AUDIO ENGINEERING AND ADVANCED POST PRODUCTION

SCIM Audio Engineering Theory:
Principles OF Sound and Recording Theory
Definition of sound
Properties of Sound Waves – Frequency and wavelength
Properties of Sound Waves – Frequency and pitch
Principles of sound recording
Understanding how sound is measured in a digital environment

SCIM Audio Engineering Theory:
Essential MIDI theory
What is MIDI
Status and Data Bytes
Summary of Technical Specifications
Midi Channels
VST Technology
Understanding The Flow Of Midi and Other Data In A Recording Studio

SCIM Audio Engineering Theory:
Cabling Basics
Balanced and Unbalanced Cables

SCIM Audio Engineering Theory:
Miscellaneous Theory
Audio Drivers
Audio Formats

SCIM Audio Engineering Theory:
Microphones & Recording Theory
Types of Microphones
Microphone polar patterns
Stereo recording techniques

SCIM Audio Engineering Theory:
Compression
Dynamic Range
Understanding the user definable parameters of compressors
Noise Gating & Expansion

SCIM Audio Engineering Theory:
Side Chain Compression
Side Chain VS Standard Compression
Understanding the user definable parameters of side chain compressors

SCIM Audio Engineering Theory:
Advanced Synthesis
Types of synthesis
Synthesizer Components
Filters
LFO's and Modulation
Miscellaneous Synth Parameters

SCIM Audio Engineering Theory:
Basic Video Theory
Frames and frame rates
SMPTE Time Code
Video Formats
Common Container Formats

SCIM Audio Engineering Theory:
Advanced Mixing and Equalization
Mixing and Equalization Theory
Understanding the three dimensional mixing
Level and metering specifics
Panning and stereo imaging techniques
Equalization Fundamentals
Equalization – Common boost & Cut Frequencies

SCIM Audio Engineering Theory:
Multiband Compression
Full Band and Multi-band compression devices
Technical Specifics
Possible cross-over configurations
Possible parameter configurations

SCIM Audio Engineering Theory:
Mastering and distribution
The goal of a mastering session
Tools of the trade
Mastering Devices
Choosing a format
ISRC Codes

SCIM Audio Engineering Theory:
Acoustics
Incident and Reflected Waveforms
Phasing
Constructive and deconstructive interference
Absorption and Reflection
Measuring transmission

Diffraction and refraction
Standing Waves
Room Shapes
Sweet Spot