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Competency Based Curriculum

(Classes 9 to 12; NSQF Levels 1 to 4)

Course: Media & Entertainment

(Job Role: Animator)

QP Ref. Id.: MES/ Q 0701

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Professor & Head

Curriculum Development and Evaluation Centre (CDEC),

National Skills Qualifications Framework Cell (NSQFC) and Electronic Media Development Centre (EMDC)

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Shyamla Hills, Bhopal – 462 013, M.P., India

COMPETENCY BASED CURRICULUM

Media & Entertainment (Job Role: Animator, QP Ref. Id.: MES/ Q 0701)
(Classes 9to 12; NSQF Levels 1 to 4)

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Preface

The Ministry of Human Resource Development (MHRD), Government of India introduced vocational courses from Class 9th onwards under the revised Centrally Sponsored Scheme of Vocationalisation of Secondary and Higher Secondary Education. The MHRD also developed a National Vocational Education Qualifications Framework (NVEQF), which was subsumed in National Skills Qualifications Framework (NSQF) in 2013. The NSQF organizes qualifications according to a series of levels of knowledge and skills. These levels are defined in terms of learning outcomes i.e. the competencies (knowledge, skills and attitude) which the learners must possess, regardless of whether they were acquired through formal, non-formal or informal education and training system. Qualifications are made up of occupational standards for specific areas of learning units or unit of competency. Units of competency are the specification of knowledge and skill to the standard of performance expected in the workplace. The unit of competency or National Occupation Standards, comprising generic and technical competencies that an employee should possess, are laid down by the Sector Skill Council of the respective economic or social sector.

Competency is defined in terms of what a person is required to do (performance), under what conditions it is done (conditions) and how well it is to be done (standards). It can be broadly categorized into foundational, practical and reflexive competencies. Generic competencies are considered essential for a person to participate effectively in the workforce, whereas technical competencies are an individual's knowledge and expertise in the specific group task, its processes and its rules and regulations.

The competency based curriculum is broken down into coherent parts known as Units. Each unit is further broken down into knowledge and skills on the basis of which evidence is to be provided by the learner and the evaluation is to be done by the teacher or trainer.

The PSS Central Institute of Vocational Education (PSSCIVE), a constituent unit of National Council of Educational Research & Training (NCERT) is an apex research and development Institute for vocational education. The institute has been mandated by the MHRD to develop curricula and courseware for vocational subjects to be introduced from Classes 9 to 12 under the NSQF.

The curriculum has been developed and reviewed by a group of experts and their contributions are admirably acknowledged. The utility of the curriculum will be adjudged by the qualitative improvement that it brings about in teaching-learning in vocational subjects. The feedback and suggestions on the content will be of immense value to us in bringing about necessary improvement in the curriculum.

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1.0 About the Course

The Media and Entertainment Industry in India is one of the fastest growing industries. Media and Entertainment industry has job opportunities for individuals in animation studios, creative design studios, art centers, multimedia development centers, etc.Its various segments, such as film, television, advertising, print media and musichave witnessed tremendous growth in the last few years. The industry is armed with digital technologies, state-of-the-art mobile devices, broadband and digital cinema.Even though traditional media, such as television and print are still the preferred medium, other segments such as animation, visual effects, films and music are slowly establishing themselves in the market.

Animator in the Media and Entertainment Industry is also known as Flash Animator or 3D Animator.An Animator is an artist who creates multiple images, which when displayed in rapid sequence, give an illusion of movement called animation. Animators can work in a variety of fields, including film, television, and video games.

An Animator needs to refer to the concept of artwork prepared by animation artists to produce a sequence of 2D/3D images by producing multiple images called frames, which when sequenced together rapidly create an illusion of movement known as animation. The images can be made up of digital or hand-drawn pictures, models or puppets. An Animator has the responsibilities of developing animation as per client requirement, creating storyboards, creating sketches, artwork or illustrations, designing models, backgrounds, sets, characters, objects, and animation environment, building up accurate, detailed frame-by-frame visuals,recording dialogue and working with editors to composite the various layers of animation (backgrounds, special effects, characters and graphics).It requires an individual to learn the fundamentals of life drawing which includes human anatomy, emotions, actions and expressions. The individual must know and keep updated on graphics and animation software and apply principles of design, animation and film-making to create animation sequences.

What Animators do?

- develop animation from the concepts
- create storyboards that depict the script and narrative
- perform drawing in 2D to create sketches, artwork or illustrations
- design models, backgrounds, sets, characters, objects and the animation environment
- use a range of materials, including modelling clay, plaster, oil paints, watercolours and acrylics for animation
- develop the timing and pace of the movements of a character or object during the sequence of images
- use software packages, such as Flash, Maya, Lightwave, Softimage, etc. to build up accurate, detailed frame-by-frame visuals
- record dialogue and work with editors to composite the various layers of animation
- work to production deadlines and meeting clients' requirements
- work in team with copywriters, photographers, designers, website designers and other specialists

2.0 Objectives of the Course

Upon completion of this course, you will be able to:

- Describe the uses and applications of Animation
- Describe the various types of Animation
- Demonstrate the knowledge of principles of Animation
- Demonstrate the knowledge of modern computers and their parts and peripherals
- Demonstrate fundamental skills of video and sound editing
- List the equipment and materials used in Animation
- Perform advanced level of computer usage
- Demonstrate the knowledge of basics compositing
- Demonstrate the various features of 2D Animation
- Demonstrate the knowledge of the concept of 3D production pipeline
- Communicate effectively at workplace
- Describe health, safety and hygiene related issues
- Communicate effectively at workplace
- Demonstrate the animation steps
- Explain the concept of biped walk cycle and run cycle
- Demonstrate the concept of facial expression and lip sync
- Demonstrate the concept of bouncing balls and steps of animation
- Demonstrate the knowledge of project setting and animation rendering
- Demonstrate the ability to work in a team and adapt to different work environment
- Demonstrate the ability to present attributes for effective performance at workplace

3.0 Course Structure

This course is a planned sequence of instructions consisting of modules called as Units.

NSQF Level 1 (Class 9)				
S.No.	**Unit Code**	**Unit Title**	**No. of Notional Learning Hours**	**Pre-requisite Unit, if any**
1.	**MEAM101-NQ2015**	Introduction to Computers and Internet Navigation	25	Nil
2.	**MEAM102-NQ2015**	Communication at Workplace	25	Nil
3.	**MEAM103-NQ2015**	Personality Development	15	Nil
4.	**MEAM104-NQ2015**	Introduction to Animation	15	Nil
5.	**MEAM105-NQ2015**	Principlesof Animation	15	Nil
6.	**MEAM106-NQ2015**	Introduction to 2D Animation	10	Nil
7.	**MEAM107-NQ2015**	3D Production Pipeline	15	Nil
		Total	120	

Successful completion of **120 hours** of theory sessions and **80 hours**of practical activities and on-the-job learning is to be done for full qualification.

NSQF Level 2 (Class 10)				
S.No.	**Unit Code**	**Unit Title**	**No. of Notional Learning Hours**	**Pre-requisite Unit, if any**
1.	**MEAM201-NQ2015**	Advance Computer Training	30	MEAM101-NQ2015
2.	**MEAM202-NQ2015**	Communication at Workplace(Basic)	30	MEAM102-NQ2015
3.	**MEAM203-NQ2015**	Customer Centricity	10	Nil
4.	**MEAM204-NQ2015**	Digital Film Making	20	Nil
5.	**MEAM205-NQ2015**	Basics of Video and Sound Editing	15	Nil
6.	**MEAM206-NQ2015**	Basic Compositing	15	Nil
		Total	120	

Successful completion of **120 hours** of theory sessions and **80 hours** of practical activities and on-the-job learning is to be done for full qualification.

NSQF Level 3 (Class 11)				
S.No.	**Unit Code**	**Unit Title**	**No. of Notional Learning Hours**	**Pre-requisite Unit, if any**
1.	**MEAM301-NQ2015**	Health, Hygiene, Safety and Ergonomics	20	Nil
2.	**MEAM302-NQ2015**	Communication at Workplace (Intermediate)	30	MEAM202-NQ2015
3.	**MEAM303-NQ2015**	Animation (Windows and Editor)	15	Nil
4.	**MEAM304-NQ2015**	Introduction to 2D Animation - Adobe Flash and Photoshop	20	Nil
5.	**MEAM305-NQ2015**	Basic Tools and Techniques of Animation in Maya	15	Nil
6.	**MEAM306-NQ2015**	Camera and Motion Path Animation	20	Nil
Total			120	

Successful completion of **120 hours** of theory sessions and 1**80 hours** of practical activities and on-the-job learning is to be done for full qualification.

NSQF Level 4 (Class 12)				
S.No.	**Unit Code**	**Unit Title**	**No. of Notional Learning Hours**	**Pre-requisite Unit, if any**
1.	**MEAM401-NQ2015**	Biped Walk and Run Cycle	20	Nil
2.	**MEAM402-NQ2015**	Communication at Workplace (Advanced)	30	MEAM302-NQ2015
3.	**MEAM403-NQ2015**	Posing of Body Mechanics	15	Nil
4.	**MEAM404-NQ2015**	Facial Expression and Lip Sync	15	Nil
5.	**MEAM405-NQ2015**	Advanced Acting	15	Nil
6.	**MEAM406-NQ2015**	Bouncing Balls and Steps of Animation	15	Nil
7.	**MEAM407-NQ2015**	Quadruped Walk Cycle and Run Cycle	15	Nil
8.	**MEAM408-NQ2015**	Basics of Project Setting and Animation Rendering	15	Nil
Total			140	

Successful completion of **140 hours** of theory sessions and **160 hours**of practical activities and on-the-job learning is to be done for full qualification.

4.0 Classroom Activities

Classroom activities are an integral part of this program and interactive lecture sessions, followed by discussions should be conducted by trained teachers. Teachers should make effective use of a variety of instructional aids, such as Videos, Colour Slides, Charts, Diagrams, Models, Exhibits, Hand-outs, Recorded Compact Discs, etc. to transmit knowledge in projective and interactive mode.

5.0 Practical Activities

Activities that provide practical experience in laboratory set up would include hands on training, case based problems, role play, games, etc. on various incidents and practical exercises in skill lab. Equipment and supplies should be provided to enhance hands-on experiences for students. Trained personnel should teach specialized techniques. A training plan signed by teacher that reflects equipment, skills and tasks should be prepared for training of the students in the organization/industry.

6.0 On-the-Job Training

On-the-job training (OJT) occurs whenever more experienced employee or supervisor teaches less experienced person on how to do one or more tasks of a job. The training utilizes actual equipment and materials. OJT should be undertaken in a structured manner with a training plan under the supervision of an experienced trainer or supervisor. A training plan that reflects tasks to be performed and competencies to be imparted should be prepared and signed by the student, teacher, and supervisor at the workplace for training of the students in the organization/industry. The trainer should break down all the steps of the job and train the students as per the training plan. In a structured OJT, the following steps should be followed:

Step 1: The Instructor or the trainer tell, show, demonstrate, and explain. The trainer gives an overview of the task while explaining the constructional details and use of the tools, equipment, materials, etc. in performing the tasks.

Step 2: The Instructor or the trainer demonstrates each step in detail, actually doing the steps of the task and explaining each step, one at a time, while the trainee watches. The steps may not necessarily be demonstrated in the sequence of actual operation, as sometimes it is better that simple tasks are demonstrated first to build confidence. Showing finished products at each appropriate step will help the leaner understand what is required as outcome. While demonstrating, the trainer explains why each step is done in the way it is done.

Step 3: It involves direct trainee participation. The trainer monitors the progress on a checklist of competencies and offers feedback and pointers where and when needed.

Step 4: The trainee practices with clearly defined targets for performance standards.

7.0 Certification

Upon successful completion of this course the State Education Board and the Media and Entertainment Sector Skill Council (MESC) will provide a certificate to the student verifying the competencies acquired by the candidate. For more details about MESC visit the website of Media and Entertainment Sector Skill Council at http://www.mescindia.in/.

8.0 Syllabus - Achievement Standards and Teaching/Training Methods

NSQF Level 1 (Class 9)

Unit Code: MEAM 101-NQ2015	**Unit Title: Introduction to Computers and Internet Navigation**			
Location: **Classroom and Computer Lab**	**Duration: 25 hours**			
	Learning Outcome	**Knowledge Evaluation**	**Performance Evaluation**	**Teaching and Training Method**
	Demonstrate the use of computer peripherals	1. Describe the parts of a computer system 2. Describe the use of different types of software 3. Differentiate between primary and secondary memory 4. Differentiate between system software and application software 5. Distinguish between common I/O ports and connectors	1. Identify hardware components of computer 2. Connect various parts and devices of computer system. 3. Start and shut down a computer system	**Interactive lecture:** Introduction to computer system **Activity:** Practice sessions on identification of various components of computer system and connecting them to the Central Processing Unit (CPU)
	Manage files and folders	1. Describe the purpose of files and folders 2. Describe the procedure for locating files and folders on the drive	1. Create a file and folder. 2. Locate and rename a folder and file 3. Delete a file or folder. 4. COPY-PASTE file and folder 5. CUT-PASTE file and folder	**Interactive lecture:** Managing files and folders **Activity:** Practice sessions on managing files and folders
	Demonstrate the use of Internet, surfing and social networking sites	1. Describe purpose of internet and world wide web 2. Explain the terms – Internet Service	1. Demonstrate how to connect to internet 2. Open and close web browsing application 3. Enter the URL in the	**Interactive lecture:** Internet and using the browsers and social networking sites

		Provider, Uniform Resource Locator, Hyperlink, etc. 3. Name different web browsers 4. Describe the risks associated with the online activities, like unintentional disclosure of personal information, bullying or harassment, targeting of users by predators and virus	address bar 4. Search documents using search engines 5. Navigate forward and backward between previously visited webpages 6. Carry out search for specific information using a keyword and phrase 7. Save a page to a location 8. Set the browsers webpage 9. Block and allow pop-ups and cookies 10. Delete browsing history	**Activity:** Practice sessions on using internet and social networking sites and use different search engines
	Demonstrate the use of Email	1. Describe the purpose of email 2. Explain the structure of email address 3. Describe the various features of email and their uses 4. Describe the advantages of using email, like speed of delivery, low cost, facility for attachment of documents, spell check facility, etc. 5. Describe the difference between the To, CC and BCC fields. 6. Describe the procedure of sending, forwarding andsearching emails 7. Discuss the best practices to be adopted while using email	1. Create an email account 2. Compose an email 3. Insert and remove a file attachment 4. Open the Sent box to see the emails sent 5. Add signatures 6. Prepare and save a draft message in Drafts folder 7. Use a spell check tool for checking spelling mistakes and correcting spelling errors 8. Copy text from another source into an email 9. Retrieve emails saved in the Drafts box and edit them before sending. 10. Flag email as Spam and recover email from Spam folder 11. Manage an email account by moving emails into folders/labels 12. Manage email account by deleting unwanted messages from inbox and trash folder 13. Update an address book from incoming email 14. Search for email	**Interactive lecture:** Using Email services **Activity:** Practice sessions on opening and managing email account

Unit Code: MEAM 102-NQ2015	**Unit Title: Communication at Workplace**			
Location: **Classroom**	**Duration: 25 hours**			
	Learning Outcome	**Knowledge Evaluation**	**Performance Evaluation**	**Teaching and Training Method**
	Identify elements of communication cycle	1. Describe the meaning of communication 2. State the different elements of communication cycle 3. Differentiate between Sender, Message, Medium, Receiver and Feedback. 4. Describe the importance of active listening	1. Identify elements of communication cycle 2. Draw a diagram of communication cycle	**Interactive lecture**: Elements of communication cycle **Activity:** Drawing a communication cycle Case based problems
	Provide feedback	1. Describe the meaning of feedback 2. Describe the importance of feedback 3. Describe the characteristics of feedback 4. Differentiate between descriptive and specific feedback	1. Construct asentence forproviding descriptive and specificfeedback 2. Demonstrate the use of different characteristics of feedback	**Interactive lecture**: Characteristics of feedback **Activity:** Assignment onconstructing sentences for providing descriptive and specific feedback Case based problems
	Overcome barriers in communication	1. Describe the factors that act as communication barrier 2. Describe the ways to overcome barriers in effective communication	1. Enlist barriers to effective communication at workplace 2. Demonstratethe ability to overcome barriers in communication	**Interactive lecture:** Barriers in communication **Activity:** Group discussion on factors responsible for barrier in communication
	Applyprinciples of communication	1. Describe the various principles of effective communication	1. Construct a sentence thatconvey all factsrequired by thereceiver 2. Construct asentenceemphasizing on specific message 3. Communicate in amanner that shows respect to the receiver	**Interactive lecture**: Principles of effective communication **Activity:** Role play, games and assignment on constructing sentences that convey facts and emphasize on specific message

Unit Code: MEAM 103-NQ2015	**Unit Title: Personality Development**			
Location: **Classroom**	**Duration: 15 hours**			
	Learning Outcome	**Knowledge Evaluation**	**Performance Evaluation**	**Teaching and Training Method**
	Describe the basic personality traits, types and disorders	1. Describe the meaning of personality 2. Describe how personality influence others 3. Describe basic personality traits 4. Describe common personality disorders- paranoid, antisocial, schizoid, borderline, narcissistic, avoidant, dependent and obsessive	1. Demonstrate the knowledge of different personality types	**Interactive lecture**: Personality traits, types and disorders **Activity:** Role Play
	Demonstrate the ability to communicate clearly and politely on telephone	1. Describe the procedure of greeting the customer on telephone call 2. Enlist the preparations to be made before receiving a telephone call	1. Demonstrate the ability to convey message clearly and completely over telephone 2. Demonstrate the procedure for leaving message on telephone 3. Demonstrate the procedure to answer the telephone call	**Interactive lecture**: Communicating clearly and politely on telephone **Activity:**Games based on improvement of telephonic conversation's skills
	Demonstrate the ability to work independently	1. Describe the importance of the ability to work independently 2. Describe the types of Self Awareness 3. Describe the meaning of Self-motivation and Self-regulation	1. Setting goals 2. Plan and finish tasks in aspecific period, with no help or directives 3. Demonstrate how to work independently 4. Demonstrate the qualities required for working independently	**Interactive lecture**: Working independently **Activity:** Complete a task independently within a specific time period without any help
	Demonstrate team work skills	1. Describe the important factors in team building 2. Describe factors influencing team work	1. Demonstrate the ability to work in a team	**Interactive lecture**: Importance of team work **Activity:** Playing games for improving team work skills Group discussion
	Demonstrate impressive appearance and grooming	1. Describe the importance of dressing appropriately, looking decent and positive body language 2. Describe the term grooming 3. Prepare a grooming checklist 4. Describe the techniques of self-exploration	1. Demonstrate impressive appearance and groomed personality 2. Demonstrate ability to self- explore	**Interactive lecture**: Importance of impressive appearance and grooming **Activity:** Prepare a chart of different dressing styles for various occasions Practice session on self -exploration

Unit Code: MEAM104-NQ2015	**Unit Title: Introduction to Animation**			
Location: **Classroom/ Digital Studio**	**Duration: 15 hours**			
	Learning Outcome	**Knowledge Evaluation**	**Performance Evaluation**	**Teaching and Training Method**
	Describe the history of animation	1. Explain the evolution of animation, with examples 2. Describe the history of animation	1.Explain how the animation industry evolved from its early days 2. Give examples of the use of animation	**Interactive Lecture:** History of animation **Activity**: Prepare a scrap book on history of animation Discussion on milestones in evolution of animation
	Demonstrate the knowledge of various types of traditional animation methods	1. Describe the various traditional methods of animation (e.g. hand drawn animation)	1.Give examples of traditional methods of animation 2.Demonstrate the knowledge of hand drawn animation and Claymation (animation using clay)	**Interactive Lecture:** Traditional animation practices **Activity**: Ask students to perform internet search on various traditional practices in animation and submit a presentation Prepare a Flipbook of images to demonstrate the traditional method of animation
	Demonstrate the knowledge of modern methods of Animation – e.g. Stop Motion Animation	1. Describe the meaning of Stop Motion Animation	1.Differentiate between modern animation and traditional animation 2.Describe the procedure adopted for Stop Motion Animation	**Interactive Lecture:** Stop Motion Animation **Activity**: Visit to a Animation Studio for understanding the various methods of animation
	Demonstrate the knowledge of the process of Computer Animation (2D & 3D Animation)	1. Describe the basic concepts of computer animation 2. Describe the advantages of computer animation over traditional animation methods	1. Differentiate between 2D and 3D animation 2.Demonstrate the knowledge of Digital animation approaches (frame by frame, shape and motion tweening) 3. Identify pivot point locations of nodes, groups and other 3D	**Interactive Lecture:** Various aspects of 2D and 3D animation **Activity**: Create and edit node based-hierarchies within a 3D environment

			objects	(generate conceptual skeleton for 3D models, apply skin to bind joints to geometry, modify the bind and skin weights and design custom character rigs for animation)
	Describe production pipeline	1. Explain the concept of productionpipeline	1. Demonstrate the knowledge of steps involved in the animation production pipeline	**Interactive Lecture:** Concept of Production pipeline **Activity**: Visit to a Animation Studio
	Describe the process of pre-production and story-boarding	1. Describe the concepts of pre-production and story-boarding activities	1. Explain the pre-production activities 2. Develop a short storyboard	**Interactive Lecture:** Preproduction activities and storyboarding **Activity**: Develop storyboards

Unit Code: MEAM105-NQ2015	**Unit Title: Principles of Animation**			
Location: **Classroom/ Digital Studio**	**Duration: 15 hours**			
	Learning Outcome	**Knowledge Evaluation**	**Performance Evaluation**	**Teaching and Training Method**
	Describe twelve principles of animation	1. Define twelve principles on which animation is established: • Squash and Stretch • Exaggeration • Anticipation • Ease In and Out • Arcs • Overlapping Action and Follow-through • Pose to Pose and Straight Ahead Animation • Reference and Planning • Timing • Staging • Appeal • Personality 2. Describe different techniques of animation	1. Explain twelve basic principles of animation 2. Enlist the advantages and limitations of different animation techniques	**Interactive Lecture:** Principles of animation **Activity**: Case study Students should be asked to experiment on animating techniques and create collaborative storyboards

Unit Code: MEAM 106-NQ2015	**Unit Title: Introduction to 2D Animation**			
	Duration: 10 hours			
Location:	**Learning Outcome**	**Knowledge Evaluation**	**Performance Evaluation**	**Teaching and Training Method**
Classroom/ Digital Studio	Demonstrate the concept of 2D Animation	1. Explain the basics of 2D animation 2. Explain the concept of production, pre-production and post-production	1. Demonstrate knowledge of storyboard image 2. Describe in details the phases-preproduction, production and post-production	**Interactive lecture:** 2D animation **Activity**: Video Sessions of 2D animated clips
	Demonstrate different types of 2D Animation	1. Describe path animation and stop-motion animation 2. Describe rotoscoping 3. Demonstrate knowledge on cinemagraphs	1. Explain the process of different 2D animation 2. Describe the details on functionality	**Interactive lecture:** Types of 2D Animation **Activity**: Prepare a chart containing various 2D animation processes with some examples
	Demonstrate the basic process of 2D animation	1. Describe work cycle of 2D animation 2. Explain the process of creating a walkcycle	1. Differentiate between 2D and 3D animation 2. Demonstrate how to create a torsion	**Interactive lecture:** Process of 2D Animation **Activity**: Create 2D animations using tools and techniques of the software application; import/add assets in line with storyboard and plan; Assemble assets in frames on the timeline and animate movement
	Demonstrate the flash animation	1. Explain the process of limited animation or cut-out animation 2. Describe email as a mode of capturing conversations 3. Describe meetings as a mode of capturing conversations	1. Demonstrate knowledge on flash cartoon	**Interactive lecture:** Flash animation **Activity**: Create walk cycle poses in flash

Unit Code: MEAM107-NQ2015	**Unit Title: 3D Production Pipeline**			
	Duration: 15 hours			
	Learning Outcome	**Knowledge Evaluation**	**Performance Evaluation**	**Teaching and Training Method**
Location: **Classroom/ Computer Lab/Digital Studio**	Describe the Pre-production activities	1. Explain story boarding 2. Define layouts 3. Describe model sheets and animatic	1. Demonstrate how to perform pre-production activities 2. Prepare a flow chart of pre- production activities and required materials/equipment 3. Identify the various drawing and text tools and the utility of the same (geometric, line, pen, brush, text, stroke, fill, point, erase, etc.)	**Interactive lecture**: Pre-production activities **Activity:**Visit to a digital film making studio to learn the pre-production activities
	Describe the concept of texturing and modelling (Production 1)	1. Explain texturing and modeling 2. Explain the basic standards followedintexturing and modeling	1. Create model for stop motion 3D animation 2. Texture a character	**Interactive lecture**: Concept of texturing and modelling **Activity:** Presentations Learn texturing and modeling on software
	Describe the concept of Lighting and Rigging (Production 2)	1. Explain lighting and rigging 2. Explain the basic standards followed in lighting and rigging 3. State importance of lighting in animation	1. Demonstrate the concept of lighting and rigging 2. Demonstrate the use of concept of lighting to create a bright image	**Interactive lecture**: Concept of lighting and rigging **Activity:** Presentations Learn lighting and rigging on software
	Describe the post-production activities	1. Describe the post production process of animation 2. Explain exporting and rendering	1. Demonstrate how to perform post-production activities 2. Prepare a flow chart of postproduction activities and required materials/equipment	**Interactive lecture**: Post production activities **Activity:** Visit to a digital film making studio to learn the post production activities

NSQF Level 2 (Class 10)

Unit Code: MEAM 201-NQ2015	**Unit Title: Advance Computer Training**			
Location: **Classroom and Computer Lab**	**Duration: 30 hours**			
	Learning Outcome	**Knowledge Evaluation**	**Performance Evaluation**	**Teaching and Training Method**
	Demonstrate knowledge of using applications of Windows 8 and Linux operating systems	1. Describe functions of different desktop applications of Windows 8 Operating System 2. Describe the functions of different desktop applications of Linux Operating System	1. Demonstrate the use of various applications of Windows 8 Operating Systems 2. Demonstrate the use of various applications of Linux Operating Systems 3. Draw flow chart for accessing, opening and closing the applications in the Windows 8 and Linux operating systems	**Interactive lecture:** Using applications of Windows 8 and Linux operating systems **Activity:** Practical session on using applications of Windows 8 and Linux operating systems
	Demonstrate knowledge of Microsoft Word	1. State the tasks that can be performed on MS word 2. Describe different objects of MS word	1. Demonstrate how to perform following activities in MSWord : • format text • use word art • use clip art, shapes and smart art • align the text • insert symbols • insert page borders • insert tables • set orientation • insert headers, footers and page number • make different types of chart • modify line spacing, create bulleted and numbered lists • spell and grammar check • save document • print document • use help option	**Interactive lecture:** Working on Microsoft Word **Activity:** Practice session on Microsoft Word
	Demonstrate knowledge of Microsoft Excel	1. State the tasks that can be performed on MS Excel 2. Describe different objects of MS Excel	1. Demonstrate how to perform following activities in MS-Word : • format cells • insert rows and columns • use multiple sheets • align the text • insert symbols • perform simple	**Interactive lecture:** Working on Microsoft Excel **Activity:** Practice sessions on Microsoft Excel

			calculations • set orientation • perform merging of the cells • make different types of chart • use filter option • perform sorting • save document • print document • use help option	
	Demonstrate ability to install and uninstall various software on computer	1. Draw flow chart of browsing the program features on control panel tag 2. Enlist the pre-requisites of installing any program in Windows OS 3. Differentiate between licensed and unlicensed software packages	1. Install and uninstall demo version of any of the open source antivirus 2. Install and uninstall Microsoft Office	**Interactive lecture:** Install and uninstall various software on computer **Activity:** Practice sessions on configuring various software on computer

Unit Code: MEAM 202-NQ2015	**Unit Title: Communication at Workplace (Basic)**			
	Duration: 30 hours			
Location: **Classroom**	**Learning Outcome**	**Knowledge Evaluation**	**Performance Evaluation**	**Teaching and Training Method**
	Demonstrate how to greet people and give self-introduction	1. Write the sentences used to introduce oneself 2. Write sentences used to greet people on different occasions/situations	1. Demonstrate how to give self-introduction to others using appropriate sentences with proper body language 2. Demonstrate how to greet people using appropriate words with proper body language	**Interactive Lecture:** Greeting people and giving self-introduction **Activity**: Role play Make a chart of the sentences that can be used to greet the people and give self-introduction
	Demonstrate how to frame sentences for different occasions/situations	1. Enlist the words commonly used for framing questions 2. State the adjectives that are generally used for describing people, things and places	1. Demonstrate how to tell the time effectively using appropriate sentences 2. Identify the sentences used while meeting someone for the first time 3. Demonstrate use of appropriate sentences for describing people, things and places 4. Frame sentences to	**Interactive Lecture:** Framing sentences for different occasions/situations **Activity**: Role Play

			congratulate someone 5. Frame sentences to give good wishes to someone 6. Frame sentences to invite people on various occasions	
	Describe weather and express likes, dislikes, strengths, weaknesses and aspirations using proper sentences	1. State the adjectives commonly used for describing weather 2. Write the words used for expressing likes, dislikes, strengths, weaknesses and aspirations	1. Demonstrate the use of appropriate sentences for describing weather 2. Express likes and dislikes effectively 3. Express strengths and weaknesses effectively 4. Express aspiration using appropriate sentences	**Interactive Lecture:** Describing weather and express likes, dislikes, strengths, weaknesses and aspirations **Activity**: Role play Group Discussion
	Demonstrate the ability to pronounce effectively	1. Define phonetics 2. State the importance of correct pronunciation 3. Describe the subfields of phonetics 4. Distinguish between phonetics and phonology	1. Pronounce common English words in correct manner 2. Identify the applications of phonetics	**Interactive Lecture:** Pronouncing effectively **Activity**: Role play Group discussion Audio session on phonetics

Unit Code: MEAM 203-NQ2015	**Unit Title: Customer Centricity**			
	Duration: 10 hours			
Location: Classroom	**Learning Outcome**	**Knowledge Evaluation**	**Performance Evaluation**	**Teaching and Training Method**
	Demonstrate the skills to handle customers effectively	1. Explain customer handling as important part of business cycle 2. Explain how to identify customer needs, preferences and expectations	1. Demonstrate the knowledge of do's and don'ts while handling customers 2. Demonstrate how to maintain customer loyalty 3. Demonstrate how to build strong relationship with customers 4. Demonstrate how to decrease the customer's waiting time	**Interactive Lecture:** Handling customers effectively **Activity**: Role play Video/Audio screening of best practices of customer handling
	Demonstrate the skills of taking orders on call	1. Describe the process of taking orders over telephone 2. Write the words/sentences used while taking orders on call	1. Demonstrate the do's and don'ts while taking orders over telephone 2. Record and organize the orders accurately	**Interactive Lecture:** Taking orders on calls **Activity**: Role play Case based problem

				Video/Audio screening of best practices of taking orders on calls
	Demonstrate how to handle customer complaints	1. Describe typical types of customer complaints 2. Describe the steps of handling customer complaints	1. Record and organize complaints 2. Demonstrate the following steps of handling customer complaints: • listening and understanding the complaint • empathize • offering the solution • executing the solution • taking follow up	**Interactive Lecture:** Handling customer complaints **Activity**: Role play Video/Audio screening of best practices of handling customer complaints
	Demonstrate how to answer enquiries	1. Describe steps of answering enquiries 2. State Frequently Asked Questions (FAQs) while enquiries 3. Explain the importance of knowledge of product/services in answering enquiries	1. Demonstrate how to answer enquiries in following manner: • acknowledge receipt of an enquiry/request • explain action taken as a consequence of the enquiry • make suggestions and justify recommendations • apologize and reject proposals • stipulate action requested or to be taken • establish goodwill and suggest contacts	**Interactive Lecture:** Answering enquiries **Activity**: Role play Case study Video/Audio screening of best practices of answering enquiries

Unit Code: MEAM204-NQ2015	**Unit Title: Digital Film Making**			
Location: **Classroom/ Computer Lab/Video and Sound Editing Studio**	**Duration: 20 hours**			
	Learning Outcome	**Knowledge Evaluation**	**Performance Evaluation**	**Teaching and Training Method**
	Demonstrate the use of Digital Camera	1. Explain features of a Digital Camera 2. Explain the essence of cinematography 3. Describe the terms zoom and dolly 4. Differentiate between the lens and the imager	1. Demonstrate the use of Digital Camera	**Interactive lecture**: Using digital camera **Activity:**Practice session on using Digital Camera
	Demonstrate the	1. Explain different	1. Demonstrate the	**Interactive lecture**:

	art of taking camera shots	types of camera shots	posture needed for close up shots 2. Demonstrate the posture required for the point of view shot	The art of taking camera shots **Activity:**Practice various ways to shoot a picture. Use a model if needed.
	Demonstrate the ability to build a story	1. Describe the setting and character required in photography 2. Explain importance of plot 3. Explain importance of back story	1. Enlist some basic rules and protocols in making a story theme 2. Build a short story	**Interactive lecture**: Building a short story **Activity:**Build a short story
	Describe the concept of standing, straight ahead and pose to pose action	1. Describe protagonist and antagonist 2. Explain the 3 art structures 3. Explain importance of standing, straight ahead and pose to pose action in digital film making 4. Describe character arc and story structure	1. Demonstrate the straight ahead and pose to pose action 2. Demonstrate the 3 art structures	**Interactive lecture**: Concept of standing, straight ahead and pose to pose action **Activity:**Write a short script for a story using straight ahead and pose to pose action & the 3 art structures

Unit Code: MEAM 205-NQ2015	**Unit Title: Basics of Video and Sound Editing**			
	Duration: 15 hours			
	Learning Outcome	**Knowledge Evaluation**	**Performance Evaluation**	**Teaching and Training Method**
Location: **Classroom/ Computer Lab/Video and Sound Editing Studio**	Use Adobe Premiere Pro	1. Explain the concept of work spaces with examples 2. Describe video and sound editing projects and its creation	1. Demonstrate the use of tool box of Adobe Premiere Pro	**Interactive lecture**: Using Adobe Premiere Pro **Activity:**Create a project in Adobe premiere pro
	Edit the video	1. Describevideo editing work flow 2. Describe timeline panel 3. Explain basic standards followed in editing a video 4. Describe clips and its types	1. Demonstrate how to edit the video	**Interactive lecture**: Editing a video **Activity:**Visit to a digital film making studio and learn how to edit a video
	Use Adobe Sound Boot	1. Describe the procedure of increasing or decreasing the amplitude of a range by using the volume pop-up menu	1. Demonstrate the ability to use simple features of Adobe Sound Booth 2. Give demo ofediting the beginning or end of an audio track	**Interactive lecture**: Using Adobe Sound Booth **Activity:**Hands on practice on the use of Adobe Sound Booth
	Editthe sound	1. Explain various ways of editing	1. Demonstrate how to increase or decrease	**Interactive lecture**: Editing a sound track

		audio track	the length of the range by clicking and dragging the start and end points of the audio track 2. Demonstrate how to edit the sound track	**Activity:**Visit to a digital film making studio and learn how to edit a sound track

Unit Code: MEAM 206-NQ2015	**Unit Title: Basic Compositing**			
Location: **Classroom/ Computer Lab/Digital Studio**	**Duration: 15 hours**			
	Learning Outcome	**Knowledge Evaluation**	**Performance Evaluation**	**Teaching and Training Method**
	Use Adobe after effects	1. Explain work spaces and its types 2. Explain the concept and use of various tools of tool box	1. Demonstrate how to create and arrange layers in a composition	**Interactive lecture**: Using Adobe after effects **Activity:**Visit to a digital film making studio and create an after effect photography
	Demonstrate how to create compositions	1. Explain the basic standards followed in compositions 2. Explain minimum requirements for compositing images through the following: • physical composition • multiple exposure • background projection • matting	1. Composite the image using following techniques: • Physical composition • Multiple exposure • Background projection • Matting	**Interactive lecture**: Creating compositions **Activity:**Visit to a digital film making studio and learn how to create compositions
	Demonstrate preview of Video and Audio	1. Explain use of workspace 2. Explain use of current time indicator 3. Explain use of Safe Zones, Grids, Guides, and Rulers	1. Demonstrate use of workspace 2. Move the current time indicator 3. Demonstrate working with Safe Zones, Grids, Guides, and Rulers	**Interactive lecture**: Previewing video and audio **Activity:**Visit to a digital film making studio and learn how to preview video and audio
	Demonstrate the knowledge of compositing	1. Define Layers 2. The various types of Layers 3. Explain transitions and effects (fade, dissolve, cut)	1. Demonstrate working with effects through Effect Controls Panel	**Interactive lecture**: Composting **Activity:**Visit to a digital film making studio and learn composting

NSQF Level 3 (Class 11)

Unit Code: MEAM 301-NQ2015	Unit Title: Health, Hygiene, Safety & Ergonomics			
Location: **Classroom and Digital Studio**	**Duration: 20 hours**			
	Learning Outcome	**Knowledge Evaluation**	**Performance Evaluation**	**Teaching and Training Method**
	Describe the importance of maintaining hygienic conditions in work area	1. Describe the need of maintaining hygiene in work space 2. State the materials used for maintaining hygiene in work area	1. Differentiate between health and hygiene 2. Demonstrate practices adopted for maintaining good health and hygienic conditions at work area	**Interactive lecture**: Best practices in maintaining cleanliness **Activity:** Visit to a digital studio to observe best practices adopted to maintain hygienic and safe working conditions
	Describe potential hazards and safe practices to be adopted at the work area and extinguishing small fires	1. State the potential hazards in work area 2. Describe the practices to be adopted for ensuring occupational health and safety	1. Enlist various safety accessories used in store 2. Differentiate between common safety and health concerns and problems	**Interactive lecture:** Measures to ensure safety in work area **Activity:** Visit to a digital studioto observe safety measures
	Demonstrate the knowledge of handling money and irate clients	1. Describe ways to handle money 2. State how to manage and deal with irate clients	1. Demonstrate the knowledge of handling money 2. Demonstrate the ability to deal with irate clients	**Interactive lecture:** Handling money and irate clients **Activity:** Visit to a digital studio to enquire about how they manage irate clients and handle transaction of money

Unit Code: MEAM 302-NQ2015	Unit Title: Communication at Workplace (Intermediate)			
Location: **Classroom**	**Duration: 30 hours**			
	Learning Outcome	**Knowledge Evaluation**	**Performance Evaluation**	**Teaching and Training Method**
	Demonstrate the ability to write sentences correctly	1. Describe the meaning of apostrophes 2. State the frequently misused words and their proper usage 3. Describe the use of spell check on computer 4. Describe the	1. Differentiate between internal and external communication 2. Demonstrate the knowledge of collecting and processing information from different sources	**Interactive lecture:** Written communication skills **Activity:** Practice sessions on written communication skills

		various modes of communication		
	Demonstrate the practices used in improving oral communication skills	1. Describe the verbal &non-verbal communication 2. Explain the importance of verbal & non-verbal communication 3. State practices of verbal & non-verbal communication	1. Differentiate between verbal and nonverbal communication 2. Identify the practices in verbal and non-verbal communication	**Interactive lecture:** Improving oral communication skills **Activity:** Practice sessions on oral communication skills
	Demonstrate the knowledge of types of communication	1. Describe formal communication 2. Explain informal communication or grapevine communication	1. Differentiate between upward, downward and horizontal communication 2. Differentiate between verbal and non-verbal communication 3. Enlist various static and dynamic features of non-verbal communication	**Interactive lecture:** Types of communication **Activity:** Role play to demonstrate various types of communication

Unit Code: MEAM303-NQ2015	**Unit Title: Animation (Windows and Editor)**			
	Duration: 15 hours			
	Learning Outcome	**Knowledge Evaluation**	**Performance Evaluation**	**Teaching and Training Method**
Location: **Classroom/ Digital Studio**	Demonstrate the process of dope sheet	1. Describe dope sheet menu bar 2. Describe dope sheet edit menu	1. Identify the resampling curves 2. Demonstrate knowledge on spreadsheet	**Interactive lecture:** The Dope Sheet **Activity**:Create a chain using basic polygons primitives and animate it using dope sheet
	Demonstrate knowledge of animation control and interface	1. Describe the various terms in animation 2. Describe the timeline and keys 3. Describe the non-liner animation 4. Describe the tool bar	1. Demonstrate the knowledge of timeline and keys 2. Demonstrate the knowledge of non-liner animation 3. Demonstrate knowledge of the tool bar	**Interactive lecture:** Animation control and interface **Activity**: Prepare a chart containing various 2D animation processes with examples
	Demonstrate knowledge ofnon-liner animation	1. Explain how to edit the clips and manipulate them to get a required animation	1. Edit animated clips	**Interactive lecture:** The non-liner animation **Activity**: Edit and

		2. Explain the open trax editor		manipulate the clips to get a required animation in an Open trax editor
	Describe animation layer editor	1. Explain the layer editor 2. Explain the graphic editor	1. Demonstrate knowledge of trax editor 2. Lists the graphic editor's components	**Interactive lecture:** Animation layer editor **Activity**: Practise session on the working procedure of animation layer editor

Unit Code: MEAM304-NQ2015	**Unit Title: Introduction to 2D Animation - Adobe Flash and Photoshop**			
Location: Classroom	**Duration: 20 hours**			
	Learning Outcome	**Knowledge Evaluation**	**Performance Evaluation**	**Teaching and Training Method**
	Describe the process of 2D animation in Flash	1. Explain basics of creating 2D animation using Flash	1. Perform 2D animation in Flash	**Interactive Lecture:** 2D animation in Flash **Activity**: Create a simple 2D animation using flash
	Describe Graphics animation using Adobe Photoshop	1. Explain basics of creating graphics animation using Adobe Photoshop	1. Perform graphic animation in Adobe Photoshop	**Interactive Lecture:** Graphics Animation in Adobe Photoshop **Activity**: Create a basic graphic animation using Photoshop

Unit Code: MEAM305-NQ2015	**Unit Title: Basic Tools and Techniques of Animation in Maya**			
Location: Classroom	**Duration: 15 hours**			
	Learning Outcome	**Knowledge Evaluation**	**Performance Evaluation**	**Teaching and Training Method**
	Demonstrate knowledge of timeline and keys	1. Explain the disadvantage of auto key 2. Describe Maya timeline in details	1. Demonstrate the use of Maya timeline 2. Demonstrate knowledge of changing settings in Maya timeline	**Interactive lecture:** Timeline and keys in animation **Activity**: Animate the translate value of a sphere using timeline and key
	Demonstrate the knowledge of frames, timing, frame rate and keyframes	1. Explain frames, timing and frame rate 2. What is key frame? 3. Why do we need to	1. Identify number of frames, timing, frame rate and key frame in animation 2. Demonstrate the	**Interactive lecture:** Introduction to Key frame **Activity**: Animate

		use key frames? 4. What are the various aspects of key frame? (picture size, position, rotation) 5. Describe the concept of setting key frames 6. Explain the importance of the S key.	knowledge of relationship between tweening and key frame 3. Demonstrate the knowledge of setting keyframes	the translate value of a sphere and add inbetween keys to make the sphere up in the middle
	Demonstrate knowledge of the graphic editor	1. Describe the concept of the graphic editor 2. Demonstrate knowledge of editing animation curves using graphic editor	1. Demonstrate editing in the graphic editor	**Interactive lecture:** The graphic editor **Activity**: Draw a diagram of graphiceditor showing the graph and value with respect to time
	Demonstrate knowledge of creating a bouncing ball	1. Representation of different bouncing balls 2. Describe the details of bouncing ball	1. Demonstrate knowledge of use of middle-mouse-button	**Interactive lecture:** Creating a bouncing ball **Activity**: Practice session on bouncing ball animation

Unit Code: MEAM 306-NQ2015	**Unit Title: Camera and Motion Path Animation**			
	Duration: 20 hours			
Location: Classroom	**Learning Outcome**	**Knowledge Evaluation**	**Performance Evaluation**	**Teaching and Training Method**
	Demonstrate knowledge of creating cameras	1. Describe cameras in details and also explain its functions 2. Describe various terms in cameras 3. Describe the function of each parts in a camera	1. Demonstrate knowledge of path animation	**Interactive lecture**: Explain the concept of creating cameras **Activity:**Visit to a digital film making studio
	Demonstrate knowledge ofanimating the camera	1. Describe the term parametric length 2. Explain path animation	1. Demonstrate detailed process used in animating the camera	**Interactive lecture**: Animating the camera **Activity:** Guided practice
	Describe the term Normal used in animation	1. Explain the concept of Normal	1. Demonstrate the knowledge of the concept of Normal in animation	**Interactive lecture**: Normal **Activity:**Discussion on the application of the concept of Normal in animation

	Demonstrate knowledge ofcreating a path animation	1. Describe the concept of creation 2. Describe the concept of path animation	1. Demonstrate knowledge of creating a path animation	**Interactive lecture**: Creating a path animation **Activity:**Practice session on creating a path animation

NSQF Level 4 (Class 12)

Unit Code: MEAM 401-NQ2015	**Unit Title: Biped Walk and Run Cycle**			
Location: Classroom	**Duration: 20 hours**			
	Learning Outcome	**Knowledge Evaluation**	**Performance Evaluation**	**Teaching and Training Method**
	Demonstrate the process of walk cycle	1. Explain the process of walk cycle	1. Demonstrate the body movement 2. Demonstrate the knowledge of the process of balancing and timing	**Interactive lecture:** Introduction to walk cycle **Activity**: Group discussion on the walk cycle animation
	Demonstrate walk cycle procedure 1	1. Explain the process of walk cycle	1. Demonstrate the knowledge of contact poses 2. Identify inbetween poses	**Interactive lecture:** Walk Cycle Procedure 1 **Activity**: Guided practice
	Demonstrate walk cycle procedure 2	1. Explain the steps of walk cycle	1. State contact and in between poses of a walk cycle	**Interactive lecture:** Walk Cycle Procedure 2 **Activity**: Practice session on creating a male walk cycle
	Demonstrate run cycle	1. Explain the process of run cycle. 2. Explain the concept of stretch and squash 3. Explain the graph editor	1. Differentiate between walk and run cycle 2. Demonstrate the knowledge of run cycle	**Interactive lecture:** Run Cycle **Activity**: Create a human run cycle

Unit Code: MEAM 402-NQ2015	**Unit Title: Communication at Workplace (Advanced)**			
Location: Classroom	**Duration: 30 hours**			
	Learning Outcome	**Knowledge Evaluation**	**Performance Evaluation**	**Teaching and Training Method**
	Describe various types of written and oral communications	1. State the importance of good written and oral communication skills for providing	1. Identify different ways of improvement of written and oral communication	**Interactive lecture:** Making effective written and oral communication **Activity:**

		customer care 2. State the essence of good written and oral communication skills	skills	Role play Writing short report
	Describe about the benefits of listening skills	1. State the importance of good listening skills for providing customer care 2. Explain how to improve listening skills	1. Identify the different ways of improvement of listening and listening comprehensive skills	**Interactive lecture:** Importance of listening for effective communication **Activity:** Listening comprehension
	Describe how assertive communication skills are necessary	1. State the importance of assertive communication (both written and oral) 2. Describe situations when assertiveness can be demonstrated(personal, social, telephone, email)	1. Demonstrate when and how to assert and the etiquettes to be maintained	**Interactive lecture:** Assertion in communication **Activity:** Role play
	Describe the importance of feedback	1. State the importance of feedback 2. Explain how to effectively give and receive feedback	1. Demonstrate the knowledge of receiving feedback 2. Demonstrate the knowledge of providing feedback	**Interactive lecture:** Making effective feedback **Activity:** Provide and receive feedback
	Describe various techniques of demonstrating presentation skills	1. Describe presentation skills 2. Explain how to make good presentations 3. Explain how to make presentation templates	1. Make short presentations	**Interactive lecture:** Making effective presentations **Activity:** Make short presentations
	Describe about the cross-cultural communication	1. State the importance of cross-cultural communication in customer care 2. Explain effective cross-cultural communication	1. Differentiate between different cultures	**Interactive lecture:** Understanding effect of culture in effective communication **Activity:** Cross-cultural exchanges

Unit Code: MEAM 403-NQ2015	**Unit Title: Posing of Body Mechanics**			
	Duration: 15 hours			
Location: Classroom	**Learning Outcome**	**Knowledge Evaluation**	**Performance Evaluation**	**Teaching and Training Method**
	Demonstrate posing 1	1. Explain line of action 2. Describe the process of	1. Demonstrate the process of staging	**Interactive lecture:** Posing 1 **Activity:** Practice session

		staging 3. Describe the word like pose design, and staging		
	Demonstrate posing 2	1. Explain what is silhouette 2. Describe the word pose-out.	1. Demonstrate the knowledge of silhouette and word pose-out	**Interactive lecture:** Posing 2 **Activity:** Video Sessions on posing in animation
	Demonstrate body mechanics 1	1. Explain overlapping actions 2. Explain the word transfer of weight. 3. Describe the word appeal in posing of body machine	1. Demonstrate the knowledge of overlapping actions, transfer of weight and appeal in body mechanics	**Interactive lecture:** Body mechanics 1 **Activity: G**roup Discussion Video sessions
	Demonstrate body mechanics 2	1. Explain silhouette 2. Describe the word anticipation 3. Explain subtlety and exaggeration	1. Demonstrate the knowledge of subtlety and exaggeration	**Interactive lecture:** Body mechanics 2 **Activity:** Guided practice

Unit Code: MEAM 404-NQ2015	**Unit Title: Facial Expression and Lip Sync**			
Location: Classroom	**Duration: 15 hours**			
	Learning Outcome	**Knowledge Evaluation**	**Performance Evaluation**	**Teaching and Training Method**
	Demonstrate facial expressions	1. Describe the study of different types of facial expressions 2. Describe the word lip biting and pursed lips	1. Demonstrate few examples of emotions that can be expressed via facial expressions.	**Interactive lecture:** Facial expressions in animation **Activity:** Practice session on the identification of name of facial expression
	Demonstrate lip sync 1	1. Explain track reading 2. Describe analysing dialogue	1. Demonstrate the knowledge of lip sync	**Interactive lecture:** Lip Sync 1 **Activity:** Guided practice
	Demonstrate lip sync 2	1. Explain the knowledge of how to synch up lip movements with spoken vocals 2. Explain synch up lip movements with sound in animation	1. Demonstrate the knowledge of how to synch up lip movements with spoken vocals	**Interactive lecture:** Synching lip with sound in animation **Activity:** Guided practice
	Demonstrate importing audio	1. Explain the knowledge about	1. Enlist different ways to import	**Interactive lecture:** Import sound into

	into Maya	importing sound and sound effects	sound and sound effects	Maya **Activity:** Import a sound in Maya and try to match lips of character

Unit Code: MEAM 405-NQ2015	**Unit Title: Advanced Acting**			
Location: Classroom	**Duration: 15 hours**			
	Learning Outcome	**Knowledge Evaluation**	**Performance Evaluation**	**Teaching and Training Method**
	Demonstrate acting in animation	1. Explain the importance of acting in animation	1.Demonstrate the knowledge of different expression	**Interactive lecture:** Acting in animation **Activity:** Group discussion on acting in animation
	Describe performance in animation	1. Explain the performance in advance acting 2. Explain exaggeration	1.Demonstrate the knowledge of thinking character and appeal	**Interactive lecture:** Performance in animation **Activity:** Guided practice
	Demonstrate advance acting set-up	1. Explain the execution of dialogue 2. Describe planning and layout 3. Describe lip sync and blocking	1.Demonstrate the knowledge of advance acting set-up 2. Demonstrate the knowledge of planning methods- visualize, conceptualise and identify sources 3.Identify and record source details, permissions and copyright implications	**Interactive lecture:** Advance acting set-up **Activity:** Create an advanced acting animation using two different rigged characters
	Demonstrate advance acting process	1. Explain advanced acting process 2. Describe animation principles	1.Enlist steps of animation	**Interactive lecture:** Advance acting process **Activity:** Discussion

Unit Code: MEAM 406-NQ2015	**Unit Title:Bouncing Balls and Steps of Animation**			
Location: Classroom	**Duration: 15 hours**			
	Learning Outcome	**Knowledge Evaluation**	**Performance Evaluation**	**Teaching and Training Method**
	Demonstrate the knowledge of bouncing ball 1	1. Describe the process of creating a bouncing ball	1. Demonstrate the knowledge of animated bouncing ball 2. State the principles applied in animation of bouncing ball	**Interactive lecture:** Bouncing Ball 1 **Activity**: Create a bouncing ball animation

	Demonstrate about bouncing ball 2	1. Describe the use of squash and stretch in a bouncing ball animation	1. Demonstrate correcttiming	**Interactive lecture:** Bouncing Ball 2 **Activity**: Create bouncing ball animation taking 3 separate spheres in a scene and show their different weights through bounce timing
	Demonstrate the key pose	1. Describe the key poses 2. Describe about the expressive poses	1. Demonstrate the knowledge of key pose in pose to pose animation method	**Interactive lecture:** Key Pose **Activity**: Video sessions Group Discussion
	Demonstrate about the in-between	1. Explain the process adding in-between. 2. Explain about the arcs 3. Explain about the timing and spacing	1. Demonstrate In-between	**Interactive lecture:** In-between **Activity**: Video sessions on the process of adding in-between Guided Practice

Unit Code: MEAM 407-NQ2015	**Unit Title: Quadruped Walk Cycle and Run Cycle**			
	Duration: 15 hours			
Location: Classroom	**Learning Outcome**	**Knowledge Evaluation**	**Performance Evaluation**	**Teaching and Training Method**
	Demonstrate the walk cycle for quadrupeds	1. Explain the study of 4 legged animal's animation and behaviour	1. Demonstrate 4 legged animal's anatomy and behavior in animation	**Interactive lecture:** The Walk Cycle For Quadrupeds **Activity**: Create a 4-legged walk cycle
	Demonstrate the walk	1. Explain the study of 4 legged animal's walk cycle	1. Demonstrate 4 legged animal's walk cycle	**Interactive lecture:** Walk cycle **Activity**: Guided practice
	Demonstrate animating a walk	1. Explain the process of animating a quadruped walk cycle. 2. Explain the process of graph editor	1. State the tools and techniques of animation in Maya	**Interactive lecture:** Animating A Walk **Activity**: Create and animate Quadruped Walk Cycle
	Demonstrate walks and runs: in brief	1. Discuss the study of 4 legged animal's run cycle	1. Demonstrate the 4 legged animal's run cycle	**Interactive lecture:** Walks And Runs: In Brief **Activity**: Guided practice

Unit Code: MEAM 408-NQ2015	Unit Title: Basics of Project Setting and Animation Rendering			
Location: Classroom	**Duration: 15 hours**			
	Learning Outcome	**Knowledge Evaluation**	**Performance Evaluation**	**Teaching and Training Method**
	Demonstrate the projects set up	1. Explain the project setting 2. Explain about the project folder	1. Demonstrate the project setting	**Interactive lecture:** Projects set-up **Activity:** Setting a new project and research on project location folders
	Describe about the performance in animation rendering	1. Explain: skip using frames and renumber frames using 2. Explain custom naming string	1. Demonstrate the knowledge of Custom naming string 2. Understand animation render setting	**Interactive lecture:** Performance in animation rendering **Activity:** Guided practice

9.0 List of Reference Books

S.No.	Title	Author	Publisher
1.	Absolute Beginner's Guide to Computer Basics	Michael Miller	Pearson Education
2.	Computer Fundamentals	Anita Goel	Pearson Education
3.	Business Email Etiquette | THE MANUAL	Judith Kallos	Lulu.com
4.	Gmail Unlocked	Scott Lasak	------
5.	Teach Yourself Gmail in 10 Minutes	Steven E. Holzner	Pearson Education
6.	Developing Communication Skills	Krishna Mohan and MeeraBanerji,	MacMillan India Limited
7.	Messages: The Communication Skills	Matthew McKay	New Harbinger Publications
8.	Communication: Principles for a Lifetime	Steven A. Beebe and Susan J. Beebe	Pearson Education Canada
9.	Communication: Making Connections	William J. Seiler	Pearson Education
10.	My Fair Lady	G.B. Shaw and J Lerner	Signet Classics; Reissue edition
11.	Student aur Personality Development	Dr. Vijay Agarwal	Benten Books
12.	Know and Grow with	Antonio E. Weiss	Pearson Education
13.	Personality Development and Soft Skills	Barun K. Mitra	Oxford
14.	Personality Development for Students	Dr. Vijay Agrawal	Benten Books
15.	BPB Computer Course MS Windows 7/ XP with MS Office 2007	Satish Jain and M Geetha	BPB Publication
16.	EXCEL 2007 Made Simple	Satish Jain	BPB Publication
17.	MS Word	Rutkosky	BPB Publication
18.	Guide to Database Management System	Satish Jain	BPB Publication
19.	Customer Centricity: Focus on the Right Customers for Strategic Advantage	Peter Fader	Wharton Digital Press
20.	Build Your Customer Strategy: A Guide to	James G. Barnes	Wiley

	Creating Profitable Customer Relationships		
21.	Secrets of Customer Relationship Management.: It's All About How You Make Them Feel	James G. Barnes	McGraw-Hill Companies
22.	The Animator's Survival Kit	Richard Williams	Faber & Faber

10.0 Assessment Guide

Assessment is a process used for determining an individual's progress or level of mastery/competence in an occupational area. It may be formative (continuous) and/or summative (final). It is a process of collecting evidence and making judgement about the extent to which a person demonstrates the knowledge and skills set out in the standards or learning outcomes of a unit of competency. Assessment should be done on the basis of information or evidence about the individual's ability against clearly stated objectives or standards. A diversity of assessment methods is required to achieve the multiple purposes and to satisfy the requirements of competency based assessment. Appropriate evidence is to be collected from activities that can be clearly related to the Units of Competency. It should cover all the elements and performance criteria/indicatorsin the competency standards. Student's achievements should be assessed by using the following methods of assessment.

S.No.	Method of Assessments	Weightage (Max. Marks)	Evaluator
1.	Written test	30	Teacher
2.	Practical test	30	Certified Assessor #
3.	Oral test/viva voce	10	Teacher/External Examiner
4.	Portfolio	10	Teacher
5.	Project	10	Teacher/Trainer
6.	Direct Observation	10	Teacher/Trainer
Total		100	

Assessors will be certified by the State Education Board.

1. **Written test:** It allows candidates to demonstrate that they have the knowledge and understanding of a given topic.
2. **Practical test:** It allows candidates to demonstrate application of skills in simulated or real work conditions against competency standards (skill and academic standards).
3. **Oral test/viva voce:** It allows candidates to demonstrate communication skills and content knowledge. Audio or video recording can be done at the time of oral test or viva voce.
4. **Portfolio:** It is a compilation of documents that supports the candidate's claim of competence that was acquired from prior learning and experience. Documents (including photo's, newspaper articles, reports, etc.) of practical experience in the workplace or the community and photographs of the products prepared by the candidates related to the units of competency should be included in the portfolio.
5. **Project:** Projects (individual or group projects) are a great way to assess the practice skills on a deadline, but these should be given on the basis of the capability of the individual to perform the tasks or activities involved in the project. Projects should be discussed in the class and the teacher should periodically monitor the progress of the project and provide feedback for improvement and innovation.

6. **Direct Observation –** Direct observation requires a considerable degree of commitment from the observer and those being observed. Employability skills evaluation listed below in the table should be evaluated through direct observation by the teacher/trainer and appropriate records should be maintained for transparency in evaluation.

Employability Skill Area	S.No.	Competencies and Performance Standards	Competent	Not Yet Competent
Communication	1.	Questions appropriately		
	2.	Writes clearly and legibly		
	3.	Demonstrates good listening and responding skills		
	4.	Informs about the absence and reasons of absence		
Responsibility	5.	Organizes work		
	6.	Manages time effectively and efficiently		
	7.	Complete assignments timely		
	8.	Displays care for tools and equipment		
	9.	Accepts responsibility pleasantly		
	10.	Exhibits patience		
	11.	Demonstrates pride in work		
Interpersonal relationship	12.	Displays friendly and cooperative attitude		
	13.	Demonstrates tactfulness in difficult situations		
	14.	Accepts constructive criticism		
	15.	Exhibits positive attitude		
Health and Safety	16.	Practices good personal hygiene regularly		
	17.	Maintains good personal health		
	18.	Dresses well and in appropriate manner		
Innovation and Creativity	19.	Give reasons and make judgements objectively		
	20.	Share ideas and thoughts with others		

1. Competent = 0.5 marks; Not Yet Competent = 0

11.0 List of Equipment and Materials

The list given below is suggestive and an exhaustive list should be prepared by the teacher. Only basic equipment and accessories should be procured by the Institution so that the routine tasks can be performed by the students regularly for practice and acquiring adequate practical experience.

Stationery

1. Drawing sheets
2. Non-Photo Blue Pencils
3. Drawing Pencil Sets
4. 3-Hole Punched Paper
5. Art Gum Eraser
6. Paints
7. Brushes
8. Watercolors, Markers, and Pastels
9. Marker/Chalk

10. Demonstration Charts
11. Whiteboard
12. Flipbook

Computer and Peripheral

1. Computer System
2. Printer
3. Scanner
4. Internet Connection
5. Digital Camera

Software

1. Adobe Premiere Pro
2. Adobe After Effects
3. Adobe Photoshop
4. Adobe Flash
5. Autodesk Maya

12.0Teacher's Qualification

Qualification, competencies and other requirements for Graduate Teacher on contractual basis should be as follows:

S.No.	Qualification	Minimum Competencies	Age Limit
1.	Graduation in any stream from a recognized Institute / organization with at least 1 yearexperience in teaching/Media & Entertainment industry, preferably in animation production	• Effective communication skills (oral and written) • Basic computing skills. • Technical competencies (e.g., in areas like animation, texturing, rigging, graphic design, 3D production, and software like Photoshop, 3D MAX, MAYA, etc.)	18-37 years (as on Jan. 01 (year)) Age relaxation to beprovided as per Government rules.

13.0 List of Contributors

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