# National Vocational Certificate Level 3 in Information Technology (Computer Graphics - Motion)



**CBT Curriculum** 



# **National Vocational & Technical Training Commission**

5th Floor, Evacuee Trust Complex Sector F-5/1, Islamabad

Tel: +92 51 904404

Fax: +92 51 904404 Email: info@navttc.org

#### Author:

Ms. Numaira Ismail (Lecture (Graphic Design) COMSATS Institute of Information Technology Islamabad), Ms. Khadija Bashir (Project Director Intel Pakistan)

# Reviewed by:

Dr. Raimund Sobetzko (Team Leader, Component 2 TVET Reform Support Programme), Mr. Muhammad Naeem Akhtar (Deputy Team Leader Component 2 TVET Reform Support Programme), Mr. Ralf Strier (Senior International Technical Advisor, TVET Reform Support Program)

## Layout and Design by:

Ms. Maria Arif (Freelance Consultant)

# Date of approval by NCRC:

26th -27th June 2013

#### Date of Notification:

17th July 2013, vide notification no F.2-1/2013-DD(VT)

This curriculum has been produced by the National Vocational & Technical Training Commission (NAVTCC) with the technical assistance of TVET Reform Support Programme, which is funded by the European Union, the Embassay of the Kingdom of the Netherland, Federal Republic of Germany and the Royal Norwegian Embassy. The Programme has been commissioned by the German Federal Ministry for Economic Cooperation and Development and is being implemented by the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH.

# Contents

CU	RRICULU	M SPECIFICATION FOR GRAPHICS DESIGN (MOTION)	4
1	. Intro	DUCTION	4
2	. OVER	VIEW OF THE CURRICULUM FOR GRAPHICS DESIGN (MOTION)	9
3	. TEACH	HING AND LEARNING GUIDE FOR GRAPHICS DESIGN (MOTION)	. 14
	3.1.	Module 1: Familiarization with Terminologies and Tools	. 14
	3.2.	Module 2: Build Design Concept	. 22
	3.3.	Module 3: Analyse Cost Effective Solution	. 26
	3.4.	Module 4: Photo Editing and Graphics Design	.30
	3.5.	Module 5: Video Editing and Motion Graphics	.33
	3.6.	Module 6: Prepare for Rendering	. 37
	3.7.	Module 7: Perform Software and Hardware Maintenance	. 40
	3.8.	Module 8: Communicate with Others	.40
	3.9.	Module 9: Duties and Rights at a Work Place	.46
4	. GENE	ral assessment guidance for the Graphics Design (Motion) Curriculum	.50
5	. Tools	S AND EQUIPMENT	. 63
6	. LIST O	F CONSUMABLE SUPPLIES	. 65

# **Curriculum specification for Graphics Design (Motion)**

# 1. Introduction

#### The structure of this course

This curriculum is for the course of Graphic Design (Motion) and comprises of 09 (nine) modules. The recommended delivery time is 800 hours for the entire course. Delivery of the course could therefore be full time, 5 days a week, for 6 months or equivalent. Trainers are at liberty to develop other models of delivery, including part-time and/ or evening delivery.

The full structure of the course is as follow:

Mo4dule	Theory <sup>1</sup> Days/ hours	Workplace <sup>2</sup> Days/ hours	Total hours
Module 1: Familiarisation with Terminologies & Tools	40	160	200
Module 2: Build Design Concepts	16	54	70
Module 3: Analyse Cost Effective Solution	100	30	130
Module 4: Photo Editing and Graphics Design	30	70	100
Module 5: Video Editing and Motion Graphics	22	88	110
Module 6: Prepare for Rendering	8	32	40
Module 7: Perform Software/ Hardware Maintenance	10	20	30
Module 8: Communicate with Others	20	10	30
Module 9: Duties and rights at the workplace	10	20	30

<sup>2</sup> Training workshop, laboratory and on-the-job workplace

Page | 4

Learning Module hours in training provider premises

The purpose of the Graphics Design (Motion) course is to provide a comprehensive introduction to young people with a programme of development that will provide them with the contemporary terminologies, process, issues and trends to start their career in Pakistan. The course has been developed to address specific issues, such as the national, regional and local cultures, the work force availability within the country, and meeting and exceeding the needs and expectations of their guests. The course prepares the trainee to be able to design and publish work for industries such as advertisement, entertainment industry, education sector, etc.

#### Central aim of the training provider, trainer or teacher

The aim for the team of staff responsible for delivery of the Graphics Design (Motion) curriculum is to develop work related skills through comprehensive action orientation. Action orientation can be understood as the willingness and ability of a student to act in professional, social and private situations appropriate, thoughtfully and in a socially responsible manner.

Teaching staff will support students in developing their willingness and ability, through their technical knowledge and abilities, to solve tasks and problems that are goal-oriented. They will need to use student-centred, practically oriented methods. They will also need to develop a programme of practical assessment that reflects the learning outcomes stated in the curriculum.

Students of the Graphics Design (Motion) curriculum will also develop their willingness and ability as an individual to clarify issues, think through and to assess development opportunities. They will learn to consider requirements and constraints in family, professional and private life and to develop their own talents and future life plans.

Teaching staff will also support students in developing characteristics such as self-reliance, reliability, responsibility, a sense of duty and the willingness and ability to criticize and to accept criticism well and to adapt their future behaviour accordingly.

Teaching also needs to use the Graphics Design (Motion) curriculum to address development of social competence. Students need to acquire a willingness and ability to live and shape their own social relationships.

Method competency, communicative competence and learning competence are inherent part of developing expertise, self-competence and social competence in students through the Graphics Design (Motion) curriculum. Method competence develops in students a willingness and ability to use a targeted, tactical approach during the handling of tasks and problems (for example, in the planning of steps). Communication competence develops a willingness and ability to understand and to shape communicative situations, including the ability for students to perceive, understand and to represent their own intentions and needs as well as those of their partners. Learning competence develops in students a willingness and ability to understand and evaluate – independently and together with others – information about facts and contexts through the Graphics Design (Motion) curriculum and to classify these in mental structures. As part of learning competencies, students will demonstrate the ability and willingness to develop in his or her professional or private life learning techniques and learning strategies and to use them for lifelong learning.

#### **Entry level for trainees**

The trainee should at least have/be:

• Successfully passed Matric/ 10th grade / or equivalent.

- Computer literate must be able to operate computer, be able to search and use internet/www, have concept of files/folder/drives/storage devices, basic operations of computer (open, close, delete, save, copy, paste, new, etc), knowledge of input/output devices
- English proficiency be able to understand and grasp concepts from any learning material/tutorials provided in English, and be able to construct sentences in English.
- The trainee cannot hold a qualification higher to F.Sc/ F.A./Intermediate/12 grade/ or equivalent.
- Previously studied the course of Graphics Design (Print Media) would be considered a plus point. Duplicate modules will be waived
  off in such case.

#### Minimum teaching qualification

Teaching staff should have at least two years' experience in the role of Graphic Designer preferably 2D or 3D graphics designer. They should also hold or be working towards a formal teaching qualification.

- Graduate/ post graduate holding Bachelors/Masters degree in Motion/ Graphic Design or Computer Science
- 2 year diploma in Motion/ Graphics Designing in case of Computer Science Degree

Other formal qualifications in the Information Technology (IT) industry would be useful in addition to the above. Trainers must be competent at Level 3 in English and numeracy.

#### **Medium of instruction**

The course can be taught using a combination of English and/ or Urdu or relevant regional language. The trainee should be able to design products in English/ Urdu/ Regional language as required by client.

#### **Terminology**

This curriculum is for a Graphics Design (Motion). Some organisations may use alternative terms (2D/3D Graphics Designer, 2D/3D Graphics Developer, Graphics Animator, Graphics Editor, Visual Artist, and Motion Developer) to describe this job role. Organisations are likely to use a range of different terms and this should be interpreted flexibly. Training providers should examine the Overview of the Curriculum to determine whether this curriculum meets the needs of potential students.

#### Laws and regulations

Training providers must ensure they keep up to date with laws, standards and regulations – at both national and regional levels – relating to ICT, Cybercrimes, software/hardware theft, and other relevant issues. These currently include:

- The Punjab Information Technology Board Ordinance, 1999
- Electronic Transaction Ordinance, 2002

- Electronic Crimes Act, 2004
- Electronic /Cyber Crimes Bill 2007
- Digital Signature Act, 2001
- Computer Crimes Act, 2007
- Intellectual Property/Copyright Act, 1992
- Consumer Protection Act, 2005
- Prevention of Electronic Crimes Ordinance 2007
- Occupational Health and Environmental Safety (OH & ES)

The team of staff responsible for delivery of the Graphics Design (Motion) curriculum must familiarise themselves with laws and regulations that relate to their area of teaching and ensure that learners know and understand how to comply with and meet their responsibilities. Learning units will refer to the above list where appropriate.

#### Suggested distribution of modules

This qualification is made up of 09 modules. Six modules relate to design concept, data collection and its editing, and preparation of the final product/service, for example Module 3: Analyse Cost Effective Solution; or Module 5: Video Editing and Motion Development. A suggested distribution of these modules is presented overleaf. This is not prescriptive and training providers may modify this if they wish.

There are three further modules relating to general code of conduct that a trainee/ designer must possess: Module 08: Communicating with others, Module 09: Duties and Rights at the Workplace; and Module 07 relating to general skills required for operating a computer and its usage. These modules are independent of the Motion design and development modules and need not to be delivered in sequence. This is illustrated in the distribution table.

Each module covers a range of learning components. These are intended to provide detailed guidance to teachers (for example the Learning Elements component) and give them additional support for preparing their lessons (for example the "Materials Required" component). The detail provided by each module will contribute to a standardised approach to teaching, ensuring that training providers in different parts of the country have clear information on what should be taught.

The distribution table is shown overleaf:

# Suggestion for sequence of modules:

Module 1: Familiarisation with Terminologies and Tools 200 hours  Module 2: Build Design Concepts 70 hours	Module 7: Perform Software / Hardware Maintenance 30 hours		
Module 3: Analyse Cost Effective Solution 130 hours  Module 4: Photo Editing and Graphics Design 100 hours		Module 8: Communicating with Others 30 hours	Module 9: Duties and Rights at the Workplace 30 hours
Module 5: Video Editing and Motion Graphics 110 hours  Module 6:			
Prepare for Rendering 40 hours			

Modules mentioned in different columns can be taught simultaneously.

# 2. Overview of the curriculum for Graphics Design (Motion)

Module Title and Aim	Learning Units	
Module 1: Familiarization with terminologies and tools	LU1: Elements of design LU2: Principles of design	Timeframe of modules
Aim: The aim of this module is to develop general knowledge, skills and understanding of the basics used to create Motion and art work. This module also includes training and use of various software required by a Motion designer.	LU3: Understanding the concept of perspective LU4: Understanding colour theory, and its relevance in design LU5: Typography LU6: Learn the usage of tools for graphics, audio, and video creation	200 hours  Theory³ Days/ hours
software required by a Motion designer.		40 hours  Workplace⁴ Days/ hours  160 hours

Learning Module hours in training provider premises Training workshop, laboratory and on-the-job workplace

Module Title and Aim	Learning Units	
Module 2: Build design concept  Aim: The aim of this module is to provide	LU1: Identify Unique Selling Point (USP) of the product/service LU2: Define particular branding guidelines/theme	Timeframe of modules
the concepts necessary to the design of a project from identifying its USP to creating	LU3: Visualize layout of the concept following brand guidelines	70 hours
the video sequence.	LU4: Create storyboard using thumbnail sketches and time duration for respective scenes	Theory Days/ hours
		16 hours
		Workplace Days/ hours
		54 hours
Module 3: Analyze cost effective solution  Aim: The aim of this module is to	LU1: Determine time duration of video sequence LU2: Determine the output format, container, and codec of video sequence	Timeframe of modules
compute and calculate the optimal cost based on the client's requirements and	LU3: Understand the trade of between quality and size	130 hours
the designer's experience. Knowledge of video's anatomy, file formats, codecs, containers, size, quality, and broadcasting		Theory Days/ hours
channel is essential.		100 hours
		Workplace Days/ hours
		30 hours

Module Title and Aim	Learning Units	
Module 4: Photo editing and graphics design	LU1: Photo Editing and Scanning LU2: Create layout of graphics and design	Timeframe of modules
Aim: The aim of this module is to develop the concept and understanding of visual		100 hours
enhancement required for media objects and development of the product or service		Theory Days/ hours
		30 hours
		Workplace Days/ hours
		70 hours
Module 5: Video editing and motion graphics	LU1: Apply colour correction	Timeframe of modules
Aim: The aim of this module is to develop	LU2: Apply visual effects and transitions	illoudies
various video editing techniques and skills	LU3: Embed video clips, audio files, and other media elements LU4: Create motion	110 hours
in order to capture the essence of people	LO4. Create motion	Theory Days/ hours
		22 hours
		Workplace Days/ hours
		88 hours

Module Title and Aim	Learning Units	
Module 6: Prepare for rendering	LU1: Prepare for rendering and export using Adobe Premiere	Timeframe of modules
<b>Aim:</b> The aim of this module is to develop basic knowledge, skills and understanding required to create final	LU2: Prepare for rendering and export using Final Cut Pro	40 hours
project		Theory Days/ hours
		8 hours
		Workplace Days/ hours
		32 hours
<b>Module 7:</b> Perform Software/ Hardware Maintenance	LU1: Install/ Uninstall graphics and animation software	Timeframe of modules
	LU2: Install/ Uninstall Operating System	modules
<b>Aim:</b> The aim of this module is to give an introduction to operations of a computer	LU3: Install/ Configure drivers, and Input/ Output devices	30 hours
usage and related skills required by a designer	LU4: Connect devices/ ports/ and cables	Theory Days/ hours
		10 hours
		Workplace Days/ hours
		20 hours

Module Title and Aim	Learning Units	
Module 8: Communicate with others	LU1: Communicate with client/owner/boss/stakeholder	Timeframe of modules
<b>Aim:</b> The aim of this module is to develop basic knowledge, skills and understanding required to communicate	LU2: Communicate with senior/junior/peers	30 hours
effectively		Theory Days/ hours
		20 hours
		Workplace Days/ hours
		10 hours
Module 9: Duties and rights at the workplace	LU1: Ethics and professional conduct	Timeframe of modules
<b>Aim:</b> The aim of this module is to develop concept of working in an environment and	LU2: Planning of business process activities LU3: Awareness to rights	30 hours
understand their rights. This module also deals with copyright.	LU4: Copyrights and Piracy	Theory Days/ hours
		10 hours
		Workplace Days/ hours
		20 hours

# 3. Teaching and Learning Guide for Graphics Design (Motion)

The aim of this training is for students to be able to act independently and responsibly in their field of study, by following an educational programme where this is part of the overall methodological concept.

Different methodologies can therefore contribute to achieving this objective. Theory methodologies should be supported by appropriate resources, as indicated in the 'Materials Required' column of the Learning Unit specifications. Teachers should also illustrate theory sessions with examples of how the learning could be applied in the workplace. Practical methodologies should be set in an appropriate environment and supported by appropriate resources, also indicated in the 'Materials Required' column of the Learning Unit specifications. Methods that directly promote capacity-building for the student are particularly suitable and therefore should be included appropriately in the teaching approach.

#### 3.1. Module 1: Familiarization with Terminologies and Tools

**Objective of the module:** The aim of this module is to develop general knowledge, skills and understanding of the basics used to create art work. This module also provides training of graphics software.

**Duration** 200 hours **Theory:** 40 hours **Practical:** 160 hours

Learning Unit	Learning Outcomes	Learning Elements	Duration	Materials Required	Learning Place
Elements of design: They are the building blocks used to create a work of art. The elements of design can be thought of as the things that make up a painting,	The student will be able to: Understand the elements of design and their application in different designs Select respective elements of designs, all designs will contain most if not all the elements Produce designs concept for any given product/ service	Differentiate, describe, practice the use of the following design elements  Dot/ Point are the smallest and most basic element. It can vary in size, value, regularity, and can be used alone or as a unit in a group which form a line or shape in the design  Understand Line	Total: 48 hours Theory: 10 hours Practical: 38 hours	Writing surface preferably white board complete with markers and eraser  Audio/Video aid and display screen  Fully functional latest up to date computer system installed with operating system, graphics card, and graphics software with internet facility	For theoretical learning: Class room with multimedia aid, audiovisual facilities and flip charts For practical learning: Lab with fully functional latest up to date

Learning Outcomes	Learning Elements	Duration	Materials Required	Learning Place
appropriately Know colour theory and composition, how to select colours based on requirements or branding guidelines	Characteristics and Types of Lines; Line can be considered in two ways. The linear marks made with a pen or brush or the edge created when two shapes meet		Visual illustrations to demonstrate each element of design  Manuals, handouts, video tutorials, and other relevant materials.  Student shall have:	computer system installed with operating system, graphics card, and graphics software with internet facility
	Understand Categories of Shapes; A shape is a self contained defined area of geometric or organic form. A positive shape in a painting automatically creates a negative shape.  Direction of lines, which can be Horizontal, Vertical or Oblique; Horizontal suggests calmness, stability and tranquillity. Vertical gives a feeling of balance, formality and alertness.  Oblique suggests movement and action  Size is simply the relationship of the area occupied by one shape to that of another		Equipment and materials for recording or noting down lecture  Canvas and lead pencil	
ا ا	Appropriately  Know colour theory and composition, how to select colours based on requirements	Appropriately  Characteristics and Types of Lines; Line can be considered in two ways. The linear marks made with a pen or brush or the edge created when two shapes meet  Understand Categories of Shapes; A shape is a self contained defined area of geometric or organic form. A positive shape in a painting automatically creates a negative shape.  Direction of lines, which can be Horizontal, Vertical or Oblique; Horizontal suggests calmness, stability and tranquillity. Vertical gives a feeling of balance, formality and alertness.  Oblique suggests movement and action  Size is simply the relationship of the area occupied by one shape to	Appropriately  Know colour theory and composition, how to select colours based on requirements or branding guidelines  Characteristics and Types of Lines; Line can be considered in two ways. The linear marks made with a pen or brush or the edge created when two shapes meet  Understand Categories of Shapes; A shape is a self contained defined area of geometric or organic form.  A positive shape in a painting automatically creates a negative shape.  Direction of lines, which can be Horizontal, Vertical or Oblique; Horizontal suggests calmness, stability and tranquillity. Vertical gives a feeling of balance, formality and alertness.  Oblique suggests movement and action  Size is simply the relationship of the area occupied by one shape to that of another	Characteristics and Types of Lines; Line can be considered in two ways. The linear marks made with a pen or brush or the edge created when two shapes meet  Understand Categories of Shapes; A shape is a self contained defined area of geometric or organic form. A positive shape in a painting automatically creates a negative shape.  Direction of lines, which can be Horizontal, Vertical gives a feeling of balance, formality and tranquillity. Vertical gives a feeling of balance, formality and alertness.  Oblique suggests movement and action  Size is simply the relationship of the area occupied by one shape to that of another

Learning Unit	Learning Outcomes	Learning Elements	Duration	Materials Required	Learning Place
		quality of a shape - rough, smooth, soft hard glossy etc. Texture can be physical (tactile) or visual.			
		Value/ Tone which is the lightness or darkness of a colour. Value is also called Tone Identify Positive/ Negative Space			
LU2:  Principles of Design: The Principles of design can be thought of as what we do to the elements of design. How we apply the Principles of design determines how successful we are in creating a work of art.	The student will be able to: Understand applications of design principles and the difference in a good or bad design  Use design principles (most of them if not all) to help make visual layout and communication of message creatively	Differentiate, describe, practice the use of the following design principles: Understand that Balance is psychological sense of equilibrium Apply Gradation to size and direction in order to produce liner perspective Compare how Repetition can make an image either interesting or monotonous Define how Contrast is the juxtaposition of opposing elements on the color wheel	Total: 48 hours Theory: 10 hours Practical: 38 hours	Writing surface preferably white board complete with markers and eraser  Audio/Video aid and display screen  Fully functional latest up to date computer system installed with operating system, graphics card, and graphics software with internet facility  Visual illustrations for demonstration  Manuals, handouts, video tutorials, and other relevant	For theoretical learning: Class room with multimedia aid, audiovisual facilities and flip charts For practical learning: Lab with fully functional latest up to date computer system installed with operating system, graphics card, and graphics software with internet facility
		Identify how Harmony brings together a composition with similar or		materials.  Student shall have:	

Learning Unit	Learning Outcomes	Learning Elements	Duration	Materials Required	Learning Place
		related visual images  Understand the use of Dominance to give a design interest, counteracting confusion and monotony  Understand Unity in a design helps the relationship among elements of a visual in functioning together		Equipment and materials for recording or noting down lecture  Canvas and lead pencil	
LU3: Understanding the concept of perspective	The student will be able to:  Understand how perspective is used to introduce the illusion of depth in an image  Use perspective in a design to make the design appear real by altering of size, location of objects on a canvas  Use perspective to draw attention to certain objects of interest or concept	Perspective is created through the arrangement of objects in two-dimensional space to look like they appear in real life.  Perspective is a learned meaning of the relationship between different objects seen in space. E.g. Is the dark rectangle in front of a circle, or beside a semicircle?  Perspective can be used to draw the audience into a visual.  Perception can be achieved through the use of relative sizes of objects,	Total: 30 hours Theory: 05 hours Practical: 25 hours	Writing surface preferably white board complete with markers and eraser Audio/Video aid and display screen Fully functional latest up to date computer system installed with operating system, graphics card, and graphics software with internet facility Visual illustrations for demonstration Manuals, handouts, video tutorials, and other relevant materials. Student shall have:	For theoretical learning: Class room with multimedia aid, audiovisual facilities and flip charts For practical learning: Lab with fully functional latest up to date computer system installed with operating system, graphics card, and graphics software with internet facility

Learning Unit	Learning Outcomes	Learning Elements	Duration	Materials Required	Learning Place
		overlapping objects, and blurring or sharpening objects		Equipment and materials for recording or noting down lecture  Canvas and lead pencil	
LU4: Understanding colour theory and the meaning of colour in a design	The student will be able to:  Understand how colour in a design is very subjective  Know how something as simple as changing the exact hue or saturation of a colour can evoke a completely different feeling  Interpret importance of certain colours with respect to culture and mood depiction  Use appropriate colour combination  Select and apply relevant colour scheme and theme  Understand and know in terms of colour job for printing	Knowledge of colour families: Warm colours include red, orange, yellow and variations of these colors. Red and yellow are both primary colors, with orange falling in the middle. Use warm colors in your designs to reflect passion, happiness, enthusiasm, and energy.  Cool colors include green, blue, and purple, are often more subdued than warm colors. They are the colors of night, of water, of nature, and are usually calming, relaxing, and somewhat reserved. Blue is the only primary color within the cool spectrum Use cool colors in your designs to give a sense of calm or professionalism.	Total: 50 hours Theory: 10 hours Practical: 40 hours	Writing surface preferably white board complete with markers and eraser Audio/Video aid and display screen Fully functional latest up to date computer system installed with operating system, graphics card, and graphics software with internet facility Visual illustrations for demonstration Manuals, handouts, video tutorials, and other relevant materials.  Student shall have: Equipment and materials for recording or noting down lecture Canvas and lead pencil	For theoretical learning: Class room with multimedia aid, audiovisual facilities and flip charts For practical learning: Lab with fully functional latest up to date computer system installed with operating system, graphics card, and graphics software with internet facility

Learning Unit	Learning Outcomes	Learning Elements	Duration	Materials Required	Learning Place
		Neutral colors often serve as the background in design. They're commonly combined with brighter accent colors, but they can also be used on their own in designs, and can create very sophisticated layouts.  Understanding concepts and terminology of hue (color), chroma (purity of color), saturation (how strong or weak a color is), value (how light or dark a color is), tones (are created by adding gray to a color, making it duller than the		Colour wheel, paint brush and paint colours, colours should be primary colours, white, and black	
		original), shades (are created by adding black to a color, making it darker than original), tints (are created by adding white to a color, making it lighter than original).			
LU5: Typography	The student will be able to: Choose appropriate fonts relating or reflecting the design concept	Define Typography Anatomy, the expression of different fonts, their families and its use in design	Total: 24 hours Theory:	Writing surface preferably white board complete with markers and eraser Audio/Video aid and	For theoretical learning: Class room with multimedia aid, audiovisual facilities and flip

Learning Unit	Learning Outcomes	Learning Elements	Duration	Materials Required	Learning Place
	Understand the anatomy of Typeface	graphics The choice of typeface and how you make it work with the layout, grid, colour scheme, design theme	05 hours  Practical: 19 hours	display screen Fully functional latest up to date computer system installed with operating system, graphics card, and graphics software with internet facility Visual illustrations for demonstration Manuals, handouts, video tutorials, and other relevant materials.  Student shall have: Equipment and materials for recording or noting down lecture Canvas and lead pencil	charts  For practical learning:  Lab with fully functional latest up to date computer system installed with operating system, graphics card, and graphics software with internet facility
LU6: Learn the usage of tools for graphics, audio, and video creation	The student will be able to: Study and make use of graphics development software Study and make use of sound editing software Study and make use of video editing and development	Understand and learn the use of tools in Adobe Photoshop for creating and editing images, graphics, pictures, etc.  Understand and learn the use of tools in Adobe Illustrator for creating and editing type, and text	Total: 24 hours Theory: 05 hours Practical: 19 hours	Writing surface preferably white board complete with markers and eraser Audio/Video aid and display screen Fully functional latest up to date computer system installed with operating system, graphics card, and	For theoretical learning: Class room with multimedia aid, audiovisual facilities and flip charts For practical learning:

Learning Unit	Learning Outcomes	Learning Elements	Duration	Materials Required	Learning Place
	software	Understand and learn the use of tools in Adobe Premiere for creating and editing videos  Understand and learn the use of tools in Adobe After Effects for creating videos in 3D view  Understand and learn the use of tools in Sound Forge for editing and creating audio files  Introduction to tools in Corel Draw and Final Cut Pro		graphics software with internet facility  Manuals, handouts, video tutorials, and other relevant materials.  Student shall have:  Equipment and materials for recording or noting down lecture  External storage devices for saving work	Lab with fully functional latest up to date computer system installed with operating system, graphics card, and graphics software with internet facility

# 3.2. Module 2: Build Design Concept

**Objective of the module:** The aim of this module to provide the concepts necessary to the design of a project from identifying its USP to creating the video sequence.

**Duration** 70 hours **Theory**: 16 hours **Practical**: 54 hours

Learning Unit	Learning Outcomes	Learning Elements	Duration	Materials Required	Learning Place
LU1: Identify Unique Selling Point (USP) of Product/ Service	The student will be able to: Have an understanding of requirements and needs of target market/ audience Identify the unique selling point of product or service Express implement the idea in visual form as design and/or video depending on client's requirement	Extract USP of a given product/ service by analysing product characteristics, price structure, placement strategy or promotional strategy  Analyze requirements/ needs of target market/ audience  Decide what emotional need is being specifically met by your product or service  Know what motivates your customers' behaviour and buying decisions  Identify aspects of your product or service that your competitors cannot imitate	Total: 21 hours Theory: 05 hours Practical: 14 hours	Writing surface preferably white board complete with markers and eraser  Audio/Video aid and display screen  Fully functional latest up to date computer system installed with operating system, graphics card, and graphics software with internet facility  Visual illustrations for demonstration  Information material of the product or service and its features  Manuals, handouts, video tutorials, and other relevant materials.  Student shall have:	For theoretical learning: Class room with multimedia aid, audiovisual facilities and flip charts For practical learning: Lab with fully functional latest up to date computer system installed with operating system, graphics card, and graphics software with internet facility

LU2: Define particular branding guidelines and themes	The student will be able to:  Design effective brand guidelines  Develop colour themes based on brand guidelines  Use of brand guidelines in their	Pick up the big idea which permeates the brand Live the brand; design the guidelines in the look and feel of the new brand design	Total: 15 hours Theory: 03 hours Practical:	Equipment and materials for recording or noting down lecture Canvas and lead pencil Writing surface preferably white board complete with markers and eraser Audio/Video aid and display screen Fully functional latest up to	For theoretical learning: Class room with multimedia aid, audiovisual facilities and flip charts
	design creation	Use knowledge of elements, principles of elements, perspective, typography, colour theory, storyboarding to create brand guidelines, brand manual and themes	12 hours	installed with operating system, graphics card, and graphics software with internet facility  Visual illustrations for demonstration  Information material of the product or service and its features  Manuals, handouts, video tutorials, and other relevant materials.  Student shall have:  Equipment and materials for recording or noting down lecture  Canvas and lead pencil	learning:  Lab with fully functional latest up to date computer system installed with operating system, graphics card, and graphics software with internet facility

Visualize the Layout of the Concept Following Brand Guidelines	The student will be able to:  Develop concept of products/ services  Analyze concept in order to develop thumbnails sketches	Develop thumbnail sketches of objects and design Create and design the page or canvas layout based on brand guidelines Identify the composition of elements following concepts learned in module 2 Collection and organization and application of material in the layout	Total: 16 hours Theory: 03 hours Practical: 13 hours	Writing surface preferably white board complete with markers and eraser Audio/Video aid and display screen Fully functional latest up to date computer system installed with operating system, graphics card, and graphics software with internet facility Visual illustrations for demonstration Content to be used for design (text, graphics, tables, diagrams, visual illustrations, etc) Manuals, handouts, video tutorials, and other relevant materials. Student shall have: Equipment and materials for recording or noting down lecture Canvas and lead pencil	For theoretical learning: Class room with multimedia aid, audiovisual facilities and flip charts For practical learning: Lab with fully functional latest up to date computer system installed with operating system, graphics card, and graphics software with internet facility
LU4: Create	The student will be able to: Create story board showing	Understand and learn the use of story board to	Total:	Writing surface preferably white board complete with	For theoretical learning:

Storyboard using thumbnails and time duration for respective scenes	individual scenes to compose video  Draw thumbnails to show composition of scenes  Allocate time duration in seconds to each scene	illustrate the images or scenes in sequence for the purpose of pre-visualizing a motion video, animation, or interactive media  Learn and practice drawing thumbnails to represent the flow of contents in a scene  Understand the calculation and allocation of time duration to different scenes in a motion video	20 hours Theory: 05 hours Practical: 15 hours	markers and eraser Audio/Video aid and display screen Fully functional latest up to date computer system installed with operating system, graphics card, and graphics software with internet facility Visual illustrations for demonstration Information material of the product or service and its features Manuals, handouts, video tutorials, and other relevant materials.  Student shall have: Equipment and materials for recording or noting down lecture Canvas and lead pencil	Class room with multimedia aid, audiovisual facilities and flip charts  For practical learning:  Lab with fully functional latest up to date computer system installed with operating system, graphics card, and graphics software with internet facility
---	--	--	---	---	---

### 3.3. Module 3: Analyse Cost Effective Solution

**Objective of the module:** The aim of this module to compute the optimal cost based on client requirement and designer's experience. Knowledge of video's anatomy, file formats, codecs, containers, size, quality, and broadcasting channel is essential.

**Duration** 130 hours

ours Theory:

100 hours

Practical: 30 hours

Learning Unit	Learning Outcomes	Learning Elements	Duration	Materials Required	Learning Place
LU1: Determine time duration of video sequence	The student will be able to: Add time in seconds to individual scenes of video sequence	Knowledge of calculating the time based on narration and audio in the scenes as well visuals by reading the narration slowly to determine the length of each section  Knowledge of length in seconds of audio clip for each particular scene for dialogues use  Understanding the synchronization of music in scenes, and computing of time duration accordingly of scenes.	Total: 30 hours Theory: 10 hours Practical: 20 hours	Writing surface preferably white board complete with markers and eraser Audio/Video aid and display screen Fully functional latest up to date computer system installed with operating system, graphics card, and graphics software with internet facility Manuals, handouts, video tutorials, and other relevant materials.  Student shall have: Equipment and materials for recording or noting down lecture Canvas/ paper for composing scenes and	For theoretical learning: Class room with multimedia aid, audiovisual facilities and flip charts For practical learning: Lab with fully functional latest up to date computer system installed with operating system, graphics card, and graphics software with internet facility

				storyboarding Stopwatch for calculating time duration	
LU2: Determine output format, container, codec of video sequence	The student will be able to: Select the output file format, container, codec for motion video	Describe the anatomy of a video file  Understanding the characteristics of a video signal  Study of file formats concepts (containers/ wrappers, and codecs)  Knowledge of list of most common containers/ wrappers used (AVI, MPEG-4, FLV, MOV, OGG, OGM, OGV, MKV, VOB, ASF, etc.)  Understanding the codecs available and compatibility based on where the video file will be played or viewed Knowledge of list of common codecs (MPEG, MPEG 1,2,4, H.264, MPEG Spinoffs, MJPEG, DV, WMV, RM, DivX, Quicktime 6, Sorenson 3, WMV9, RP9, Ogg Theora, Dirac, etc.)	Total: 60 hours Theory: 55 hours Practical: 05 hours	Writing surface preferably white board complete with markers and eraser Audio/Video aid and display screen Fully functional latest up to date computer system installed with operating system, graphics card, and graphics software with internet facility Illustrations for demonstration Manuals, handouts, video tutorials, and other relevant materials.  Student shall have: Equipment and materials for recording or noting down lecture External storage device to store student work	For theoretical learning: Class room with multimedia aid, audiovisual facilities and flip charts For practical learning: Lab with fully functional latest up to date computer system installed with operating system, graphics card, and graphics software with internet facility

		Study of video sampling bit rates and quality measured in kilobits (kb), or megabits (Mb). Common bit rates include: 16kb, 128-384kb, 1.5Mb, 3.5Mb, 9.8Mb, 19Mb, 24Mb, 25Mb, 29.4Mb, 40Mb			
		Understanding the process of transcoding of part of a video sequence			
		Understanding the difference between compressed and uncompressed videos obtained using different video formats			
		Knowledge of digital storage space or size of footage required.			
		Effect of recording device and its quality in use on final product			
LU3: Understand the trade of between	The student will be able to: Set optimal compression ratio for video file	Information of compression methods available for media types	Total: 40 hours Theory:	Writing surface preferably white board complete with markers and eraser	For theoretical learning: Class room with multimedia aid, audio-
quality and size of a video file	Select output size of video file Set resolution of video Select optimal frame rate for	Knowledge of transmission channels and playback/ output platform  Describe frames per	35 hours  Practical:	Audio/Video aid and display screen  Fully functional latest up to date computer system	visual facilities and flip charts  For practical

playback	seconds as fps and its	05 hours	installed with operating	learning:
	effect with increasing and		system, graphics card, and	
	decreasing fps on video file-		graphics software with	Lab with fully functional
	increasing frame rate		internet facility	latest up to date
	makes the video smother		Illustrations for	computer system
	Resolution of video as		demonstration	installed with operating
	defined by number of pixels		Manuals, handouts, video	system, graphics card,
	present in the image. This		tutorials, and other relevant	and graphics software with internet facility
	determines if definition of		materials.	with internet racility
	the video file is standard			
	definition (SD) or high		Student shall have:	
	definition (HD)		Equipment and materials	
	Understanding that higher		for recording or noting	
	resolution yields bigger file		down lecture	

# 3.4. Module 4: Photo Editing and Graphics Design

**Objective of the module:** The aim of this module to develop various editing techniques and skills in order to capture the essence of people, places, or objects – for images to stand out - they must be edited.

**Duration** 100 hours **Theory**: 30 hours **Practical**: 70 hours

Learning Unit	Learning Outcomes	Learning Elements	Duration	Materials Required	Learning Place
LU1: Photo Editing and Scanning	The student will be able to:  Edit photos through different editing software, tools and techniques available  Apply visual effects such as filters to a photo to enhance it  Merge different photos to create one single photo  Scan and use photos	Explain different color correction techniques for images  Adjust brightness, contrast, color tint, color saturation of the image as a whole  Define sharpening, retouching, removing dust specks and scratches  Understand and practice use of visual effects  Define transformation and styles  Correct lens aberrations (barrel and pincushion), chromatic aberrations and light falloff in wide angle lens  Adjust the geometry by crop, rotate, correct	Total: 65 hours Theory: 20 hours Practical: 45 hours	Writing surface preferably white board complete with markers and eraser Audio/Video aid and display screen Fully functional latest up to date computer system installed with operating system, graphics card, and graphics software with internet facility Visual illustrations for demonstration Manuals, handouts, video tutorials, and other relevant materials.  Student shall have: Equipment and materials for recording or noting	For theoretical learning: Class room with multimedia aid, audiovisual facilities and flip charts For practical learning: Lab with fully functional latest up to date computer system installed with operating system, graphics card, and graphics software with internet facility

Learning Unit	Learning Outcomes	Learning Elements	Duration	Materials Required	Learning Place
		perspective, distortion  Explain photo enhancement/ manipulation through the use of filters  Understand how two or more photos can be merged together to form one photo Importing photos through scanning them in a layout		down lecture	
LU2: Create Layout	The student will be able to:  Have sense of balance and alignment of objects in a layout on canvas  Use of typography, create graphics/ objects  Use a good layout to allow better communication of complex information to the viewer	Create objects (media elements, graphics, graphs, tables, diagrams, etc.) on canvas Apply colors into objects	Total: 35 hours Theory: 10 hours Practical: 60 hours	Writing surface preferably white board complete with markers and eraser Audio/Video aid and display screen Fully functional latest up to date computer system installed with operating system, graphics card, and graphics software with internet facility Visual illustrations for demonstration Manuals, handouts, video tutorials, and other relevant materials.	For theoretical learning: Class room with multimedia aid, audiovisual facilities and flip charts For practical learning: Lab with fully functional latest up to date computer system installed with operating system, graphics card, and graphics software with internet facility

Learning Unit	Learning Outcomes	Learning Elements	Duration	Materials Required	Learning Place
				Student shall have:	
				Equipment and materials for recording or noting down lecture	

# 3.5. Module 5: Video Editing and Motion Graphics

Objective of the module: The aim of this module is to develop various video editing techniques and skills in order to capture the essence of people.

**Duration** 110 hours **Theory**: 22 hours **Practical**: 88 hours

Learning Unit	Learning Outcomes	Learning Elements	Duration	Materials Required	Learning Place
LU1: Apply colour correction	The student will be able to:  Learn and apply colour correction to the video using filters	Knowledge of filters for applying colour correction to videos  Knowledge of colour correction in order to convey message, e.g. white balance or unbalance to convey a feeling or emotion	Total: 20 hours Theory: 05 hours Practical: 15 hours	Writing surface preferably white board complete with markers and eraser Audio/Video aid and display screen Fully functional latest up to date computer system installed with operating system, graphics card, and graphics software with internet facility Visual illustrations for demonstration Manuals, handouts, video tutorials, and other relevant materials.  Student shall have: Equipment and materials for recording or noting down lecture	For theoretical learning: Class room with multimedia aid, audiovisual facilities and flip charts For practical learning:  Lab with fully functional latest up to date computer system installed with operating system, graphics card, and graphics software with internet facility

Learning Unit	Learning Outcomes	Learning Elements	Duration	Materials Required	Learning Place
				External storage for saving work	
LU2: Apply visual effects and transition	The student will be able to: Use filters to enhance video Add effects and transitions with creativity to convey message to audience	Understand the use of built in filters for adding visual effects. Different filters can be used to convey different messages  Use of built in transition to move from one scene to another. A transition gives the viewer sense of continuality.  Use of effects to produce results that cannot be achieved by normal techniques. A common effect used in video editing is brightness/ contrast effect to correct the scene.  Understanding other effects such as deleting unnecessary audio clip, or part of a scene  Knowledge of creating title slides for credits	Total: 25 hours Theory: 05 hours Practical: 20 hours	Writing surface preferably white board complete with markers and eraser Audio/Video aid and display screen Fully functional latest up to date computer system installed with operating system, graphics card, and graphics software with internet facility Visual illustrations for demonstration Manuals, handouts, video tutorials, and other relevant materials.  Student shall have: Equipment and materials for recording or noting down lecture External storage for saving work	For theoretical learning: Class room with multimedia aid, audiovisual facilities and flip charts For practical learning: Lab with fully functional latest up to date computer system installed with operating system, graphics card, and graphics software with internet facility
LU3: Embed video	The student will be able to: Import and embed media	Learn to import audio files, voice over into computer	Total: 30 hours	Writing surface preferably white board complete with	For theoretical learning: Class room with

Learning Unit	Learning Outcomes	Learning Elements	Duration	Materials Required	Learning Place
clips, audio files, and other media elements	assets into the project	from recording device  Understand how to edit and export audio files into suitable format for the project  Import edited pictures, images, and other graphics material edited using Photoshop into project  Import other video clips to be used into the project  Learn and understand the use of timeline for arranging and placing media elements for the project  Knowledge of various settings for importing different media elements	Theory: 07 hours Practical: 23 hours	markers and eraser Audio/Video aid and display screen Fully functional latest up to date computer system installed with operating system, graphics card, and graphics software with internet facility Visual illustrations for demonstration Manuals, handouts, video tutorials, and other relevant materials.  Student shall have: Equipment and materials for recording or noting down lecture External storage for saving work	multimedia aid, audiovisual facilities and flip charts  For practical learning:  Lab with fully functional latest up to date computer system installed with operating system, graphics card, and graphics software with internet facility
LU4: Prepare and publish artwork	The student will be able to: Create motion	Understand the creation of motion using a video editing software once all media elements are in place on the timeline Understand the settings, properties, preferences for	Total: 35 hours Theory: 05 hours Practical:	Writing surface preferably white board complete with markers and eraser Audio/Video aid and display screen Fully functional latest up to date computer system	For theoretical learning: Class room with multimedia aid, audiovisual facilities and flip charts For practical

Learning Unit	Learning Outcomes	Learning Elements	Duration	Materials Required	Learning Place
		creating motion	30 hours	installed with operating system, graphics card, and graphics software with internet facility  Visual illustrations for demonstration  Manuals, handouts, video tutorials, and other relevant materials.  Student shall have:  Equipment and materials for recording or noting down lecture  External storage for saving work	Lab with fully functional latest up to date computer system installed with operating system, graphics card, and graphics software with internet facility

### 3.6. Module 6: Prepare for Rendering

Objective of the module: The aim of this module to knowledge, skills, and understanding required to create the final project/ story.

**Duration** 40 hours **Theory**: 08 hours **Practical**: 32 hours

Learning Unit	Learning Outcomes	Learning Elements	Duration	Materials Required	Learning Place
LU1: Prepare for rendering and exporting the story using Adobe Premiere	The student will be able to: Export final project/ story using Adobe Premiere	Export final project out of Adobe Premiere into a format that can be viewed by others  Preparation and burning of a performance disk which allows playback on regular DVD players  Preparation and burning of a data disk (CD) to store all source files used to create project.	Total: 29 hours Theory: 05 hours Practical: 24 hours	Writing surface preferably white board complete with markers and eraser Audio/Video aid and display screen Fully functional latest up to date computer system installed with operating system, graphics card, and graphics software with internet facility Visual illustrations for demonstration Manuals, handouts, video tutorials, and other relevant materials.  Student shall have: Equipment and materials for recording or noting down lecture	For theoretical learning: Class room with multimedia aid, audiovisual facilities and flip charts For practical learning: Lab with fully functional latest up to date computer system installed with operating system, graphics card, and graphics software with internet facility

Learning Unit	Learning Outcomes	Learning Elements	Duration	Materials Required	Learning Place
				External storage for saving work  DVD for preparing performance disk  CDs for burning data disk	
LU2: Prepare for rendering and exporting the story using Final Cut Pro	The student will be able to: Export final project/ story using Final Cut Pro	Export final project out of Final Cut Pro into a format that can be viewed by others  Preparation and burning of a performance disk which allows playback on regular DVD players  Preparation and burning of a data disk (CD) to store all source files used to create project.	Total: 11 hours Theory: 03 hours Practical: 08 hours	Writing surface preferably white board complete with markers and eraser Audio/Video aid and display screen Fully functional latest up to date computer system installed with operating system, graphics card, and graphics software with internet facility Visual illustrations for demonstration Manuals, handouts, video tutorials, and other relevant materials.  Student shall have: Equipment and materials for recording or noting down lecture External storage for saving	For theoretical learning: Class room with multimedia aid, audiovisual facilities and flip charts For practical learning: Lab with fully functional latest up to date computer system installed with operating system, graphics card, and graphics software with internet facility

Learning Unit	Learning Outcomes	Learning Elements	Duration	Materials Required	Learning Place
				work  DVD for preparing performance disk	
				CDs for burning data disk	

#### 3.7. Module 7: Perform Software and Hardware Maintenance

**Objective of the module:** The aim of this module to develop concepts regarding how to prepare the computer for a designer. It gives the trainee introduction to the computers and its usage

**Duration** 30 hours **Theory**: 10 hours **Practical**: 20 hours

Learning Unit	Learning Outcomes	Learning Elements	Duration	Materials Required	Learning Place
LU1: Install Graphics Software	The student will be able to: Install relevant graphics software Uninstall relevant graphics software	Method of installing graphics software  Learn the configuration (if any) required by software  Describe work environment of Photoshop, Illustrator, Adobe Premiere, Sound Forge for designing artwork  Introduction to Corel Draw and Final Cut Pro	Total: 10 hours Theory: 03 hours Practical: 07 hours	Writing surface preferably white board complete with markers and eraser Audio/Video aid and display screen Fully functional latest up to date computer system installed with operating system, graphics card, and graphics software with internet facility Manuals, handouts, video tutorials, and other relevant materials.  Student shall have: Equipment and materials for recording or noting down lecture	For theoretical learning: Class room with multimedia aid, audiovisual facilities and flip charts For practical learning: Lab with fully functional latest up to date computer system installed with operating system, graphics card, and graphics software with internet facility
LU2:	The student will be able to:	Installing Operating System	Total:	Writing surface preferably	For theoretical

Learning Unit	Learning Outcomes	Learning Elements	Duration	Materials Required	Learning Place
Install/ Uninstall Operating System	Install relevant Operating System (Windows and Mac OS) Uninstall relevant Operating System (Windows and Mac OS)	on a computer/ laptop  Un-installing operating system on a computer/ laptop  Explain upgrade and configuration of operating systems	10 hours Theory: 03 hours Practical: 07 hours	white board complete with markers and eraser Audio/Video aid and display screen Fully functional latest up to date computer system installed with operating system, graphics card, and graphics software with internet facility Manuals, handouts, video tutorials, and other relevant materials. Licensed operating Systems (Windows and Mac OS) Student shall have: Equipment and materials for recording or noting down lecture	learning: Class room with multimedia aid, audio- visual facilities and flip charts  For practical learning:  Lab with fully functional latest up to date computer system installed with operating system, graphics card, and graphics software with internet facility
LU3: Install/ Configure Drivers, Input/ Output Devices	The student will be able to: Install and configure required driver Install and configure input/output devices	Explain installation of software and configuration of drivers  Explain installation and configuration of input/output devices  Define plug and play	Total: 05 hours Theory: 02 hours Practical:	Writing surface preferably white board complete with markers and eraser Audio/Video aid and display screen Fully functional latest up to date computer system	For theoretical learning: Class room with multimedia aid, audiovisual facilities and flip charts For practical learning:

Learning Unit	Learning Outcomes	Learning Elements	Duration	Materials Required	Learning Place
		devices	03 hours	installed with operating system, graphics card, and graphics software with internet facility  Manuals, handouts, video tutorials, and other relevant materials.  Drivers of software and devices  Plug and play devices  Student shall have:  Equipment and materials for recording or noting down lecture	Lab with fully functional latest up to date computer system installed with operating system, graphics card, and graphics software with internet facility
LU4: Connect devices to ports using appropriate cables	The student will be able to: Connect various devices using appropriate ports and cables	Understand the different types of connector  Differentiate between different types of cables  Explain different ports used for connection of various devices  Installing the drivers of devices	Total: 05 hours Theory: 02 hours Practical: 03 hours	Writing surface preferably white board complete with markers and eraser Audio/Video aid and display screen Fully functional latest up to date computer system installed with operating system, graphics card, and graphics software with internet facility Various ports, cables, and connectors for	For theoretical learning: Class room with multimedia aid, audio- visual facilities and flip charts For practical learning: Lab with fully functional latest up to date computer system installed with operating system, graphics card,

Learning Unit	Learning Outcomes	Learning Elements	Duration	Materials Required	Learning Place
				demonstration  Manuals, handouts, video tutorials, and other relevant materials.  Student shall have:  Equipment and materials for recording or noting down lecture	and graphics software with internet facility

#### 3.8. Module 8: Communicate with Others

**Objective of the module:** The aim of this module to develop the skills necessary for communication. The learner should communicate efficiently and gather requirements from the client for product/ services.

**Duration** 30 hours **Theory**: 20 hours **Practical**: 10 hours

Learning Unit	Learning Outcomes	Learning Elements	Duration	Materials Required	Learning Place
LU1: Communicate with Client/Owner/ Boss/stakeholder	The student will be able to: Listen to client/owner/ boss and synthesize relevant information about all problems and understanding of their product/ service required	Introduction to communication and interpersonal communication  Learn skills needed to interact in a social environment  Communicate attentively in order to gather requirements and needs  Apply communication skills to facilitate understanding to enable them to undertake decisions as equal partners  Communicate effectively both orally and in writing  Synthesize and present information appropriate to the needs of the client, and	Total: 15 hours Theory: 10 hours Practical: 05 hours	Writing surface preferably white board complete with markers and eraser Audio/Video aid and display screen Fully functional latest up to date computer system installed with operating system, graphics card, and graphics software with internet facility Manuals, handouts, video tutorials, and other relevant materials. Student shall have: Equipment and materials for recording or noting down lecture	For theoretical learning: Class room with multimedia aid, audiovisual facilities and flip charts For practical learning:  Lab with fully functional latest up to date computer system installed with operating system, graphics card, and graphics software with internet facility

Learning Unit	Learning Outcomes	Learning Elements	Duration	Materials Required	Learning Place
		discuss achievable goals and final product/ services			
LU2: Communicate with Senior/Junior/ Peers	The student will be able to:  Develop a strategy for using communication skills  Interact with other professionals involved in design development through effective teamwork	Communicate effectively with colleagues, peers, the community, other related personals to exchange information over an extended period of time  Monitor and critically reflect on your use of communication skills, adapting your strategy as necessary, to produce the quality of outcomes required	Total: 15 hours Theory: 10 hours Practical: 05 hours	Writing surface preferably white board complete with markers and eraser Audio/Video aid and display screen Fully functional latest up to date computer system installed with operating system, graphics card, and graphics software with internet facility Manuals, handouts, video tutorials, and other relevant materials.  Student shall have: Equipment and materials for recording or noting down lecture	For theoretical learning: Class room with multimedia aid, audiovisual facilities and flip charts For practical learning: Lab with fully functional latest up to date computer system installed with operating system, graphics card, and graphics software with internet facility

### 3.9. Module 9: Duties and Rights at a Work Place

**Objective of the module:** The aim of this module is to develop code of ethics and professional conduct, improve planning capabilities, and awareness to provision of employment rights. This module can be delivered alongside other modules.

**Duration** 

30 hours

Theory:

10 hours

Practical:

20 hours

Learning Unit	Learning Outcomes	Learning Elements	Duration	Materials Required	Learning Place
LU1: Ethics and professional conduct	The student will be able to: Understand and perform the mandatory standard for: Responsibility Respect Fairness Honesty	The responsibility to take ownership for the decisions and actions they make or fail to make and their consequences. This can be learnt through role play.  The duty to show a high regard for resources entrusted to them. This includes accountability to subordinates, tangible assets such as equipments, and company profile.  The responsibility to make decisions and act impartially and objectively; free from self interest.  (Quantified self assessment can be performed e.g. case studies/white papers, for areas like conflict of interest.)  Being able to understand	Total: 10 hours Theory: 04 hours Practical: 06 hours	Equipment and materials for recording or noting down lectures  Manuals, handouts, computer based trainings (CBT), case studies, templates for industry standards, video assistance, and other relevant materials.  General guidelines for professional of conduct and ethics	For theoretical learning: Class room with multimedia aid, audiovisual facilities and flip charts  For practical learning: EITHER  Labs  OR  Access to a work place/ organization for training purposes (for example printing press, arts studios, graphics institutes, and similar establishments)

		truth and act in truthful manner in conduct and communication. E.g. daily attendance enrolment on register, "What you say is what you did"			
LU2: Planning of the business process activities	The student will be able to: Identify tasks, their scheduling, define milestones, and learn optimal utilization of resources	Provide due assistance to in-line manager e.g. coordinating recurring meetings, intimate resource availability, create and keep documentations, validate applicable company defined standards.  Define activities, e.g. Apply specific life cycle methodologies – (Requirement gathering, design solution, prototype, testing, documentations)  Estimate time, e.g. hours' calculations for an activity; consider calendar year official leaves, company working timings.  Achieve work breakdowns, divide module in smaller and more manageable components. E.g. testing a product may have components like interface,	Total: 06 hours Theory: 02 hours Practical: 04 hours	Equipment and materials for recording or noting down lectures  Manuals, handouts, computer based trainings (CBT), case studies, templates for industry standards, video assistance, and other relevant materials.  Orientation to "project planning tool" is recommended.	For theoretical learning: Class room with multimedia aid, audiovisual facilities and flip charts For practical learning: EITHER  Labs OR  Access to a work place/ organization for training purposes (for example printing press, arts studios, graphics institutes, and similar establishments)

LU3:	The student will be able to:	performance, and test cases.  Resource leveling due to work load, e.g. calculations of leisure hours of a worker.  Inform ourselves and	Total:	Equipment and materials	For theoretical
Awareness to rights	Recognize the aspirational requirements of human rights in employment context.	uphold the policies, rules and regulations that govern the work and workplace.  Report illegal conduct or illegitimate action to appropriate management.  Protect propriety or confidential information	07 hours Theory: 02 hours Practical: 05 hours	for recording or noting down lectures  Manuals, handouts, computer based trainings (CBT), case studies, templates for industry standards, video assistance, and other relevant materials.  Designing tools as Reference: (ArguUML, Sparx Enterprise Architect)	learning: Class room with multimedia aid, audio- visual facilities and flip charts  For practical learning: EITHER Labs OR  Access to a work place/ organization for training purposes (for example printing press, arts studios, graphics institutes, and similar establishments) establishments)
LU4: Understanding of copyrights and piracy	Understand the legal right granted to an author, composer, publisher, production, or any other artist's work	Learn and adapt to the process of purchasing photos or any other required material from internet which has	Total: 07 hours Theory: 02 hours	Equipment and materials for recording or noting down lectures  Manuals, handouts, computer based trainings	For theoretical learning: Class room with multimedia aid, audiovisual facilities and flip

	nd that unauthorized	copyrights.	Practical:	(CBT), case studies,	charts
copyright of is illegal Understant the design	or patented material or patented material or patented material and that they can't give in made for and sold ent to the others.	Understanding what royalty free content.  Explain what can be used and what cannot be used from internet or other resources	05 hours	templates for industry standards, video assistance, and other relevant materials.  General policies regarding copyrights and piracy implemented in organizations	For practical learning: Labs  OR  Access to a work place/ organization for training purposes (for example printing press, arts studios, graphics institutes, etc)

### 4. General assessment guidance for the Graphics Design (Motion) Curriculum

Good practice in Pakistan makes use of sessional and final assessments, the basis of which is described below. Good practice by vocational training providers in Pakistan is to use a combination of these sessional and final assessments, combined to produce the final qualification result.

Sessional assessment is going on all the time. Its purpose is to provide feedback on what students are learning:

- to the student: to identify achievement and areas for further work
- to the teacher: to evaluate the effectiveness of teaching to date, and to focus future plans.

Assessors need to devise sessional assessments for both theoretical and practical work. Guidance is provided in the assessment strategy

Final assessment is the assessment, usually on completion of a course or module, which says whether the student has "passed" or not. It is – or should be – undertaken with reference to all the objectives or outcomes of the course, and is usually fairly formal. Considerations of security – ensuring that the student who gets the credit is the person who did the work – assume considerable importance in final assessment.

#### Methods of assessment

For lessons with a high quantity of theory, written or oral tests related to learning outcomes and/ or learning content can be conducted. For workplace lessons, assessment can focus on the quality of planning the related process, the quality of executing the process, the quality of the product and/or evaluation of the process.

Methods include direct assessment, which is the most desirable form of assessment. For this method, evidence is obtained by direct observation of the student's performance.

Examples for direct assessment of a graphics designer include:

- Creating a short video sequence
- Creating and designing a storyboard based on a theme, concept, or subject given
- Direct questioning, where the assessor would ask the student why certain editing process, techniques, tools, or style was/ were
  used

Paper-based tests, such as multiple choice or short answer questions based on theory parts and concepts

Indirect assessment is the method used where the performance could not be watched and evidence is gained indirectly.

Examples for indirect assessment of a graphic designer include:

- Designing an animation video
- Capturing and editing a short film/ video sequence or a documentary based on a theme, concept, subject

Indirect assessment should only be a second choice. (In some cases, it may not even be guaranteed that the work products were produced by the person being assessed.)

#### **Principles of assessment**

All assessments should be valid, reliable, fair and flexible:

Fairness means that there should be no advantages or disadvantages for any assessed person. For example, it should not happen that one student gets prior information about the type of work performance that will be assessed, while another candidate does not get any prior information.

Validity means that a valid assessment assesses what it claims to assess. For example, if the designing ability is to be assessed and certificated, the assessment should involve performance criteria that are directly related to that creative designing activity. An interview about different paper sizes or colour formats would not meet the criteria.

Reliability means that the assessment is consistent and reproducible. For example, if design work such concept based poster design has to be assessed, another assessor (eg the future employer) should be able to see the same work performance and witness the same level of achievement.

Flexibility means that the assessor has to be flexible concerning the assessment approach. For example, if there is a power failure during the assessment, the assessor should modify the arrangements to accommodate the students' needs.

## Assessment strategy for the Graphics Design (Motion) Curriculum

This curriculum comprises 09 modules:

- Module 1: Familiarisation with terminologies and tools
- Module 2: Build design concept
- Module 3: Analyse cost effective solution
- Module 4: Photo editing and graphics design
- Module 5: Video editing and motion graphics
- Module 6: Prepare for pre-press job
- Module 7: Perform software/ hardware maintenance
- Module 8: Communication with others
- Module 9: Duties and rights at the workplace

### Sessional assessment

The sessional assessment for all 09 modules shall be in two parts: theoretical assessment and practical assessment. The sessional marks shall contribute to the final qualification.

Theoretical assessment for all learning modules must consist of a written paper lasting at least one hour per module. This can be a combination of multiple choice and short answer questions.

For practical assessment, all procedures and methods for the modules must be assessed on a sessional basis. Guidance is provided below under Planning for assessment.

### **Final assessment**

Final assessment shall be in two parts: theoretical assessment and practical assessment. The final assessment marks shall contribute to the final qualification.

The final theoretical assessment shall consist of one 3-hour paper, consisting of multiple choice and short answer questions, covering all modules. This must include at least two short answer questions for each Modules 07, 08, and 09: 'Perform Software/ Hardware Maintenance', 'Communication with others' and 'Duties and Rights at the workplace'.

For the final practical assessment, each student shall be assessed over a period of two days, with two 3-hour sessions on each day. This represents a total of four sessions totalling 12 hours of practical assessment for each student. During this period, each student must be assessed on his/her ability to create from scratch a piece of design work, this could be a company stationary for an assumed organization, or a advertisement banner for a product or service and present the work in printed form. The student shall use and apply the knowledge learned in modules 01-07 for its creation.

- Module 1: Familiarisation with terminologies and tools
- Module 2: Build design concept
- Module 3: Analyse cost effective solution
- Module 4: Photo editing and graphics design
- Module 5: Video editing and motion graphics
- Module 6: Prepare for pre-press job
- Module 7: Perform software/ hardware maintenance

Module 08: 'Communication with others' and 'Module 09: Duties and rights at the workplace', shall be assessed separately, preferably through role play.

#### The assessment team

The number of assessors must meet the needs of the students and the training provider. For example, where two assessors are conducting the assessment, there must be a maximum of five students per assessor. In this example, a group of 20 students shall therefore require assessments to be carried out over a four-day period.

# **Planning for assessment**

Sessional assessment: assessors need to plan in advance how they will conduct sessional assessments for each module. The tables on the following pages are for assessors to use to insert how many hours of theoretical and practical assessment will be conducted and what the scheduled dates are.

Final assessment: Training providers need to decide ways to combine modules into a cohesive two-day final assessment programme for each group of five students. Training providers must agree the dishes for practical assessments in advance.

# Planning aid for sessional assessments

Module 1: Familiarisation with terminologies and tools				
Learning Units	Hours of theoretical assessment	Hours of practical assessment	Scheduled Dates	
LU1: Elements of design				
LU2: Principles of design				
LU3: Understand concept of perspective				
LU4: Understand colour theory, and its relevance in design				
LU5: Typography				
LU6: Learn the usage of tools for graphics, audio, and video creation				

Module 2: Build design concepts				
Learning Units	Hours of theoretical assessment	Hours of practical assessment	Scheduled Dates	
LU1: Identify Unique Selling Point (USP) of the product/service				
LU2: Define particular branding guidelines/theme				
LU3: Visualize layout of the concept following brand guidelines				
LU4:Create storyboard using thumbnail sketches and time duration for respective scenes				

Module 3: Analyze cost effective solution			
Learning Units	Hours of theoretical assessment	Hours of practical assessment	Scheduled Dates
LU1: Determine time duration of video sequence			
LU2: Determine the output format, container, and codec of video sequence			
LU3: Understand the trade of between quality and size			

Module 4: Photo editing and graphics development			
Learning Units	Hours of theoretical assessment	Hours of practical assessment	Scheduled Dates
LU1: Photo Editing/Scanning			
LU2: Create layout of graphics and design			

Module 5: Video editing and motion development				
Learning Units	Hours of theoretical assessment	Hours of practical assessment	Scheduled Dates	
LU1: Apply colour correction				
LU2: Apply visual effects and transitions				
LU3: Embed video clips, audio files, and other media elements				
LU4: Create motion				

Module 6: Prepare for rendering			
Learning Units	Hours of theoretical assessment	Hours of practical assessment	Scheduled Dates
LU1: Prepare for rendering and export using Adobe Premiere			
LU2: Prepare for rendering and export using Final Cut Pro			

Module 7: Perform software/ hardware maintenance				
Learning Units	Hours of theoretical assessment	Hours of practical assessment	Scheduled Dates	
LU1: Install/ Uninstall graphics and animation software				
LU2: Install/ Uninstall operating System				
LU3: Install/ Configure Drivers, Input/ Output devices				
LU4: Connect devices/ ports/ cables				

Module 8: Communicate with others			
Learning Units	Hours of theoretical assessment	Hours of practical assessment	Scheduled Dates
LU1: Communicate with client/owner/boss			
LU2: Communicate with senior/junior/peers			
LU3: Communicate with concerned office/ stakeholder			

Module 9: Duties and rights at a workplace				
Learning Units	Hours of theoretical assessment	Hours of practical assessment	Scheduled Dates	
LU 1: Ethics and professional conduct				
LU2: Planning of business process activities				
LU3: Awareness to rights				
LU4: Copyrights and Piracy				

# 5. Tools and equipment

Sr. No.	Name of Item/ Equipment / Tools	Quantity
1.	Computer Systems	20
	Intel® 3rd gen. Core i7 3770 3.4GHz 8GB DDR3-1600 memory 1000GB SATA hard drive internal SATA DVD & CD writer 2GB dedicated graphic card (EVGA GT 640 2048MB - 128bit - GDDR 3 - core clock 901MHz memory clock 1782MHz - mini display port - HDMI - dual-link DVI - (02GP42643KR) 10-channel surround sound support true 420W power supply 4 way cooling chassis front USB 3.0,USB 2.0 ports up to 1000 MBPS LAN support	
	Casing Intel approved, with rear and front USB ports and audio jacks	
	Optical mouse (wireless)	
	Multimedia keyboard (wireless)	
2.	LCD Display 17" with built in speakers	20
3.	HP Laser Jet Printer – Black	01
4.	HP Laser Jet Printer- Coloured	01
5.	Flat bed Scanner	01
6.	Graphics Tablet	01
7.	USB Flash Drive	01

8.	Multimedia Projector	01
9.	Multimedia Projector Screen	01
10.	5.1 Surround Sound System	01
11.	White Board	01
12.	Computer Tables & Chairs – Lab	20
13.	Study Tables & Chairs – Classroom	20
14.	Licensed Graphics/ Animation Software	20
	Adobe Photoshop	
	Adobe Premiere	
	Adobe Illustrator	
	Adobe After Effects	
	Sound Forge	
	Chorma	
	Final Cut Pro	
15.	Licensed Microsoft Office Suit	20
16.	Licensed Nero Burning Software	20
17.	Licensed Operating System	20
18.	3000 VA UPS AMP Batteries Led AGS Reconditioned	10
	OR	
	Generator to support a lab of 20 systems	
19.	3KVA Stabilizer	20

# 6. List of consumable supplies

Sr. No.	Name of Consumable Supplies	Quantity
1.	Offset Paper A4 size (90 gm)	10 Rims
2.	Offset Paper Legal size	06 Rims
3.	White Board Markers	04 Dozen
4.	White Board Eraser	03
5.	Toner Black: Laser Printer	01
6.	Toner Coloured: Laser Printer	01
7.	CD's/ DVD's (RW)	04 Dozen
8.	Ball Point Pens (blue)	1 dozen
9.	Ball Point Pens (blue)	1 dozen
10.	Office Files	20
11.	Office Box Files	05
12.	Notepads	05
13.	Pencils	1 dozen
14.	Paint brushes	05
15.	Canvas	01
16.	Office Stationary Set	01
17.	Air Freshener	01



# National Vocational & Technical Training Commission (NAVTTC)

5th Floor Evacuee Trust Complex Sector F-5/1, Islamabad.

T +92 51 904404

F +92 51 904404

E info@navttc.org

I http://www.navttc.org/