

DIGITAL AUDIO PRODUCTION

100 CONTACT HOURS/
10 CONTINUING EDUCATION UNITS

Ai The Center for Professional Development
The New England Institute of Art®

CERTIFICATE IN DIGITAL AUDIO PRODUCTION

The Certificate of Completion in Digital Audio Production introduces participants to the fundamentals of digital audio and is designed for musicians and audio enthusiasts who wish to enhance and elevate their technical and creative skills. Participants are taught the concepts of sound theory and digital audio theory to enable personal and professional growth using digital audio workstations. Course content is focused around students becoming proficient in the use of Digidesign's Pro Tools recording and editing system. Faculty are experienced professionals and can update participants on current industry demands and practices. Pro Tools classes are held in a hands-on lab environment which allows each student time to work on individual workstations. All work culminates in the creation of an individual project that draws from the skills attained throughout the Certificate.

Participants in the Digital Audio Production are required to have a fundamental working knowledge of software applications on a Macintosh or Windows platform and have worked in a professional capacity for at least two years. Direct industry experience is not required.

Courses meet one evening per week or on Saturday. All work is graded Pass or Fail.

CERTIFICATE COURSE SEQUENCE

- Mac Navigation Workshop*
- DAP 101 Sound Basics
- DAP 102 Pro Tools 1
- DAP 103 Signal Processors and Critical Listening
- DAP 104 Pro Tools 2

* These workshops are intended for students who have never used a Mac platform or who need a refresher. Students who do not have prior experience with the Mac platform will be required to take these workshops prior to being admitted to CPD to guarantee an opportunity for success in subsequent courses. They meet two evenings and the cost for the workshops is \$210 (total).

Please see below for detailed descriptions of some of the sample materials that may be covered in each course within the sequence. Course curricula will vary depending on the instructor yet the following pages provide an overview of the principles to be covered.

COURSE DESCRIPTIONS

MN 101 Mac Navigation Workshop

This workshop will familiarize students with Mac functionality and its basic interface. It will provide an introduction and orientation to using the Mac as a design and development platform. Students will have opportunity in-class to navigate and experience the Mac platform. An application such as Photoshop will be employed to help each student become more

familiar with the Mac interface and its functionality. Each student will use Photoshop to create a design and layout project (TBD) that will give them the opportunity to practice the Mac Basic features. Students will be given a homework assignment that will prepare them for this session, and allow them to practice the essential Mac basic skills they will need for session two. Note: no continuing education units are awarded for this workshop.

Upon completion of this course you will have:

- Explored the functionality of the top main menu, including:
- Where to find applications, how to find and open recent applications,
- Mac System Folder, Finding, making, and saving files, creating folders, the Mac
- Drop-Box, the Desk Top, Apple Menu Items

Software Used: Adobe Photoshop®

DAP 101 Sound basics

The first class in Digital Audio Production introduces students to the fundamental properties of sound and the underlying principles and limitations common to all audio systems. Topics discussed include amplitude and frequency, dynamic range & frequency response, audio connectors, and audio levels. Digital audio theory is discussed as well to prepare students for digital audio recording and editing.

Upon completion of this course you will have:

- Explored the basics of sound waves
- Studied the parameters and limitations common to all audio systems
- Compared analog and digital audio systems
- Created block diagrams of basic audio systems
- Examined home studio systems and setup options

Software Used: This is a non-lab course

DAP 102 Pro Tools 1

This unit introduces students to the hardware and software used in computer based digital audio workstations. Digidesign's Pro Tools hardware and software is introduced. Topics include system capabilities, hard disk basics, Mac OS audio, editing and mixing using Pro Tools software.

Upon completion of this course you will have:

- Explored the Pro Tools edit and mix windows
- Studied the system hardware and software limitations
- Created multi-track recordings
- Examined the core audio controls in OS
- Processed sounds using Audio Suite plug-ins

Software Used: Pro Tools

*Subject to Change

DIGITAL AUDIO PRODUCTION

DAP 103 Signal Processors and Critical Listening

This unit covers the theory and critical listening skills needed for proper use of signal processors in music and audio production. Students examine the parameters and operation of equalizers, compressors, gates, expanders, limiters, reverbs, and a wide variety of other time base effects. Listening examples are given which show typical application of each processor.

Upon completion of this course you will have:

- Explored the various types of signal processors used in audio production
- Experienced the result of signal processors applied to a variety of sound sources
- Used ear training materials to sharpen listening skills

Software Used: This is not a lab course

DAP 104 Pro Tools 2

This course covers more advanced Pro Tools concepts and techniques. Topics covered include: Signal Routing & Voice Allocation, Pro Tools session management concepts, making use of sends & aux inputs, automation modes, in-depth plug-in usage, technical and practical application of the concepts introduced in DAP 103. Pro Tools MIDI functions and integration with other software is also covered.

Software Used:

Digidesign Pro Tools
Propellerheads Reason
MOTU Digital Performer