



SKILL DEVELOPMENT PROGRAMS

OFFICIAL STUDY MATERIAL

SKILL COURSE
Studio Technology &
PCR

SKILL SYLLABUS

- ▶ **TELEVISION TECHNICAL SYLLABUS**
- ▶ **CAMERA TRAINING SYLLABUS**

TELEVISION TECHNICAL SYLLABUS SKILL DEVELOPMENT PROGRAMS OFFICIAL STUDY MATERIAL

Course Overview

This course covers the complete technical workflow of Television Production, including studio operations, PCR management, signal flow, playout handling, audio mixing, live broadcasting, cable systems, and newsroom–studio communication.

Detailed Class Breakdown

Class 1 – Television Technical Standards

Aspect ratio, resolution, pixel count, FPS formats (PAL, NTSC, HD, 4K), and SD/HD/UHD color standards.

Class 2 – Broadcast Signals Fundamentals

Understanding signals, analog vs. digital formats, HD/SD differences, and basic signal flow overview.

Class 3 – PCR Workflow & Terminology - Part 1

Rundown, run schedule, TP basics, and common commands: cue, take, roll, stop.

Class 4 – PCR Workflow & Terminology - Part 2

Glitch handling methods, emergency protocols (SOS), and delay buffering concepts.

Class 5 – PCR Team Structure & Roles

Roles and responsibilities of producer, technical director, vision mixer operator, audio engineer, and graphics operator.

Class 6 – CAR Room Basics

Overview of Central Apparatus Room (CAR), equipment functions, and wiring understanding.

Class 7 – Live Management Fundamentals

Live program flow, pre-live SOS checks, and essential precautions for live broadcasting.

Class 8 – Studio Live Management – Part 1

Pre-live preparation, anchor TP setup, and producer–anchor coordination.

Class 9 – Studio Live Management – Part 2

Command system for anchors, EP (ear-piece) functioning, and practical command protocol examples.

Class 10 – Recorded Program Production

Studio recording flow and differences between live and recorded productions.

Class 11 – PCR Playout Software – Basics

Introduction to playout software, primary tools, and common operational functions.

Class 12 – Playout Software – Advanced Operations

Advanced tools: Jump, Log, Trim, and safety practices for failover handling.

Class 13 – Title Box / Graphics Fire Software

Overview of graphics software, keywords usage, templates, and on-air title management.

Class 14 – VMIX Software in PCR

VMIX introduction, switching, streaming, and recording workflow inside PCR.

Class 15 – Teleprompter (TP) Software

Teleprompter setup, script loading, scrolling techniques, and VMIX-TP integration.

Class 16 – All Types of Cables & Connectors

Video/audio/power/data cables and connectors including BNC, XLR, HDMI, SDI, RCA.

Class 17 – Cable Fabrication & Repair

Emergency cable making, cable fault detection, and practical repair techniques.

Class 18 – Signal Path & Cable Differences

Impedance, shielding, and understanding why different cables serve different transmission needs.

Class 19 – Video Studio Overview

Studio categories (news, talk show, discussion, bulletin), and equipment requirement checklist.

Class 20 – Studio Setup for Live & Recorded

Camera setup, lighting, backdrop management, and studio control configuration.

Class 21 – Studio Operations & Troubleshooting

Switching, live/record monitoring, recording process, and backup systems.

Class 22 – Audio Mixer Fundamentals

Channel strip structure, faders, mute/solo functions, and gain staging basics.

Class 23 – Audio Mixer – Advanced Functions

EQ controls (treble/mid/bass), frequency ranges, AUX outputs, and effects (send/return).

Class 24 – Phono Unit & IFB Communication

Phono unit operations, live field-to-studio communication, and anchor command workflow.

Class 25 – Complete Workflow Simulation & Q&A

End-to-end simulation: studio recording, live broadcast, playout, graphics, audio mixing, PCR operations, and final Q&A session.

CAMERA TRAINING SYLLABUS SKILL DEVELOPMENT PROGRAMS OFFICIAL STUDY MATERIAL

Course Overview

This course covers complete training in camera operations for studio, field, documentary, social media, and religious (Jain) shoots. It includes understanding camera types, lenses, exposure triangle, lighting, multicam workflow, audio setup, and cameraman responsibilities.

Detailed Class Breakdown

Class 1 – Illustrator Basic Interface & Workspace

Learn the Illustrator interface, toolbars, panels, properties, how to create and manage artboards, and understand basic file

Class 2 – Pen Tool Mastery & Tracing

Understand Pen Tool basics including anchor points, curves, and handles, learn smooth vs. corner points, tracing reference

Class 3 – Custom Character Design

Use the Pen Tool to build simple character shapes, follow basic proportions, choose a color palette, and organize the design with proper grouping and layering.

Class 4 – Asset Design (Props & Elements)

Design common 2D animation props like chairs, tables, books, create reusable elements, and apply simple shading for a clean animated look.

Class 5 – Animals & Background Creation

Trace or design simple animals, create background elements like trees, grass, and sun, and use gradients and textures to add depth.

Class 6 – Scene Composition

Combine characters, assets, and background into a complete scene with proper layer management, balanced composition, and preparation for export to animation software.

Class 7 – Final Project & Export

Refine your final character and scene, optimize the file, and export assets as SVG or PNG sequences for animation use.

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