

LEARNING OUTCOMES –FRAMEWORK – B.Sc. Animation

Manipal Institute of Communication, MAHE offers a three years Degree in Animation.

This degree looks at animation production in a large and holistic way, providing a thoroughly intensive and comprehensive experience to the students to develop the whole preproduction - production – postproduction process.

The semesters are designed to provide a strong practical and academic foundation. The subject establishes competent practical, functional skills and abilities that are essential for successful participation in variety of creative media settings. They also lay the foundations for addressing the academic demands of further studies like post graduate studies by forming and exercising basic cognitive abilities, relevant theoretical frame works positive and professional attitudes towards learning.

This BSc (Animation) Degree Programme with a Parallel Track Advancement (PTA) concept that enables students to acquire a holistic learning while mastering the craft of Animation.

This Parallel Track Advancement Concept encompasses the following:

- **General Education** – Training in related aspects outside the core subject leading to a broader and comprehensive development.
- **Traditional and Digital Learning** - Facilitating simultaneous introduction of traditional and digital techniques and enabling understanding of how these two are actually integrated.
- **Hands on Workshop Learning (H.O.W.L)** - Experiential learning outside a classroom set-up enabling creative exploration and development.
- **Holistic Personality Enhancement (H.O.P.E)** – While subject knowledge and skills are developed on the one hand, focus is also directed towards creating a holistic personality for confident functioning in a real world environment.

The course will have a total of **120** credits & **29** Subjects

DETAILED CURRICULUM

NATURE AND EXTENT OF THE PROGRAM

Manipal Academy of Higher Education's three-year Degree in Animation has been designed as a comprehensive training Programme where components of traditional skills, digital applications, Hands-on Workshop Learning (HOWL), Holistic Personality Enhancement (HOPE) and support skills, run on harmonized learning paths leading to a 'Parallel Track Advancement'.

The critical but diverse learnings seamlessly mesh together, going way beyond stereotypical structures of animation training. Each essential element of the course, as varied as conceptual understanding, technical ability, sculpting, acting, lectures, experiential learning, traditional art, software skills, designing, film appreciation, has been interlocked perfectly for a unique learning experience. Furthermore, the syllabus prepares you for the intriguing challenges in Animation, Film, Television, VFX, Advertising and Gaming Industry.

The Academic Team every year upgrading their Technical Skills for the Products / Application they teach. All our Animation Faculty members are "Certified Instructors" by Autodesk, Canada, thereby;

1. Benchmarking our Academic Team & Deliver Standards
2. The Team as Access to the global network of certified instructors through the Professional Instructor Community to share Assignments & curriculum
3. Provide Opportunity to students to collaborate with and represent Manipal Academy of Higher Education at industry forums & fairs.
4. We are the ONLY Authorized Training Centre for Media & Entertainment Product in Karnataka

1. PROGRAM EDUCATION OBJECTIVE (PEO)

The overall objectives of the Learning Outcomes-based Curriculum Framework (LOCF) for B.Sc. Animation program are as follows.

PEO No	Education Objective
PEO 1	Students will be able to use their fundamental concepts and technical competence in the animation domain as and when required to achieve professional excellence.
PEO 2	Students will demonstrate strong and well defined practical knowledge in different areas of animation such as 2D Animation, Preproduction, Comic Art & Design, 3D Animation, 3D Modeling, 3D Shading, 3D Lighting & Rendering, 3D Dynamics, VFX, Digital Compositing etc.
PEO 3	Students will be able to practice the profession with highly professional and ethical attitude, strong communication skills, and effective professional skills to work in a team with several specialized disciplines.
PEO 4	Students will be able to use interpersonal and collaborative skills to identify, assess and formulate creative inputs and execute the idea in creative sector.
PEO 5	Students will be able to imbibe the culture of creative thinking, research design, referencing & activities involved in animation studios.
PEO 6	Students will be able to participate in lifelong learning process for a highly productive career and will be able to relate the concepts of animation & design experience towards serving the cause of the society.

2. GRADUATE ATTRIBUTES:

S No.	Attribute	Description
GA 1	Disciplinary Knowledge	Knowledge of Animation & Design theories. Acquiring knowledge of different dimensions of traditional and digital animation, learning various tools of animation, storytelling, character development, design and other related areas of studies.
GA 2	Understanding different subsets of Animation	Preproduction, Comic Art & Design, Graphic Design, 3D Modeling 3D Shading, 3D Lighting & Rendering, 3D Character Animation, Visual Effects and Digital Compositing.
GA 3	Measurable Skills and Industry-ready Professionals	Strengthening the abilities of a learner by skills, gaining knowledge of the current trends in Animation & Design, Optional certification from Autodesk Training Centre in Creative profession.
GA 4	Effective and Influencing communication	Effective and Influencing communication ability to share creative thoughts, ideas and applied skills of communication in its various perspectives like Interpersonal, communication, computer skills, design & artwork presentation etc.
GA 5	Leadership readiness/ Qualities	To make learners fluent in multiple facets of artist leading creative organization. Creating the ability & enhancing the qualities to be an efficient artist. Cultivating key characteristics in learners, to be visionary head who can inspire the team to greatness. Attention to detail, adaptability, and receptiveness to feedback and direction.

GA 6	Critical/ Reflective thinking & language efficiency	Critical/ Reflective thinking ability to employ creative, critical and reflective thinking along with the ability to create the sense of awareness of one self and society.
GA 7	Technologically Efficient Professional	Capability to use various animation & design applications and ability to use utilities and tools for content creation related to creative studio.
GA 8	Ethical Awareness	As an artist, one has to understand the importance of ethical values and its application in professional life.
GA 9	Lifelong Learning	Every graduate to be converted into lifelong learner and consistently update himself or herself with current knowledge, skills and technologies. Acquiring Knowledge and creating the understanding in learners that learning will continue throughout life.
GA 10	Research-related Skills	A sense of inquiry and investigation for raising relevant and contemporary questions & ideas, synthesizing, articulating and executing.
GA 11	Cooperation/ Team work	Building a team, motivating and inspiring the team members to work up with cooperation to their utmost efficiency to develop animations and solve problems.

3. QUALIFICATIONS DESCRIPTORS

1. Demonstrate
 - (i) a systematic, extensive and coherent knowledge and understanding of an academic field of study as a whole and its applications, and links to related disciplinary areas/subjects of study; including a critical understanding of the established theories, principles and concepts, and of a number of advanced and emerging issues in the field of Animation;
 - (ii) Procedural knowledge that creates different types of professionals related to the Animation Industry, including research & development, teaching and government and public service;
 - (iii) Professional and creative skills in the domain of Preproduction, Comic Art & Design, Graphic Design, 3D Modeling, 3D Shading, 3D Lighting & Rendering, 3D Character Animation, Visual Effects and Digital Compositing, including a critical understanding of the latest applications, and an ability to use established techniques in the domain of animation & design.
2. Demonstrate comprehensive knowledge about creative art forms, including traditional and digital tools, relating to essential and advanced learning areas pertaining to the Animation field of study, and techniques and skills required for identifying creative solutions.
3. Demonstrate skills in identifying information needs, collection of relevant reference on a wide range of sources, observing and replicating of details.
4. Design Theories as appropriate to the subject(s) for creating effective art work.

5. Use knowledge, understanding and skills for critical assessment of a wide range of ideas and complex animation & design and issues relating to the chosen field of study.
6. Communicate the learnings undertaken in an academic field accurately in a range of different contexts using principles and models of the Animation studies.

PROGRAM OUTCOMES: After successful completion of B.Sc. Animation, Students will be able to:

PO No	Attribute	Competency
PO 1	Domain knowledge	Apply the fundamental knowledge of Animation & Design
PO 2	Design analysis	Identify, formulate, and study complex designs using principles of designing.
PO 3	Design/develop creative ideas	Design ideas for animation through concepts and references.
PO 4	Collection of references	Use reference for observations, analysis and interpretation of concept, and details of the information to provide valid and compelling artworks.
PO 5	Latest Application usage	Create, select, and apply appropriate applications and tools.
PO 6	Business and society	Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal, and cultural issues and the consequent responsibilities relevant to the creative practice.
PO 7	Environment and sustainability	Understand the impact of the creative works in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.
PO 8	Ethics	Apply ethical principles and commit to professional ethics and responsibilities and norms of the studio practice.
PO 9	Individual / Team work	Cultivating key characteristics in learners, to be visionary head who can inspire the team to greatness. Attention to detail, adaptability, and receptiveness to feedback and direction.
PO 10	Communication	Strong communication, presentation, interpersonal, and computer skills
PO 11	Project management	Demonstrate knowledge and understanding of the Project management principles and apply these to evaluate new and existing projects for effective decision making.
PO 12	Life-long learning	Recognize the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change.

PROGRAM STRUCTURE

BSc (Animation): (Three years course) – Papers with credit units & marks are indicated below.

Subject Code: ANI = B.Sc. in ANIMATION; 1101/3/5... = First year Odd Semester; 1102/4/6... = First year Even Semester

Credit System: L: Lecture Hour; T: Tutorial Hour; P; Practical Hour

1 Lecture Hour = 1 Credit

1 Tutorial Hour = 1 Credit

2 Practical Hours = 1 Credit

Subject Code & Nomenclature	Contact Hours			Credits	Evaluation			Total Marks
	L	T	P		Semester Examination		Internal Assessment	
Semester I					Theory	Practical	Internals	
ANI 1101: Art for Animation	1	1	4	4	-	50	50	100
ANI 1103: Digital Design	1	1	2	3	-	50	50	100
ANI 1105: Script for Animation	2	-	2	3	50	-	50	100
ANI 1107: Color Practice & Painting	2	-	2	3	-	50	50	100
ANI 1109: Communicative English	3	-	-	3	50	-	50	100
ANI 1111: Experimental Animation	-	1	6	4	-	50	50	100
ANI 1113: Art Appreciation	3	-	-	3	-	-	-	-
TOTAL No. of CREDITS & MARKS				20	100	200	300	600

Subject Code & Nomenclature	Contact Hours			Credits	Evaluation			Total Marks
	L	T	P		Semester Examination		Internal Assessment	
Semester II					Theory	Practical	Internals	
ANI 1102: Traditional Animation	2	-	4	4	-	50	50	100
ANI 1104: Digital Animation	1	1	4	4	-	50	50	100
ANI 1106: Matte Painting	1	1	2	3	-	50	50	100
ANI 1108: Pre Production	1	1	2	3	-	50	50	100
ANI 1110: Anatomy for Animation	1	-	4	3	-	50	50	100
ANI 1112: Interaction Design	1	1	2	3	-	50	50	100
ANI 1114: Environmental Science	3	-	-	3	-	-	-	-
TOTAL No. of CREDITS & MARKS				20	-	300	300	600

Subject Code: ANI = BSc in ANIMATION; 2201/3/5... = Second year Odd Semester; 2202/4/6... = Second year Even Semester

Subject Code & Nomenclature	Contact Hours			Credits	Evaluation			Total Marks
	L	T	P		Semester Examination		Internal Assessment	
Semester III					Theory	Practical	Internals	
ANI 2201: 3D Modeling I	1	1	4	4	-	50	50	100
ANI 2203: 3D Rigging	1	1	2	3	-	50	50	100
ANI 2205: 3D Animation I	1	1	2	3	-	50	50	100
ANI 2207: 3D Surface Shading	1	1	2	3	-	50	50	100
ANI 2209: Editing & Compositing	1	1	2	3	-	50	50	100
ANI 2211: Mini Project	-	1	6	4	-	50	50	100
ANI 2213: Project Management	3	-	-	3	-	-	-	-
TOTAL No. of CREDITS & MARKS				20	-	300	300	600

Subject Code & Nomenclature	Contact Hours			Credits	Evaluation			Total Marks
	L	T	P		Semester Examination		Internal Assessment	
SEMESTER IV					Theory	Practical	Internals	
ANI 2202: 3D Modeling II	1	1	4	4	-	50	50	100
ANI 2204: 3D Animation II	1	1	4	4	-	50	50	100
ANI 2206: Acting for Animation	1	-	4	3	-	50	50	100
ANI2 208: 3D Lighting & Rendering	1	-	4	3	-	50	50	100

ANI 2210: 3D Dynamics	1	1	4	4	-	50	50	100
ANI 2212: 3D & VFX	1	1	4	4	-	50	50	100
TOTAL No. of CREDITS & MARKS				22	-	300	300	600

Subject Code: ANI = BSc in ANIMATION; 3301/3/5... = Third year Odd Semester; 3302/4/6... = Second year Even Semester

Subject Code & Nomenclature	Contact Hours			Credits	Evaluation			Total Marks
	L	T	P		Semester Examination		Internal Assessment	
SEMESTER V					Theory	Practical	Internals	
Elective*								
ANI 3301 A: Preproduction								
ANI 3301 B: Comic Art & Design								
ANI 3301 C: Graphic Design								
ANI 3301 D: 3D Modeling								
ANI 3301 E: 3D Texturing	-	-	-	20	-	50	50	100
ANI 3301 F: 3D Lighting & Rendering								
ANI 3301 G: 3D Character Animation								
ANI 3301 H: Visual Effects								
ANI 3301 I: Digital Compositing								
TOTAL No. of CREDITS & MARKS				20		50	50	100

Subject Code & Nomenclature	Contact Hours			Credits	Evaluation			Total Marks
	L	T	P		Semester Examination		Internal Assessment	
SEMESTER VI					Theory	Practical	Internals	
ANI 3399: Project / Practice School	-	-	-	18	-	50	50	100
TOTAL No. of CREDITS & MARKS				18	-	50	50	100
TOTAL No. of COURSE CREDITS and MARKS				120	100	1200	1300	2600

- All End-semester Practical examinations shall be evaluated by the Internal & External Examiner.