

Audio Engineering Course

9 Weeks long, 1 class per week (3 hours per class)

What you will learn

Basic acoustics and studio design

Understand and utilize professional recording software and hardware.

Explore techniques and strategies for capturing the best vocal/instrumental performance

Gain hands-on experience with microphone techniques

Learn how to effectively conduct a full recording session

Discover editing tips and tricks that are used on major productions

Understand how to properly prepare your tracks for mixing

9-Week Course Syllabus

Week 1...Introduction to the studio

Acoustics and studio design in live rooms and control rooms.
Explore and discuss how to build and design sound-proof rooms
Explore the importance of acoustically tuned rooms
Understand how instruments interact within different spaces
Discuss the challenges of working in different environments
Understanding cabling, patchbays and how everything is connected

Week 2 ... Microphones and Preamps

Understanding the different types of microphones
Understanding microphone polar patterns
Learn how to choose the right microphone
Learn mono and stereo microphone techniques
Understand how to set up microphone preamp
Understand gain staging

Week 3 ... Dynamic Controllers and Time Based Effects

Understanding the different types of dynamic controllers

Learn how and when to use dynamic controllers in recording
How to use software and hardware dynamic controllers in recording
Track and Bus processing with dynamics and time based processors
Understanding Reverb and Delay
How to add width and depth to your mix using reverb and delay
Learn creative tricks to make your productions stand out

Week 4 Introduction to Pro Tools

Understand how to set up Pro Tools Software
Understanding and using basic navigation and editing tools
Understanding signal flow and internal routing

Week 5 ... Recording Drums / Percussion

Drum tuning & maintenance
Drum Shell / Cymbal Selection
Troubleshooting the acoustic environment
Setting up a metronome / Tempo map
Selecting the right microphones
Drum compression
Learn different drum mic'ing techniques
Understanding and fixing microphone phase

Week 6 ... Drum Editing / Sampling

Quantizing multitrack drums
Cleaning up microphone bleed
Balancing out the kit
Using equalization
Controlling dynamics
Panning
Understanding grouping and bussing
Drum sample enhancement
Drum production tricks

Week 7 ... Recording and Editing Electric / Acoustic Guitars / Bass Guitar

Overview of guitar anatomy, tuning and maintenance
Selecting the right microphones
Learn acoustic guitar mic'ing techniques
Learn speaker cabinet mic'ing techniques
Guitar Amps Vs. Amp sims

How to use equalization
Editing tips and tricks
Exploring re-amping

Week 8 ... Recording / Editing Vocal

Choosing the right mic
Microphone techniques / set up for voice recording (singing, voice-over, adr)
Understanding acoustic treatments for vocal recording
Working with a vocalist
Recording large groups and choirs
Getting the most out of the vocalist
Vocal editing
Vocal comping
Using automation
Setting up a vocal effects chain
Exploring how to use equalization with a voice

Week 9 ...Mix Prep / Introduction to Mixing

Multitrack mixing vs. 2 track mixing
Understanding how to organize your tracks
Learn about routing your audio tracks to busses
Learn how to monitor your mix correctly
Understanding how to use reference tracks
Creating space in your mix for all of the elements
Learn how to balance your mix
Learn about panning
Mastering basics.