

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 (NAVTTCC) with the technical assistance of TVET Reform Support Programme, which is funded by the European Union, the Embassy 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

| | |
|---|----------|
| CURRICULUM SPECIFICATION FOR GRAPHICS DESIGN (MOTION) | 4 |
| 1. INTRODUCTION | 4 |
| 2. OVERVIEW OF THE CURRICULUM FOR GRAPHICS DESIGN (MOTION) | 9 |
| 3. TEACHING 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. GENERAL ASSESSMENT GUIDANCE FOR THE GRAPHICS DESIGN (MOTION) CURRICULUM..... | 50 |
| 5. TOOLS AND EQUIPMENT..... | 63 |
| 6. LIST OF 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 ¹ Days/ hours | Workplace ² 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 |

¹ Learning Module hours in training provider premises

² Training workshop, laboratory and on-the-job workplace

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:

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

Modules mentioned in different columns can be taught simultaneously.

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

| Module Title and Aim | Learning Units | |
|--|---|--|
| <p>Module 1: Familiarization with terminologies and tools</p> <p>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.</p> | <p>LU1: Elements of design</p> <p>LU2: Principles of design</p> <p>LU3: Understanding the concept of perspective</p> <p>LU4: Understanding colour theory, and its relevance in design</p> <p>LU5: Typography</p> <p>LU6: Learn the usage of tools for graphics, audio, and video creation</p> | Timeframe of modules |
| | | 200 hours |
| | | Theory³ Days/ hours |
| | | 40 hours |
| | | Workplace⁴ Days/ hours |
| 160 hours | | |

³ Learning Module hours in training provider premises

⁴ Training workshop, laboratory and on-the-job workplace

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

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

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

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

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 |
|---|---|---|--|--|--|
| LU1: 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, audio-visual facilities and flip charts For practical learning: Lab with fully functional latest up to date |

| Learning Unit | Learning Outcomes | Learning Elements | Duration | Materials Required | Learning Place |
|----------------------|---|---|----------|--|--|
| drawing, design etc. | appropriately Know colour theory and composition, how to select colours based on requirements or branding guidelines | <p>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</p> <p>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.</p> <p>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</p> <p>Size is simply the relationship of the area occupied by one shape to that of another</p> <p>Texture is the surface</p> | | <p>Visual illustrations to demonstrate each element of design</p> <p>Manuals, handouts, video tutorials, and other relevant materials.</p> <p>Student shall have:</p> <p>Equipment and materials for recording or noting down lecture</p> <p>Canvas and lead pencil</p> | 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 |
|---|---|---|---|--|--|
| | | <p>quality of a shape - rough, smooth, soft hard glossy etc. Texture can be physical (tactile) or visual.</p> <p>Value/ Tone which is the lightness or darkness of a colour. Value is also called Tone</p> <p>Identify Positive/ Negative Space</p> | | | |
| <p>LU2:</p> <p>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.</p> | <p>The student will be able to:</p> <p>Understand applications of design principles and the difference in a good or bad design</p> <p>Use design principles (most of them if not all) to help make visual layout and communication of message creatively</p> | <p>Differentiate, describe, practice the use of the following design principles:</p> <p>Understand that Balance is psychological sense of equilibrium</p> <p>Apply Gradation to size and direction in order to produce liner perspective</p> <p>Compare how Repetition can make an image either interesting or monotonous</p> <p>Define how Contrast is the juxtaposition of opposing elements on the color wheel</p> <p>Identify how Harmony brings together a composition with similar or</p> | <p>Total:</p> <p>48 hours</p> <p>Theory:</p> <p>10 hours</p> <p>Practical:</p> <p>38 hours</p> | <p>Writing surface preferably white board complete with markers and eraser</p> <p>Audio/Video aid and display screen</p> <p>Fully functional latest up to date computer system installed with operating system, graphics card, and graphics software with internet facility</p> <p>Visual illustrations for demonstration</p> <p>Manuals, handouts, video tutorials, and other relevant materials.</p> <p>Student shall have:</p> | <p>For theoretical learning:</p> <p>Class room with multimedia aid, audio-visual facilities and flip charts</p> <p>For practical learning:</p> <p>Lab with fully functional latest up to date computer system installed with operating system, graphics card, and graphics software with internet facility</p> |

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

| 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 | |
| <p>LU4:</p> <p>Understanding colour theory and the meaning of colour in a design</p> | <p>The student will be able to:</p> <p>Understand how colour in a design is very subjective</p> <p>Know how something as simple as changing the exact hue or saturation of a colour can evoke a completely different feeling</p> <p>Interpret importance of certain colours with respect to culture and mood depiction</p> <p>Use appropriate colour combination</p> <p>Select and apply relevant colour scheme and theme</p> <p>Understand and know in terms of colour job for printing</p> | <p>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.</p> <p>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.</p> | <p>Total:</p> <p>50 hours</p> <p>Theory:</p> <p>10 hours</p> <p>Practical:</p> <p>40 hours</p> | <p>Writing surface preferably white board complete with markers and eraser</p> <p>Audio/Video aid and display screen</p> <p>Fully functional latest up to date computer system installed with operating system, graphics card, and graphics software with internet facility</p> <p>Visual illustrations for demonstration</p> <p>Manuals, handouts, video tutorials, and other relevant materials.</p> <p>Student shall have:</p> <p>Equipment and materials for recording or noting down lecture</p> <p>Canvas and lead pencil</p> | <p>For theoretical learning:</p> <p>Class room with multimedia aid, audio-visual facilities and flip charts</p> <p>For practical learning:</p> <p>Lab with fully functional latest up to date computer system installed with operating system, graphics card, and graphics software with internet facility</p> |

| Learning Unit | Learning Outcomes | Learning Elements | Duration | Materials Required | Learning Place |
|-----------------------------------|---|---|--|---|--|
| | | <p>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.</p> <p>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 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).</p> | | <p>Colour wheel, paint brush and paint colours, colours should be primary colours, white, and black</p> | |
| <p>LU5: Typography</p> | <p>The student will be able to: Choose appropriate fonts relating or reflecting the design concept</p> | <p>Define Typography Anatomy, the expression of different fonts, their families and its use in design</p> | <p>Total: 24 hours Theory:</p> | <p>Writing surface preferably white board complete with markers and eraser Audio/Video aid and</p> | <p>For theoretical learning: Class room with multimedia aid, audio-visual facilities and flip</p> |

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

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

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

| | | | | | |
|---|---|--|--|--|---|
| | | Create design about your unique product or service | | Equipment and materials for recording or noting down lecture Canvas and lead pencil | |
| 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 design creation | 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 Use knowledge of elements, principles of elements, perspective, typography, colour theory, storyboarding to create brand guidelines, brand manual and themes | Total: 15 hours Theory: 03 hours Practical: 12 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: Equipment and materials for recording or noting down lecture Canvas and lead pencil | 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, and graphics software with internet facility |

| | | | | | |
|---|--|---|--|---|---|
| <p>LU3: Visualize the Layout of the Concept Following Brand Guidelines</p> | <p>The student will be able to: Develop concept of products/ services Analyze concept in order to develop thumbnails sketches</p> | <p>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</p> | <p>Total: 16 hours Theory: 03 hours Practical: 13 hours</p> | <p>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</p> | <p>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, and graphics software with internet facility</p> |
| <p>LU4: Create</p> | <p>The student will be able to: Create story board showing</p> | <p>Understand and learn the use of story board to</p> | <p>Total:</p> | <p>Writing surface preferably white board complete with</p> | <p>For theoretical learning:</p> |

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

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 **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, 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 |

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

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

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

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

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

| 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, 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 |

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

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

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, 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 |

| 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, 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 |

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

| 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, 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 |

| Learning Unit | Learning Outcomes | Learning Elements | Duration | Materials Required | Learning Place |
|---|--|---|--|--|---|
| | | discuss achievable goals and final product/ services | | | |
| <p>LU2: Communicate with Senior/Junior/Peers</p> | <p>The student will be able to: Develop a strategy for using communication skills Interact with other professionals involved in design development through effective teamwork</p> | <p>Communicate effectively with colleagues, peers, the community, other related persons 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</p> | <p>Total: 15 hours Theory: 10 hours Practical: 05 hours</p> | <p>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</p> | <p>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, and graphics software with internet facility</p> |

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, 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) |

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

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

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

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. | <p>Computer Systems</p> <p>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</p> <p>Casing Intel approved, with rear and front USB ports and audio jacks</p> <p>Optical mouse (wireless)</p> <p>Multimedia keyboard (wireless)</p> | 20 |
| 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 Adobe Photoshop Adobe Premiere Adobe Illustrator Adobe After Effects Sound Forge Chorma Final Cut Pro | 20 |
| 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 OR Generator to support a lab of 20 systems | 10 |
| 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 (NAVTTTC)

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/>