportunities for a given re-engineering project | Analyze | PO3 | L4 | Exam/Assignment |
| CO4 | Exploit tests during re-engineering. | Evaluating | PO5 | L5 | Exam/Assignment |
| CO5 | Solve the typical problems of an object-oriented re-engineering project. | Design | PO6 | L6 | Exam/Assignment |

**Semester:V**
**Paper: Software Project Management and Business Solutions**

|  | Course Outcome | Skill | PO | Bloom's Taxonomy Level | Assessment Tools |
|---|---|---|---|---|---|
| CO1 | Distinguish among SCM and SQA and can classify different testing strategies and tactics and compare them. | Evaluating | PO5 | L5 | Exam/Assignment |
| CO2 | Identify the different project contexts and suggest an appropriate management strategy | Understanding | PO2 | L2 | Exam/Assignment |
| CO3 | Practice the role of professional ethics in successful software development | Apply | PO3 | L3 | Exam/Assignment |
| CO4 | Determine an appropriate project management approach through an evaluation of the business context and scope of the project. | Analyze | PO4 | L4 | Exam/Assignment |

**Semester: V**
**Paper: ASP .NET with C#**

|  | Course Outcome | Skill | PO | Bloom's Taxonomy Level | Assessment Tools |
|---|---|---|---|---|---|
| CO1 | Create user interactive web pages using ASP.Net. | Apply | PO2 | L3 | Assignment |
| CO2 | Performing Database operations for Windows Form and web applications. | Analyze | PO3 | L4 | Assignment |
| CO3 | Make database connection using proper controls | Evaluating | PO4 | L5 | Assignment |
| CO4 | Validate the field elements using validator control. | Design | PO3 | L6 | Assignment/Project |

**Semester: V**
**Paper: Software Testing & Quality Assurance**

|  | Course Outcome | Skill | PO | Bloom's Taxonomy Level | Assessment Tools |
|---|---|---|---|---|---|
| CO1 | Familiar with the process of verification and validation. | Understanding/ Remembering | PO2 | L2/L1 | Exam/Assignment |
| CO2 | Able to derive test cases from software requirement specifications - including being able to partition input and output domains, form test specifications, and identify valid combinations of input | Analyze/ Apply | PO4 | L4/L3 | Exam/Assignment |
| CO3 | Understand and be able to distinguish between methods of judging test case adequacy and how to design tests that will accomplish the obligations of such methods | Understanding | PO2 | L2 | Exam/Assignment |
| CO4 | Analyze code to automate test execution. | Analyze | PO6 | L4 | Exam/Assignment |

**Semester: V**
**Paper: Adobe Muse**

|  | Course Outcome | Skill | PO | Bloom's Taxonomy Level | Assessment Tools |
|---|---|---|---|---|---|
| CO1 | Demonstrate planning and creating website using Muse. | Understanding | PO2 | L2 | Exam/Assignment |
| CO2 | Able to add text to website, formatting text, and adding images and graphics | Apply | PO3 | L3 | Exam/Assignment |
| CO3 | Modify menus, widgets, and links within site | Apply | PO3 | L3 | Exam/Assignment |
| CO4 | Analyze publishing site to the web. | Analyze | PO4 | L4 | Exam/Assignment |

**Semester: V**
**Paper: Lab: Software Testing (Case Tools**

|  | Course Outcome | Skill | PO | Bloom's Taxonomy Level | Assessment Tools |
|---|---|---|---|---|---|
| CO1 | Demonstrate the steps of software development. | Understanding/ Remembering | PO2 | L1/L2 | Exam/Assignment |
| CO2 | Develop and Design the UML Diagrams. | Design | PO6 | L6 | Exam/Assignment |
| CO3 | Modify the levels of SDLC. | Apply | PO4 | L3 | Exam/Assignment |
| CO4 | Analyze the errors to be encountered during the development of a software. | Analyze | PO3 | L4 | Exam/Assignment |

**Semester: VI**
**Paper: Major Project**

| | | Course Outcome | Skill | PO | Bloom's Taxonomy Level | Assessment Tools |
|---|---|---|---|---|---|---|
| CO1 | | Create their own Website or Portal using all the web technologies they have learnt through this programme. | Design | PO6 | L6 | Project/Assignment |
| CO2 | | Able to make the website live on the Internet and start making money | Apply | PO6 | L3 | Project/Assignment |
| CO3 | | Modify assistive tools for the running websites | Apply | PO6 | L3 | Project/Assignment |
| CO4 | | Create and compile their own idea in the form of a working and interactive website using all the technologies learnt throughout the program. | Design | PO5 | L6 | Project/Assignment |