VIDEO EDITING CURRICULUM

DURATION: 6 Months

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Curriculum specification for Video Editing

1. Introduction

Technical Training for Polio-affectees

The United Nations Industrial Development Organization (UNIDO) is the specialized agency of the United Nations mandated to promote industrial development and global industrial cooperation.

UNIDO's Education Programme strives to promote industry-relevant education and training for the sustainable industrial development of Pakistan.

The UNIDO Education Programme, in collaboration with the National Vocational & Technical Training Commission (NAVTTC) and Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ), has developed ten curricula as part of its Polio-Plus Initiative.

 Amongst its main objectives, the United Nations' Polio-Plus Initiative is intended to aid in the rehabilitation of working-age disabled individuals by means of technical training programs in employable skills. With such training, it is projected that these individuals may then positively contribute, both socially and economically, within their respective communities.

In December 2013, teachers of selected Technical Educational & Vocational Training Authority (TEVTA) centres from the priority districts underwent such technical training for the specified ten curricula.

NAVTTC delivered competency-based training to trainers of selected TEVTAs from several high-priority polio districts. The competency standards developed and validated during the curricula development process, now certified as National Standards, are to be used during the training of polio-affected individuals. The workshop was markedly interactive in nature, focusing on group work

and presentations while highlighting the intended goal of applicability in such competency-based trainings.

One notable trainer recounted his own experiences working with thousands affected by Polio in Pakistan. Noting their often absence from rigorous economic participation, he referred to these individuals as Pakistan's 'untapped resources'. The trainer also placed special emphasis on the work of disabled working–age individuals in the carpet industry and urged the other trainers to use this as an example during their own training to ensure the successful streamlining of polio-affectees into Pakistan's workforce.

In order to sensitize participants and raise awareness on the matter, participants shared individual experiences linked to polio-affectees and working-age individuals. Most of the high-priority TEVTAs are located in smaller districts of Pakistan where trainers aimed to raise awareness through word-of-mouth. Additionally, they spoke of success stories and considered using these experiences as sources of inspiration during their own trainings for polio-affectees. Trainers were quick to suggest several untapped avenues to maximize the potential of this training.

It is imperative to note that although polio-affectees may require special attention and training, it must be delivered without compromising their dignity and self-esteem.

The idea is to train polio-affectees and equip them with the ability to earn a respectable living. The TEVTAs of these high-priority districts will carry out these trainings through the coordination and support of NAVTTC.

The pattern of the training is such that it will aim to merge the training of Life Skills Curriculum into the training polio-affectees will receive. Earlier in 2012, the Education Programme at UNIDO along with GIZ and NAVTTC developed a Curriculum on Life Skills.

The Life Skills component of this training will impart knowledge on the use of 'soft skills'. This will result in employees who have:

Effective communication skills	A knack for internal and external customer care	Plain "common sense"	A good work ethic	Flexible attitude and are self-driven

Since polio-affectees are disconnected from the mainstream workforce, their inclusion through the use of Life Skills Curriculum will make their transition into Pakistan's mainstream workforce smoother. If trainings consist of five sessions per week, three will consist

of technical training for polio-affectees while the other two will incorporate 'Life Skills' trainings, thereby making it more effective and successful.

UNIDO hopes that the creation of these curricula will serve the purpose for which they were made i.e. the rehabilitation of working-age disabled individuals through technical training programs in employable skills, so that they may contribute socially and economically in their respective communities.

Furthermore, it is hoped that this training will serve to educate and sensitize local communities, particularly illiterate people & workers, on measures for prevention against fatal diseases and the benefits of early intervention while also mobilizing support in local communities for the polio eradication drive.

Curriculum for Video Editing

Name of course: Video Editing

The course will cover the fundamental theoretical and practical aspects of video editing. Further, the course will impart technical knowhow of operating two different video editing software applications.

Overall Objectives of the course:

- To provide a well-rounded and comprehensive training on video editing through lectures, exercises and applications.
- To set a contextual backdrop for aiding ease of understanding, the theoretical background pertaining to video editing would be covered as well.
- To emphasize skill proficiency so that trainees can practically contribute and provide support to the relevant industry.
- To maximize the production of high quality videos, films, documentaries and other related formats.

Competencies gained after completion of the course:

On completion of the course, the trainee will be able…

- To professionally edit videos of different genres i.e. documentaries, drams, short films, interviews, commercials etc.
- To proficiently use different video editing software applications including Adobe Premiere and Final Cut Pro.
- To acquire a theoretical and practical knowledge of video editing and its related constructs including filmmaking.

Job opportunities available immediately and in the future:

- The trainee will be able to understand the industrial set up and would be able to work efficiently.
- Trainee can be hired as a video editor or work in a related industry as a professional thus, aiding post-production skills to produce quality video/films.
- Trainee could become an entrepreneur to further extend the industry.
- They could work in different areas of the media industry, work within a production house as an editor, or even provide freelance editing solutions to various clients. They can be easily employed by different TV channels as a Non-liner Editor.

Curriculum Salient Features:

Trainee entry level:	Matric
Minimum qualification of trainer:	Graduate / Diploma in Film Making or Mass Communication
Medium of Instruction:	English/ Urdu
Duration of Course:	6 Months
Period of Training:	5 days/week (7 working Hrs /day)

Training methodology:

- Theoretical coverage: 20 %
- Practical coverage: 80 %

Sequence of the Modules:

2. Overview about the program – Curriculum for Video Editing

Module Title and Aim	Learning Units	Theory[1] Days/hours	Workplace[2] Days/hours
Module 1: **Understanding Filming** Aim: Understand the history, key concepts and characteristics of filming in an effort to set a contextual background for video editing. To explain the production, post production and delivery guidelines pertaining to filmmaking.	LU1-A History of Motion Picture Industry	8 Hours	NIL
	LU2-Production Guidelines	8Hours	NIL
	LU3-Post Production Guidelines	8 Hours	NIL
	LU4- Delivery Guidelines	8 Hours	NIL

[1] Learning hours in training provider premises
[2] Training workshop, laboratory and on-the-job workplace

Module 2: **Basics of computer** **Aim:** Understand the basic functions, components and aspects of computers to establish a certain level of computer literacy so that students are able to perform video editing functions using various types of software in the subsequent modules.	LU1- Computer Basics – I	4 Hours	18 Hours
	LU2- Computer Basics – II	3 Hours	18 Hours
	LU3- Internet Basics – I	4 Hours	18 Hours
	LU4- Internet Basics – II	3 Hours	18 Hours
	LU5-Productivity Program – MS Word	3 Hours	18 Hours
	LU6-Productivity Program – MS Excel	3 Hours	18 Hours
	LU7-Productivity Program – MS PowerPoint	3 Hours	17 Hours
	LU8-Computer Security	3 Hours	17 Hours

	LU9-Digital lifestyle	4 Hours	18 Hours
Module 3: **Basics of Adobe Premiere** **Aim:** Teach learners about the basics of Adobe Premiere to allow them to be able to log and transfer videos onto a hard drive (internal or external), where it can be edited, processed, and output to a wide variety of formats using Adobe Premiere Learn about Adobe Premiere software using a step-by-step approach starting from the generic basics to specific intricacies.	LU1- Overview of Adobe Premiere	3 Hours	14 Hours
	LU2-Workflow and workspace	3 Hours	14 Hours
	LU3-Project Setup	3 Hours	14 Hours
	LU4- Importing Footage	3 Hours	14 Hours
	LU5-Monitering Assets	3 Hours	13 Hours
	LU6- Editing Sequences and clips	3 Hours	13 Hours
	LU7-Editing Audio	3 Hours	13 Hours

	LU8- Titling and the Title	3 Hours	13 Hours
	LU9- Effects and Transition	2 Hours	13 Hours
	LU10-Animation and Key frames	2 Hours	`13 Hours
	LU11- Compositing	2 Hours	13 Hours
	LU12-Exporting	2 Hours	13 Hours
Module 4: **Basics of Final Cut Pro** **Aim** Understand the basics of Final Cut Pro (FCP) and to learn all relevant concepts, functions and constructs applicable to video editing in FCP.	LU1- Introduction to Final Cut Pro	4 Hours	18 Hours
	LU2- Keyboard shortcuts	2 Hours	9 Hours
	LU3-Import media resources	3 Hours	9 Hours
	LU4- Organize Your Media	4 Hours	18 Hours

To explain video editing using Final Cut Pro starting from the very basics to the specifics using a step by step approach	LU5-Review and skim media	3 Hours	18 Hours
	LU6- Create and Manage Projects	3 Hours	18 Hours
	LU7-Edit your project	3 Hours	18 Hours
	LU8-Edit Audio Resources	3 Hours	17 Hours
	LU9- Add transitions, titles, effects, and generators	3 Hours	17 Hours
	LU10- Exporting media	2Hours	9 Hours
Module 5 **Video Editing – Practical**	LU1- Practical Session – I	8 Hours	40 Hours

Aim Provide an opportunity to the students/learners to practically apply the learned constructs during all preceding modules.	LU2- Practical Session – II	8 Hours	40 Hours
	LU3: Practical Session –III	8 Hours	40 Hours
	LU4- Practical Session – IV	8 Hours	40 Hours
Total Hrs		160 Hours	640 Hours

3. Video Editing Contents (Teaching and Learning Guide)

3.1. Module1: Understanding Filming

Objective of the Module:

- Understand the history, key concepts and characteristics of filming in an effort to set a contextual background for video editing.
- To explain the different film/video types and formats in detail.

Duration:32 Hours

Theory: 32 Hours

Practice : N/A

Learning Unit	Learning Outcomes	Learning Elements	Duration	Materials Required	Learning Place
LU1- A History of the Motion Picture Industry	The learner will be able to acquire knowledge of the historical context of filmmaking and how it has progressed over the years.	**Knowledge of:** ▪ Development of motion pictures o Introduction to images o Introduction to different genres o History of movies and equipment o Ethical responsibility	Theory: 8 hours	Fixed tables, stationary, projector with sound system	Class room

		of editing			
		o History and Structure of the film industries			
		o History and structure of broadcast medium			
		o History of media			
		o Role of Editor in Media industry			
		Ability to: Gain knowledge about the history of filmmaking			
LU2- Production Guidelines	To gain knowledge of the various concepts, constructs and processes pertaining to the production of films/videos.	**Knowledge of:** How to produce a film or video. Understand the key concepts and guidelines to improve the following processes. ▪ Introduction ▪ Image creation or manipulation ▪ Production Phases ▪ Genre ▪ Story ▪ Casting ▪ Story Outline ▪ The Script ▪ Narrative ▪ Storyboards	Theory: 8 hours	Fixed tables, stationary, projector with sound system	Class room

		▪ Planning a Film Shoot ▪ Camera Technique ▪ Recount / Retake **Ability to:** Understanding of the key phase involved during pre-production and production.			
LU3-Post Production Guidelines	Learn about the post production process	**Knowledge of:** The steps and processes involved in post-production - Scheduling - The lab/editing studio - Off-line editing - On-line editing - Sound Editing - Compilation - Execution **Ability to:** Familiarize the trainee with key processes in post-production related to the editing role.	Theory: 8 hours	Fixed tables, stationary, projector with sound system	Class room
LU4- Delivery Guidelines	Key understanding of skills required to deliver quality broadcast over	**Knowledge of:** • Do's and don'ts of work/service	Theory: 8 hours	Fixed tables & stationary	Class room

	television network, internet or related platforms.	• Delivery check list • Packaging **Ability to:** Deliver and execute work that is of high quality.			

3.2. Module 2: Basics of Computer

Objectives of the Module:

- Understand the basic functions, components and aspects of computers to establish a certain level of computer literacy.
- To perform video editing functions using various software applications in the subsequent units.

Duration: 192 Hours

Theory: 32 Hours

Practice :   160 Hours

Learning Unit	Learning Outcomes	Learning Elements	Duration	Materials Required	Learning Place
LU1-Computer Basics – I	To learn the main parts of the computer i.e. keyboard, mouse.	**Knowledge of** ▪ Identifying main components of the	Theory: 4 hours Practice:	• Fixed tables • Stationary	Class room and Computer

| | Furthermore, the student will learn common computer terminology such as data, program, networking etc. | various software application graphical user interface (GUI).
▪ Use the pointer to navigate in a program i.e. mouse, keyboard.
▪ Identify the tabs, groups, and commands on the Ribbon.
▪ Identify the menus, menu options and shortcut keys on the ribbon panel.
▪ Type text and characters in a word processor, spreadsheet and slide programs.
▪ Explain the use of keyboard shortcuts and key combinations.
Ability to: Operate input mediums i.e. mouse and keyboard on different software applications. | 18 Hours | • Computer | Lab |
| LU2- | Explain the different type | **Knowledge of:** | Theory: | • Fixed | Class room |

Computer Basics – II	of computers and their peripherals i.e. RAM, hard disk etc. used for production, communication, educational or entertainment activities. Explain the features of various operating systems i.e. Windows and Mac.	▪ Identifying and compare the features of different types of computers. ▪ Explain the role of memory i.e. primary and secondary. ▪ Explain the basics of computer performance indicators and how they relate to productivity. ▪ Describe the different types of software applications and their use. **Ability to:** Execute various actions using computer tools.	3 Hours Practice: 18 Hours	tables • Stationary • Computer	and computer lab
LU3- Internet Basics – I	Explain the purpose of the world wide web i.e. its need and importance. Explain the use of search engines and various web-based applications.	**Knowledge of** ▪ Defining the Internet and elaborate on the impact of its use. ▪ Identify the different components required to connect to the Internet.	Theory: 4 Hours Practice: 18 Hours	• Fixed tables • Stationary • Computer • Internet connection	Class room and computer lab

		▪ Identify the features of different types of Internet connections. ▪ Explain the term *bandwidth* in relation to the different types of Internet connections. **Ability to:** To use internet search engines etc., and web base applications.			
LU4- Internet Basics – II	To learn the differences between and benefits of using email, online communities and messaging services tools.	**Knowledge of:** ▪ Explaining how e-mail works. ▪ Write and send e-mail messages. ▪ Manage e-mail messages. ▪ Identify the features of online communities (i.e. Google ring) ▪ Explain how instant messaging works. ▪ Explain how the web	Theory: 3 Hours Practice: 18 Hours	• Fixed tables • Stationary • Computer • Internet connection	Class room and computer lab

		authorizing software is used to create and publish web pages. **Ability to:** Download and install various web base application tools.			
LU5-Productivity Program – MS Word	Students will learn about the basic tasks that can be performed using a word processor. Students will learn to work with text, tables, and pictures. Students will also learn how to use language tools.	**Knowledge of:** ▪ Performing basic tasks in a word processor. ▪ Edit and format text. ▪ Work with tables and pictures. ▪ Work with language tools. **Ability to:** Use of Microsoft word for professional activities.	Theory: 3 Hours Practice: 18 Hours	• Fixed tables • Stationary • Computer	Class room and computer lab
LU6-Productivity Program – MS Excel	Students will learn the components of a spreadsheet and how to store data in it. Students will also learn to perform basic mathematical tasks, and create charts	**Knowledge of:** ▪ Identifying the components of a spreadsheet. ▪ Enter data into a spreadsheet. ▪ Perform basic	Theory: 3 Hours Practice: 18 Hours	• Fixed tables • Stationary • Computer	Class room and computer lab

	and graphs in a spreadsheet. In addition, students will learn about the various options available for printing a spreadsheet.	mathematical tasks in a spreadsheet using basic formulas. ■ Insert charts in a spreadsheet. ■ Printing using spreadsheets. **Ability to:** Use of Microsoft Excel for professional activities.			
LU7- Productivity Program – MS PowerPoint	To teach students about the basic elements of presentation slides, how to develop the slides, add graphics and multimedia to the presentation. Students will also learn to identify various options available to print presentation in different formats.	**Knowledge of:** ■ Identifying the basic functionalities offered by presentation programs. ■ Develop presentation slides. ■ Add graphics and multimedia to a presentation. ■ Identify the various options available to print presentations in different formats. **Ability to:** Use of Microsoft	Theory: 3 Hours Practice: 17 Hours	Fixed tables & stationary	Class room

		Power Point for professional activities.			
LU8-Computer Security	To explain to students the need for protecting the computer hardware, software and electronic data from damage, loss, or theft. Students will also learn about the various solutions and devices that can be used to protect the data on computer.	**Knowledge of:** ▪ Explaining the terms security and privacy and why they are important in computing industry. ▪ Identify the various threats i.e. virus trogons etc. and their possible solutions. ▪ Identify the common measures used to protect privacy. **Ability to:** Understand the possible threats such as malicious malware, trogons and viruses, which can be harmful to any computer.	Theory: 3 Hours Practice: 17 Hours	• Fixed tables • Stationary • Computer	Class room and computer lab
LU9-Digital Lifestyles	To introduce various characteristics of new digital technologies including digital audio, video and photography.	**Knowledge of:** ▪ Identify the various characteristics of digital audio options. ▪ Explain the concepts	Theory: 4 Hours Practice: 18 Hours	• Fixed tables • Stationary • Computer	Class room and computer lab

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		of recording, copying, and converting digital audio medium. ■ Identify the features of advanced speech recognition tools. ■ Identify the characteristics of digital video options. ■ Explain what digital video editing is and various output formats available for digital video medium. ■ Identify the features of different web video tools. ■ Explain the benefits, features, and workings of a digital camera. ■ Explain how digital images can be managed and edited. ■ Identify the features			

		of different types of printers that are available for printing. **Ability to:** Handle Audio software applications, usage of digital camera and be able to edit pictures**.**			

3.3. Module 3: Basics of Adobe Premiere

Objectives of the Module:

- To teach learners the basics of Adobe Premiere.
- To teach them how to log and transfer videos onto an internal or external storage mediums.
- To teach them how to edit, process, and export to a wide variety of formats using Adobe Premiere.
- To teach them about Adobe Premiere software by applying a step by step approach starting from the generic basics to specific intricacies.

Duration: 192 Hours

Theory: 32 Hours

Practice: 160 Hours

Learning Unit	Learning Outcomes	Learning Elements	Duration	Materials Required	Learning Place
LU1- Overview of Adobe Premiere	The learner will be made aware of the basic tools of Adobe Premiere	**Knowledge of:** ▪ Understanding how Adobe Premiere works. ▪ The functions that can be performed using Adobe Premiere. ▪ Covering the limitations of Adobe Premiere. **Ability to:** Perform basic tasks using Adobe Premiere.	Theory: 3 Hours Practice: 14 Hours	• Stationary • PC with Windows • Adobe Premiere	Computer lab
LU2- Workspace and Workflow	To acquaint the learner with various concepts, constructs and processes pertaining to the workspace and workflow.	**Knowledge of:** ▪ Using Workspaces ▪ Setting up your system ▪ Using Synchronize setting ▪ Setting up your system ▪ Working with Tool Panels ▪ Setting up Preferences ▪ Setting Basic workflow ▪ Setting Cross-platform workflow	Theory: 3 Hours Practice: 14 Hours	• Stationary • PC with Windows • Adobe Premiere	Computer lab

		▪ Differentiating between Direct-Link workflow, Premiere Pro and Speed Grade ▪ Using Cross-application workflows ▪ Applying Adobe Dynamic Link ▪ Using the Source Monitor and Program Monitor ▪ Creating Multi-Camera editing workflow ▪ Controlling surface support ▪ Using Keyboard shortcuts in Premiere **Ability to:** Use Adobe Premier Pro for extensive projects.			
LU3-Project Setup	Learn about project set up.	**Knowledge of:** ▪ Creating and changing projects ▪ Archiving projects ▪ Trimming or copying	Theory: 3 Hours Practice: 14 Hours	• Stationary • PC with Windows • Adobe	Computer lab

| LU4- Importing Footage | Teach the learner how to import footage and its related concepts. | **Knowledge of:**
▪ Transferring and importing files
▪ Importing assets from tapeless formats
▪ Importing still images
▪ Importing sequences, clip lists, libraries, and compositions
▪ Importing digital audio
▪ Importing XML project files from Final Cut Pro Support for growing files
▪ Capturing and digitizing
▪ Capturing DV or HDV video
▪ Capturing HD video
▪ Capturing content for DVD
▪ Batch capturing and recapturing
▪ Creating clips for offline | Theory: 3 Hours Practice: 14 Hours | • Stationary
• PC with Windows
• Adobe Premiere
• DVR
• Required Software | Computer lab |

project

Ability to: Manage projects using Adobe Premiere.

Premiere

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		editing			
		• Digitizing analog video			
		• Working with time code			
		Ability to: Work on advance projects using Premiere Pro.			
LU5- Monitoring Assets	Learner will be taught about the concept of monitoring assets.	**Knowledge of:** • Using the Source Monitor and Program Monitor • Playing assets • Using the Waveform monitors and vector scope • Using the Reference Monitor **Ability to:** Monitor and profile projects using Premier Pro.	Theory: 3 Hours Practice: 13 Hours	• Stationary • PC with Windows • Adobe Premiere	Computer lab
LU6- Editing Sequences and clips	Learner will be taught about the editing of sequences and clips in a step by step fashion.	**Knowledge of:** • Creating and changing sequences • Creating and playing clips • Adding clips to	Theory: 3 Hours Practice: 13 Hours	• Stationary • PC with Windows • Adobe Premiere	Computer lab

		sequences			
		▪ Working with clips in a sequence			
		▪ Working with offline clips			
		▪ Re-linking offline media			
		▪ Trimming clips			
		▪ Editing multi-camera sequences			
		▪ Source patching and track targeting			
		▪ Multi-Camera editing workflow			
		▪ Editing from sequences loaded into the Source monitor			
		▪ Rearranging clips in a sequence			
		▪ Working with clips in a sequence			
		▪ Rendering and previewing sequences			
		▪ Closed Captioning			
		▪ Modifying clip properties with Interpret Footage			
		▪ Synchronizing audio and			

		▪ video with Merge Clips ▪ Creating special clips (synthetics) ▪ Trimming clips ▪ Correcting mistakes ▪ Removing alerts with the Events panel ▪ Synchronizing audio and video with Merge Clips **Ability to:** Use advance tools for editing in-line and out-line mediums within Premiere Pro.			
LU7- Editing Audio	Students will be taught how to edit audio in detail.	**Knowledge of:** ▪ Overviewing audio and the Audio Track Mixer ▪ Working with clips, channels, and tracks ▪ Editing audio in a Timeline panel ▪ Recording audio ▪ Adjusting volume levels ▪ Recording audio mixes ▪ Monitoring clip volume and pan using Audio	Theory: 3 Hours Practice: 13 Hours	• Stationary • PC with Windows • Adobe Premiere	Computer lab

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		Clip Mixer ▪ Multiple stereo assignments for tracks to multichannel masters ▪ Advanced mixing ▪ Editing and mixing audio in Adobe Audition ▪ Editing audio in Adobe Sound booth ▪ Panning and balancing **Ability to:** Use advance audio functionalities within Premiere Pro.			
LU8- Titling and the Titler	Students will learn the concepts of titling and titler using a step by step approach	**Knowledge of:** ▪ Creating and editing titles ▪ Creating and formatting text in titles ▪ Drawing shapes in titles ▪ Add images to titles ▪ Working with text and objects in titles ▪ Fills, strokes, and shadows in titles	Theory: 3 Hours Practice: 13 Hours	• Stationary • PC with Windows • Adobe Premiere	Computer lab

		Rolling and crawling titles			
		Using Titler text styles			
		Ability to: Input text and drawing using the titler tools in Premiere Pro.			
LU9- Effects and Transition	Acquaint the learner with the different effects and transitions available in Adobe Premiere.	**Knowledge of** - Using effects - Applying, removing, finding, and organizing effects - Viewing and adjusting effects and key frames - Applying effects to audio - Working with audio transitions - Using Effect presets - Using Warp Stabilizer effect to stabilize the video - Color correction and adjustment - Using Adjustment Layers - Using the rolling shutter	Theory: 2 Hours Practice: 13 Hours	- Stationary - PC with Windows - Adobe Premiere	Computer lab

		repair effect • Using Three-way Color Corrector effect • Using Audio effects and transitions reference • Creating common results • Setting up Duration and speed • Applying Effects and transitions references • Using Eliminate flicker tool • Using Interlacing and field order • Modifying and customizing transitions • Using Motion: position, scale, and rotate a clip • Using Transition overview: applying transitions **Ability to:** Use colors, effects and after effects by applying various tools.			

LU10-Animation and key frames	Learner will be taught about different animation and key frames available in Adobe Premiere.	**Knowledge of:** ▪ Adding, navigating, and setting key frames ▪ Moving and copying key frames ▪ Controlling effect changes using key frame interpolation ▪ Optimize key frame automation **Ability to:** Use frames for animation.	Theory: 2 Hours Practice: 13 Hours	• Stationary • PC with Windows • Adobe Premiere	Computer lab
LU11-Compositing	Students will learn the concept of compositing.	**Knowledge of:** ▪ Compositing, alpha channels, and adjusting clip opacity ▪ Using Blending modes **Ability to:** Use transparency tools.	Theory: 2 Hours Practice: 13 Hours	• Stationary • PC with Windows • Adobe Premiere	Computer lab
LU12-Exporting	Teach students how to perform the export function in Adobe Premiere.	**Knowledge of:** ▪ Setting up workflow and overview for exporting ▪ Applying formats exported directly from Premiere Pro	Theory: 2 Hours Practice: 13 Hours	• Stationary • PC with Windows • Adobe Premiere	Computer lab

		▪ Exporting to Panasonic P2 format ▪ Exporting OMF files for Pro Tools ▪ Exporting to a still image ▪ Exporting to DVD or Blu-ray Disc ▪ Using Smart rendering ▪ Working with Adobe Speed Grade ▪ Working with Adobe Prelude ▪ Exporting for the Web and mobile devices ▪ Exporting projects for other applications ▪ Exporting to videotape **Ability to:** Use export tool in various formats.			

3.4. Module 4: Basics of Final Cut Pro

Objectives of the Module:

- Understand the basics of Final Cut Pro (FCP) and to learn all relevant concepts, functions and constructs applicable to video editing in FCP.
- To explain video editing using Final Cut Pro starting from the very basics to the specifics using a step by step approach.

Duration: 192 Hours

Theory: 32 Hours

Practice : 160 Hours

Learning Unit	Learning Outcomes	Learning Elements	Duration	Materials Required	Learning Place

LU1-
Introduction to
Final Cut Pro
	The learner will be
	familiarized with the
	basics of Final Cut Pro.
		Knowledge of:
		
		▪ Starting up Final Cut Pro
		
		▪ Working with workflow
		
		▪ Induction with the basic
		  interface
		
		▪ Setting up Media files
		  and clips
		
		▪ Managing Events and
		  projects
		
		Ability to: Work with the
		initial setup of Final Cut Pro
			Theory:
			4 Hours
			Practice:
			18 Hours
				• Fixed
				  tables
				• Stationary
				• MAC
				  System
				• Final Cut
				  Pro
					Computer
					Lab

LU2- Keyboard
shortcuts
	Teach different keyboard
	shortcuts and gestures in
	FCP
		Knowledge of:
		
		▪ Using keyboard
		  shortcuts and multi-
		  touch gestures
		
		▪ Customizing keyboard
		  shortcuts
		
		▪ Using and modifying
		  keyboard shortcuts in
		  the Command Editor
		
		▪ Exporting and importing
		  command sets in the
		  Command Editor
		
		Ability to: Use shortcut
		keys and gesture and be
			Theory:
			2 Hours
			Practice:
			9 Hours
				• Fixed
				  tables
				• Stationary
				• MAC
				  System
				• Final Cut
				  Pro
					Computer
					Lab

		able to modify them.			
LU3- Import Media Resources	Understanding of various concepts, constructs and processes involved in importing of media elements.	**Knowledge of:** ▪ Importing files from different medium ▪ Accessing media files from an archive or disk image ▪ Organizing files while importing ▪ Importing files during recording ▪ Using memory cards and cables ▪ Using media formats supported by FCP ▪ Importing and adjusting REDCODE RAW video files **Ability to:** Import many formats from various mediums and to adjust them using FCP.	Theory: 4 Hours Practice: 18 Hours	• Fixed tables • Stationary • MAC System • Final Cut Pro	Computer lab
LU4 - Organizing Media	Organizing media resources and using various functions.	**Knowledge of** ▪ Inserting Events and clips	Theory: 4 Hours Practice:	• Fixed tables	Computer lab

Resources		▪ Organizing events	18 Hours	• Stationary	
		▪ Creating a new event		• MAC	
		▪ Renaming events		System	
		▪ Merging events		• Final Cut	
		▪ Splitting events		Pro	
		▪ Copying or dragging clips between events			
		▪ Copying or dragging events			
		▪ Sporting events			
		▪ Deleting clips or events			
		▪ Organizing clips			
		▪ Reviewing and sorting clips			
		▪ Renaming clips			
		▪ Differentiating favorite or rejected clips through color coding			
		▪ Adding keywords to clips			
		▪ Adding or editing clip notes			
		▪ Organizing clips by roles			
		▪ Searching clips using the Event Browser			
		▪ Saving searches as			

		Smart Collections ▪ Organizing Keyword and Smart Collections **Ability to:** Sort various projects, events and resources using FCP			
LU5- Review and Skim Media	Educate the learner about using basic concepts of reviewing and skim media resources.	**Knowledge of:** ▪ Playing back and skimming ▪ Applying play back and skim media in the Event Viewer ▪ Using second display to view playback ▪ Viewing playback on an external video monitor ▪ Understanding background rendering **Ability to:** Use Playback, skimming, event viewer features.	Theory: 3 Hours Practice: 18 Hours	• Fixed tables • Stationary • MAC System • Final Cut Pro	Computer lab
LU6- Create and Manage Projects	Learner will be educated to create and manage projects in FCP.	**Knowledge of:** ▪ Creating a new project ▪ Using Preview and open project options	Theory: 3 Hours Practice: 18 Hours	• Fixed tables • Stationary	Computer lab

		Modifying a project's name and properties • Organizing projects in the Project Library • Saving projects **Ability to:** Create new projects and their retrieval.		• MAC System • Final Cut Pro	
LU7- Edit Project	Provide an overview of how editing is done using FCP.	**Knowledge of:** • Editing projects • Selecting clips and name ranges • Adding and removing clips • Arranging clips in the Timeline • Using Cut and trim tools • Using Navigation tools • Working with markers • Correcting excessive shake and rolling shutter issues **Ability to:** Edit using moderate level, selection, navigational and corrective tools.	Theory: 3 Hours Practice: 18 Hours	• Fixed tables • Stationary • MAC System • Final Cut Pro	Computer lab

LU8- Edit Audio Resources	Provide an overview of audio editing by using various tools in FCP.	**Knowledge of**: ▪ Supported Audio Format ▪ Editing 158 Audio basics ▪ Adding Audio resources ▪ Editing audio clips or audio components ▪ Adding and adjusting audio effects ▪ Using audio tools and techniques **Ability to:** Use and edit audio resources in FCP.	Theory: 3 Hours Practice: 18 Hours	• Fixed tables • Stationary • MAC System • Final Cut Pro	Computer lab
LU9- Add transitions, titles, effects, and generators	Teach learners how to add transitions, titles, effects and generators in FCP.	**Knowledge of:** ▪ Using Transitions, titles, effects, ▪ Using generators ▪ Using 205 Add and adjust transitions ▪ Adding and adjust titles ▪ Adjusting built-in effects ▪ Adding and adjust clip effects ▪ Adding generators ▪ Using themes ▪ Using 242 onscreen	Theory: 3 Hours Practice: 17 Hours	• Fixed tables • Stationary • MAC System • Final Cut Pro	Computer lab

		controls			
		▪ Using the Video Animation Editor			
		Ability to: Use various effects and after effects tools in FCP.			
LU10 – Exporting Media	To educate the learner about the various concepts, constructs and processes pertaining to exporting of media elements.	Knowledge of: ▪ Rendering the complete project ▪ Reviewing the complete project before exporting ▪ Setting up the export properties ▪ Exporting the project in the required video format. **Ability to:** Render the project and export it.	Theory: 2 Hours Practice: 9 Hours	• Fixed tables • Stationary • MAC System • Final Cut Pro	Computer lab

3.5.   Module 5: Video Editing – Practical

Objective of the Module:

- Providing an opportunity for the students/learners to practically apply the learned constructs during all preceding modules.

Duration: 192 Hours

Theory: 32 Hours

Practice : 160 Hours

Learning Unit	Learning Outcomes	Learning Elements	Duration	Materials Required	Learning Place
LU1- Practical	The learner will be given	**Knowledge of:**	Theory:	• MAC &	Computer

Session – I	a task to edit a drama/ short film.	Editing a drama / short film type of video **Ability to:** Work with different formats, types and genre of videos.	8 Hours Practice: 40 Hours	PC • Adobe Premiere & Final Cut Pro • Footage	Lab and Studio
LU2- Practical Session – II	The learner will be given a task to edit a commercial video.	**Knowledge of:** Editing a commercial video **Ability to:** Work with different formats, types and genre of videos.	Theory: 8 Hours Practice: 40 Hours	• MAC & PC • Adobe Premiere & Final Cut Pro • Footage	Computer Lab and Studio
LU3- Practical Session – III	The learner will be given a task to edit a documentary.	**Knowledge of:** Editing a documentary **Ability to:** Work with different formats, types and genre of videos.	Theory: 8 Hours Practice: 40 Hours	• MAC & PC • Adobe Premiere & Final Cut Pro • Footage	Computer Lab and Studio
LU4- Practical Session – IV	The learner will be given a task to edit a music video.	**Knowledge of:** Editing a music video **Ability to:** Work with different formats, types and	Theory: 8 Hours Practice: 40 Hours	• MAC & PC • Adobe Premiere	Computer Lab and Studio

| | | | genre of videos. | | & Final Cut Pro |
| | | | | | • Footage |

4. Assessment Template

4.1. Module1: Understanding Filming

Learning Units	Theory Days/hours	Workplace Days/hours	Recommended formative assessment	Recommended Methodology	Scheduled Dates
LU1- A History of the Motion Picture Industry	8	Nil	Describe the history of still and moving pictures Describe the beginning eras of the movie industry Describe the beginning eras of	Written Questions	

			the broadcast medium		
LU2-Production Guidelines	8	Nil	Explain the difference between the real time and illustration Describe the hierarchy of production teams What is difference between story and genre? Define the phases of planning the shoot What is a script? What is story boarding?	Written Questions	
LU3-Post Production Guidelines	8	Nil	What does scheduling mean? Define the following: 1. Scheduling 2. Budgeting 3. Studio 4. Off line editing 5. Online Editing What does post-production	Written Questions	

Learning Units					
LU4- Delivery Guidelines	8	Nil	Explain the do's and do not's of the successful editor	Written Questions	

4.2. Module 2: Basics of Computer

Learning Units	Theory Days/hours	Workplace Days/hours	Recommended formative assessment	Recommended Methodology	Scheduled Dates
LU1- Computer Basics – I	4	18	▪ What does GUI mean? ▪ Write short notes on the following: 1. TABS 2. Groups	Demonstration of practical Assignment given by teacher for each unit	

			3. Menus 4. Commands 5. Ribbons ▪ Explain the use of keyboard shortcuts and key combinations. ▪ What do the short cut keys mean? ▪ Write the short keys for the following: 1. Copy 2. Paste 3. Cut 4. Rename 5. Save 6. Print 7. Select All		
LU2- Computer Basics – II	3	18	▪ Identify and compare the features of different types of computers ▪ Explain the role of memory ▪ Explain the basics of computer performance and how it relates to productivity	Demonstration of practical Assignment given by teacher for each unit	

			▪ Describe the different types of productivity programs and their uses	
LU3- Internet Basics – I	4	18	▪ Define the Internet and elaborate on its uses ▪ Explain the different components required to connect to the Internet ▪ Elaborate the features of different types of Internet connections ▪ Explain the term *bandwidth* in relation to the different types of Internet connections	Demonstration of practical Assignment given by teacher for each unit	
LU4- Internet Basics – II	3	18	▪ Explain how e-mail works ▪ Write and send e-mail messages ▪ How to manage e-mail messages ▪ Describe the features of	Demonstration of practical Assignment given by teacher for each unit	

			online communities		
			▪ Explain how instant messaging works		
			▪ Explain how the Web authoring software is used to create and publish Web pages		
LU5-Productivity Program – MS Word	3	18	▪ Perform the experiment in which you should explain the following in steps: 1. Insert a cover Page 2. Insert references 3. Insert table of content 4. Perform spell check	Demonstration of practical Assignment given by teacher for each unit	
LU6-Productivity Program – MS Excel	3	18	▪ Describe the components of a spreadsheet ▪ Insert data into a spreadsheet ▪ Perform basic mathematical tasks in a spreadsheet	Demonstration of practical Assignment given by teacher for each unit	

			▪ Insert charts in a spreadsheet ▪ Demonstrate how to set print settings		
LU7-Productivity Program – MS PowerPoint	3	17	▪ Describe the basic functionalities offered by presentation programs ▪ How to create a presentation ▪ How to add graphics and multimedia to a presentation ▪ Describe the various options available to print presentations in different formats	Demonstration of practical Assignment given by teacher for each unit	
LU8-Computer Security	3	17	▪ Explain what the terms security and privacy mean as they apply to computing ▪ Describe the various	Demonstration of practical Assignment given by teacher for each unit	

			threats prevalent in the world of computers and the corresponding solutions ▪ Describe the common measures used to protect privacy	
LU9-Digital Lifestyles	4	18	▪ Describe the various characteristics of digital audio ▪ Describe the concepts of recording, copying, and converting digital audio ▪ Describe the features of advanced speech technologies ▪ Describe the characteristics of digital video ▪ Explain what digital video editing is and the various output formats for digital	Demonstration of practical Assignment given by teacher for each unit	

			video		
			▪ Describe the features of different web video technologies		
			▪ Explain the benefits, features, and workings of a digital camera		
			▪ Explain how digital images can be managed and edited		
			▪ Describe the features of different types of printers that are available for printing photos		

4.3. Module 3: Basics of Adobe Premiere

Learning Units	Theory Days/hours	Workplace Days/hours	Recommended formative assessment	Recommended Methodology	Scheduled Dates
LU1-	3	14	• Elaborate on the functions that can be performed using	Demonstration of practical

Assignment given by teacher for each unit | |

Overview of Adobe Premiere				Adobe Premiere ▪ Cover the functions that cannot be performed by Adobe Premiere		
LU2- Workspace and Workflow	3	14	▪	Explain the following: 1. Workspaces setting 2. Synchronization settings 3. Name the common Panels in Pre Pro GUI 4. Cross-platform workflow 5. Direct-Link workflow between Premiere Pro and Speed Grade 6. Cross-application workflows 7. Adobe Dynamic Link 8. Using the Source Monitor and Program Monitor 9. Multi-Camera editing workflow 10. Control surface support 11. Keyboard shortcuts in	Demonstration of practical Assignment given by teacher for each unit	

			Premiere Pro CC		
LU3-Project Setup	3	14	▪ Explain the creating and changing projects ▪ Explain the archiving projects ▪ Explain how to trim or copy your project	Demonstration of practical Assignment given by teacher for each unit	

LU4- Importing Footage	3	14	▪ Identify common steps involved in transferring and importing files?
			▪ Explain how to Importing assets from tapeless formats
			▪ Write the steps for the following:
			  1. Importing still images.
			  2. Importing sequences, clip lists, libraries, and compositions
			  3. Importing digital audio
			  4. Importing XML project files from Final Cut Pro Support for growing files
			  5. Capturing and digitizing
				Demonstration of practical
				
				Assignment given by teacher for each unit	

			6. Capturing DV or HDV video 7. Capturing HD video 8. Capturing content for DVD 9. Batch capturing and recapturing 10. Create clips for offline editing 11. Digitizing analog video 12. Working with time code		
LU5- Monitoring Assets	3	13	▪ Explain the difference between the Source Monitor and Program Monitor ▪ Explain steps to Play assets in Premiere Pro ▪ Explain the use of the Waveform monitors and vector scope ▪ Explain the use the Reference Monitor	Demonstration of practical Assignment given by teacher for each unit	
LU6- Editing Sequences	3	13	▪ Explain how to create and change sequences? ▪ Write the steps of the	Demonstration of practical Assignment given by teacher for each unit	

and clips			following procedures: 1. Creating and playing clips 2. Adding clips to sequences 3. Working with clips in a sequence 4. Working with offline clips 5. Re-linking offline media 6. Trimming clips 7. Editing multi-camera sequences 8. Source patching and track targeting 9. Multi-Camera editing workflow 10. Edit from sequences loaded into the Source monitor 11. Rearranging clips in a sequence 12. Working with clips in a sequence 13. Rendering and previewing sequences		

			14. Closed Captioning 15. Modifying clip properties with Interpret Footage 16. Synchronizing audio and video with Merge Clips 17. Creating special clips (synthetics) 18. Trimming clips (CS5 and CS5.5) 19. Correcting mistakes 20. Remove alerts with the Events panel 21. Synchronizing audio and video with Merge Clips (CS5.5 and later)		
LU7- Editing Audio	3	13	▪ Write the steps for the following: 1. Overview of audio and the Audio Track Mixer 2. Working with clips, channels, and tracks 3. Editing audio in a Timeline panel 4. Recording audio	Demonstration of practical Assignment given by teacher for each unit	

			5. Adjusting volume levels 6. Recording audio mixes 7. Monitor clip volume and pan using Audio Clip Mixer 8. Multiple stereo assignments for tracks to multichannel masters 9. Advanced mixing 10. Editing and mixing audio in Adobe Audition 11. Editing audio in Adobe Sound booth 12. Panning and balancing		
LU8- Titling and the Titler	3	13	▪ Write the steps for the following: 1. Creating and editing titles 2. Creating and formatting text in titles 3. Drawing shapes in titles 4. Add images to titles 5. Working with text and objects in titles	Demonstration of practical Assignment given by teacher for each unit	

			6. Fills, strokes, and shadows in titles 7. Rolling and crawling titles 8. Titler text styles		
LU9- Effects and Transition	2	13	▪ Write the steps of the following: 1. About effects 2. Applying, removing, finding, and organizing effects 3. Viewing and adjusting effects and key frames 4. Applying effects to audio 5. Working with audio transitions 6. Effect presets 7. Stabilize motion with the Warp Stabilizer effect 8. Color correction and adjustment 9. Adjustment Layers 10. The rolling shutter repair effect	Demonstration of practical Assignment given by teacher for each unit	

			11. Three-way Color Corrector effect 12. Audio effects and transitions reference 13. Creating common results 14. Duration and speed 15. Effects and transitions reference 16. Eliminate flicker 17. Interlacing and field order 18. Modifying and customizing transitions 19. Motion: position, scale, and rotate a clip 20. Transition overview: applying transitions		
LU10-Animation and key frames	2	13	▪ Write the steps for the following: 1. Adding, navigating, and setting key frames 2. Moving and copying key frames	Demonstration of practical Assignment given by teacher for each unit	

			3. Controlling effect changes using key frame interpolation Optimize key frame automation		
LU11-Compositing	2	13	▪ Write the following steps: 1. Compositing, alpha channels, and adjusting clip opacity 2. Blending modes	Demonstration of practical Assignment given by teacher for each unit	
LU12-Exporting	2	13	▪ Write the following steps: 1. Workflow and overview for exporting 2. Formats exported directly from Premiere Pro 3. Export to Panasonic P2 format 4. Exporting OMF files for Pro Tools 5. Export a still image 6. Exporting to DVD or Blu-ray Disc 7. Smart rendering	Demonstration of practical Assignment given by teacher for each unit	

			8. Working with Adobe Speed Grade 9. Working with Adobe Prelude 10. Exporting for the Web and mobile devices 11. Exporting projects for other applications 12. Exporting to videotape		

4.4. Module 4: Basics of Final Cut Pro

Learning Units	Theory Days/hours	Workplace Days/hours	Recommended formative assessment	Recommended Methodology	Scheduled Dates
LU1- Final Cut Pro Basics	4	18	▪ Explain the following: 1. Final Cut Pro 2. Final Cut Pro workflow overview 3. Final Cut Pro interface	Demonstration of practical Assignment given by teacher for each unit	

			overview 4. Media files and clips 5. Events and projects		
LU2- Keyboard shortcuts	2	9	▪ Explain the following: 1. Keyboard shortcuts and Multi-Touch gestures overview 2. Keyboard shortcuts 3. Multi-Touch gestures 4. Customize keyboard shortcuts 5. View keyboard shortcuts in the Command Editor 6. Modify keyboard shortcuts in the Command Editor 7. Export and import command sets in the Command Editor		
LU3- Import Media	4	18	▪ Explain the following: 1. Importing overview: Importing from different 2. Access media on an archive or disk image	Demonstration of practical Assignment given by teacher for each unit	

			3. Organize files while importing 4. Import while recording 5. About memory cards and cables 6. Supported media formats 7. Import and adjust REDCODE RAW video files		
LU3- Organize Media	4	18	▪ Explain the following: 1. Events and clips overview 2. Organize events 3. Create a new event 4. Rename an event 5. Merge or split events 6. Copy or move clips between events 7. Copy or move events 8. Sort event 9. Delete clips or events 10. Organize clips 11. View and sort clips 12. Rename clips		

			13. Rate clips as Favorite or Rejected 14. Add keywords to clips 15. Add or edit clip notes 16. Organize clips by roles 17. Find clips in the Event Browser 18. Save searches as Smart Collections 19. Organize Keyword and Smart Collections		
LU5-Playback and Skim Media	3	18	▪ Write the steps for the following: 1. Playback and skimming overview 2. Play back media 3. Skim media 4. Play back and skim media in the Event Viewer 5. View playback on a second display 6. View playback on an external video monitor	Demonstration of practical Assignment given by teacher for each unit	

			7. About background rendering		
LU6- Create and Manage Projects	3	18	▪ Write the steps: 1. Create a new project 2. Preview and open a project 3. Modify a project's name and properties 4. Organize projects in the Project Library 5. Save projects	Demonstration of practical Assignment given by teacher for each unit	
LU7- Edit Project	3	18	▪ Write the steps of the following: 1. Editing overview 2. Select clips and ranges 3. Add and remove clips 4. Arrange clips in the Timeline 5. Cut and trim clips 6. View and navigate 7. Work with markers 8. Correct excessive shake and rolling shutter issues	Demonstration of practical Assignment given by teacher for each unit	

LU8- Edit Audio Resources	3	18	▪ Write the following steps of the following: 1. Audio overview 2. 158 Audio editing basics 3. Add Audio 4. Edit audio clips or audio components 5. Add and adjust audio effects 6. Audio tools and techniques	Demonstration of practical Assignment given by teacher for each unit	
LU9- Add transitions, titles, effects, and generators	3	17	▪ Write the following steps: 1.Transitions, titles, effects, and generators overview 205 3. Add and adjust transitions 4. Add and adjust titles 5. Adjust built-in effects 6. Add and adjust clip effects 7. Add generators 8. About themes 9. 242 Use onscreen	Demonstration of practical Assignment given by teacher for each unit	

			controls		
			10. Use the Video Animation Editor		

4.5. Module 5: Video Editing – Practical

Learning Units	Theory Days/hours	Workplace Days/hours	Recommended formative assessment	Recommended Methodology	Scheduled Dates
LU1- Practical	8	40	Explain the editing style of a drama / short film. Able to explain how to work with different formats,	Demonstration of practical Assignment given by teacher for each unit	

Session – I			types and genre of videos.		
LU2- Practical Session – II	8	40	Explain the editing style of a commercial video. Able to explain how to work with different formats, types and genre of videos.	Demonstration of practical Assignment given by teacher for each unit	
LU3- Practical Session – III	8	40	Explain the editing style of a documentary. Able to explain how to work with different formats, types and genre of videos.	Demonstration of practical Assignment given by teacher for each unit	
LU4- Practical Session – IV	8	40	Explain the editing style of a music video. Able to explain how to work with different formats, types and genre of videos.	Demonstration of practical Assignment given by teacher for each unit	

5. Supportive Notes

- Assessment context

  The student's competencies will be assessed through work developed individually and within a team.

- Critical aspects

  Student must know the basics of film making and video editing.

- Assessment conditions

  The student must be assessed in an environment where all the required tools, equipment and basic material are available.

The student must be provided access to a relevant working area.

- Special Notes

  During the assessment the student must:

  - Demonstrate practical work at all times.

  - Communicate information about the task being undertaken to ensure a safe working environment.

5.1. List of Tools, Machinery & Equipment

Name of Trade	Video Editing
Duration	6 months

Sr. No.	Name of Item/ Equipment / Tools	Qty.
1.	Computer System Intel Core I5 Processor 2.6Ghz Motherboard according to processor Ram Corsair DDR3 8GB Hard disk : WD 1 GB SATA 8MB Cache MAC PRO 2System Motherboard according to processor Ram Corsair 16GB	20

	Hard disk : WD 1 TB Thermal ATX casing USB and Audio panel 460 + Power supply (according to graphics card) NVIDIA 2GB Graphics Card Integrated USB and Modem ports Integrated Audio Card Sony DVD writer Optical Mouse Multimedia Keyboard	
2.	LED Display 20''	20
3.	Creative 2.1 Speakers	20
4.	Headphones	20
5.	3k VA Stabilizer	20
6.	VTR Machine	1

5.2. List of Consumable Supplies

Name of Trade	Video Editing
Duration	6 months

Sr. No.	Name of Consumable Supplies	Quantity Required
1.	DVD - R	40
2.	Mini DV	40
3.	Notebooks	20
4.	Ball pen	20
5.	Flash Disk	20