Technical Mastery of Live Sound and Lighting Production Training Course



16 - 20 Nov 2026

Boston

7500 € (Per Person)

Ref: #EL8645_74561

Course Introduction / Overview:

This comprehensive training course is designed to provide aspiring and current technical professionals with the foundational and advanced skills needed to produce flawless live sound and lighting for any event. It goes beyond simple equipment operation to a deep understanding of acoustics, electrical principles, and creative design. The curriculum is informed by both academic physics and real-world industry standards, drawing on concepts from "The Live Sound Engineer's Handbook" by Bobby Owsinski, a definitive guide that provides a technical framework for signal flow, mixing, and system design. Participants will learn how to set up, operate, and troubleshoot sound systems, design lighting plots that enhance mood and performance, and manage a show's technical aspects from start to finish. BIG BEN Training Center has developed this program to be highly interactive and hands-on, with dedicated practice sessions using professional-grade equipment. The training emphasizes a meticulous and safety-conscious approach, empowering professionals to deliver high-quality production that elevates any live performance or event.

Target Audience / This training course is suitable for:

- Live sound engineers and technicians.
- Lighting designers and operators.
- Event production managers.
- Stage crew and technical staff.
- Musicians and artists who self-produce.
- Venue operations staff.
- Aspiring technical professionals.

Target Sectors and Industries:

- Live music and concerts.
- Theatre and performing arts.
- Corporate events and conferences.
- Houses of worship.
- Hospitality and nightlife.
- Film and television production.
- Government agencies and equivalents.

Target Organizations Departments:

- Event production and technical services.
- Stage management.
- Venue operations.
- Corporate communications.
- Marketing and events.
- Media and broadcasting.
- Entertainment technology.

Course Offerings:

By the end of this course, the participant will have mastered the following skills:

- Set up and mix a professional live sound system for various venues.
- Design and program a lighting plot using industry-standard software.
- Troubleshoot common audio and lighting issues in a live environment.
- Understand signal flow, microphone types, and mixing console operation.
- Implement best practices for electrical safety and cable management.
- Work collaboratively with artists and production teams.
- Manage and execute a complete show from a technical perspective.

Course Methodology:

This training course employs a highly practical and hands-on methodology to provide a deep understanding of live production. The program combines expert-led sessions with extensive lab time where participants will be tasked with setting up and operating real-world sound and lighting systems. This includes hands-on practice with mixing consoles, microphones, speakers, lighting fixtures, and control boards. The curriculum offered by BIG BEN Training Center is designed to simulate a real production environment, with exercises that include mixing a band, designing a lighting sequence for a corporate presentation, and troubleshooting a system failure in real-time. The training is structured to foster a collaborative learning environment, with opportunities for peer review and feedback on technical setups and design choices. This practical and dynamic approach ensures that participants are not only knowledgeable about the theory but are also equipped with the muscle memory and problem-solving skills needed to succeed in a fast-paced live environment.

Course Agenda (Course Units):

Unit One: Foundations of Live Production

- Physics of sound and light.
- Understanding signal flow and signal chains.
- Types of microphones and their applications.
- Introduction to mixing consoles and digital audio.
- Basic electricity and power distribution.
- Safety protocols and risk management.
- The role of the technician in a live show.

Unit Two: Live Sound Reinforcement

- Microphone placement and gain structure.
- Mixing techniques for different genres.
- The use of equalization (EQ) and compression.
- Managing monitor mixes for performers.
- Speaker selection and system setup.
- Handling feedback and unwanted noise.
- Sound checking and pre-show preparation.

Unit Three: Principles of Lighting Design

- Understanding color theory and mood.
- Types of lighting fixtures and their uses.
- Introduction to lighting consoles and DMX control.
- Designing a lighting plot and cue list.
- Programming automated fixtures and special effects.
- The relationship between lighting and sound.
- Safety and rigging basics.

Unit Four: Show Production and Management

- Putting it all together: the production workflow.
- Liaison with artists and production teams.
- Running the show: calling cues and managing the board.
- Troubleshooting common technical problems.
- Live recording and post-show archival.
- Cable management and on-stage organization.
- Advanced techniques and tools.

Unit Five: The Business and Future of Production

- Building a freelance career in live production.
- Understanding contracts and budgets.
- Emerging technologies in audio and lighting.
- The impact of virtual and hybrid events.
- Networking and professional development.
- Strategic career planning.
- Action planning for future projects.

FAQ:

Qualifications required for registering to this course?

There are no requirements.

How long is each daily session, and what is the total number of training hours for the course?

This training course spans five days, with daily sessions ranging between 4 to 5 hours, including breaks and interactive activities, bringing the total duration to 20 - 25 training hours.

Something to think about:

How does a deep technical understanding of live sound and lighting fundamentally transform a technician's role from a simple operator to a creative collaborator in shaping a memorable live experience?

What unique qualities does this course offer compared to other courses?

This training course is distinguished by its intense, hands-on focus on both sound and lighting production, providing a dual skill set that is highly valued in the industry. Unlike programs that may cover one discipline in isolation, this curriculum, developed by BIG BEN Training Center, provides a holistic understanding of how audio and visual elements must work together to create a cohesive and impactful experience. The program's use of real-world equipment and scenario-based learning ensures that participants gain practical, technical proficiency and problem-solving skills that are immediately applicable. The emphasis on safety, communication, and creative collaboration sets this course apart, empowering participants to not only operate equipment but to become indispensable members of any live production team.