



**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.

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# **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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“This syllabus belongs to a private training program and is not approved by UGC/AICTE or any government body.”