



ELECTRONIC MUSIC PRODUCTION PROGRAM  
CONTINUING STUDIES

HOME-BASED RECORDING & MASTERING FOR MUSICIANS

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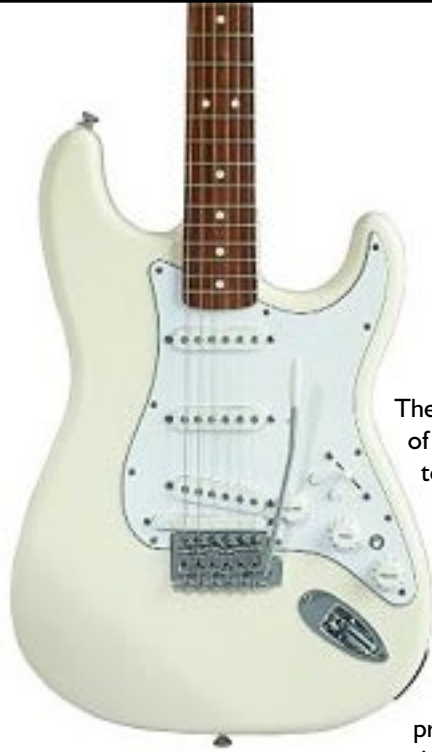
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# INTRODUCTION

The Electronic Music Production Program is a very comprehensive non-certificate program aimed more at the musician than the audio engineer. In the last few years, there has been a revolutionary advance in music production and recording technology, and this revolution has happened in the home as much as it has in commercial recording studios. Most of the recording and production instruments of the recent past, such as multi-track recording devices, effects devices, synthesizers and instrument samplers are no longer incredibly expensive hardware devices. They have now become extremely versatile and quite inexpensive software packages instead. This software is readily available for home computers on both Mac & PC. Software such as Reason gives the user a full production studio with immediate access to an astonishing (we're talking many thousands) array of beautifully sampled instruments, drum machines, loop players, synthesizers and effects devices. The only limit is your own imagination (that and your computer's CPU). It does not matter what sort of music appeals to you, whether it be classical, jazz, rock, country, punk, electronica, ambient, house, hip hop, R&B or dance, this program will enable you to express your own creativity and experiment freely with music.

This software will enable users to create completely original compositions using whatever instrumentation they wish, if you need an oboe, there is a whole host of them available to you – drums by the thousands, every type of guitar available, \$30,000 grand pianos (doing a cover of a Beatles tune? Paul McCartney's iconic Hofner violin bass is there too). But these programs do not exclude the analogue musicians or vocalists. Software such as Cubase allows you to play an electric guitar or base, or mic an acoustic instrument directly onto your computer so you can accompany it with as many other acoustic instruments or digital instruments as you wish. Students of this program will also learn how to record and produce vocal tracks so you can include lead and back-up vocals on your work. Finally, students will learn how to mix their scores to perfection and then master the final recording to prepare the song for burning onto an audio CD or preparing it for MP3 format in a way that, done right, seriously rivals that of a commercial recording studio.



## WHO DOES THIS PROGRAM APPLY TO?

The Electronic Music Production Program was designed to apply to a broad range of individuals. Most common are professional and amateur musicians who wish to be able to produce and record their own compositions, or cover versions of other songs. This software, when used by individuals who understand how to produce, is incredibly advanced and gives musicians the ability to shape the sound of their instruments and compositions to an extraordinary level. We look at production and mastering as being as much an art form as that of the musicians themselves. Elements of the program have also been aimed at self-taught musicians who would like to learn more about music structure and basic theory as it applies to creating and producing your own music. The program is extremely useful to individuals who are learning new instruments as the programs allow you to freely experiment with sampled instruments where students can program sequences which they can then emulate with the real instrument. Even individuals with no musical background that wish they could produce music will find this software very empowering.

For those individuals who are professional or semi-professional, this program offers a number of possibilities. First, producing a demo has never been more accessible. Gone are the days of un-mixed and poorly recorded tapes of your work. This technology offers you the chance to produce demos that are on a level with the final produced work. Also, for those musicians who would like to produce compositions for commercial purposes, this program teaches musicians how to produce scores for film, video, commercials and multimedia both from an aesthetic and technical level. The software allows you to write scores to a sequencer that exactly match a final edited film or video. The program is also highly relevant to multimedia or gaming designers, regardless of whether or not you have a musical background. Two of the software packages used in the program (Ableton Live & Reason) have very advanced loop players and editors. Using huge libraries of pre-recorded riffs and sounds, multimedia designers can create completely original scores or sound bytes for their projects where the copyright of the music belongs to you.

# WHAT DOES THIS SOFTWARE MEAN TO US?



First we want to be very clear that we view technological and software advances as being nothing more than better and more capable tools in the hands of the right people. Software cannot make music, nor can it make a non-musician into an expert in song structure. This software will never be able to replace exquisitely capable musicians or sound engineers and experienced producers. Music isn't about the technology, the only thing that matters in the end is how it sounds, and no technology will ever be able to replace a well-trained

ear. That said, this software has had an undeniable effect on both the professional and amateur music industry, and anything that helps individuals access music and take their creativity for a spin is a good thing in our opinion.

For those of you who are comfortable making music, this means unmatched creative freedom. If you are in the middle of recording a piece of your work late at night and you decide that your song needs an oboe, you have a whole host of oboes at your call. You need not be limited by the instruments you have or can play – instead you can call on the instruments that you feel will best suit your work. For less experienced musicians, this offers an incredible opportunity to explore your creativity – frankly, who cares if you're not a particularly experienced musician if you are able to produce music that draws people in? Besides, we're pretty convinced that once you experience this for yourself, it will inspire you to push yourself musically as far as you can.



Finally there is the colossal reality that what once cost 10s of thousands of dollars can now be assembled for well under \$4,000. Many of the top hardware manufacturers for the music industry that have built the best electronic instruments such as a huge array of synthesizers, drum machines and loop players as well as effects and production devices such as reverb, delay, compressors and equalizers, are now building their devices (circuit for circuit) via software instead of hardware, and selling it at a fraction of the price of the hardware. This is not some retail gimmick aimed at wannabes, ask almost any veteran or celebrity musician, and this is not only software that is on their systems, it's technology that has fundamentally changed the way they work.

# PROGRAM STRUCTURE

The Electronic Music Production Program is a non-certificate program, which means that it is open to all individuals and does not require an interview to access it. It also means that you may take as many or as few courses within the program as you wish. Many of the courses do have prerequisite requirements, but these prerequisites may be challenged by individuals who already have the necessary background or experience. This program has also been designed to accommodate students at all levels, from those who are new to music, to those who are veteran. Of course, the program also accommodates electronic musicians and producers such as DJs or media designers.



The courses are designed to start with the software to ensure that students first have the tools to produce. Courses then branch out into different levels, such as music fundamentals for beginners to specialized commercial courses such as live electronic performance (DJs) to writing and producing scores for film and multimedia. Students may take this as far as they wish – from music hobbyist to recording artist to producing.



## REASON SOUND SOFTWARE

Course Length: 10 Weekly 3 hr Sessions

Course Fee: \$495.00

Prerequisites: None

Reason is one of the fundamental software packages used in this program (you can see a full description of this software on page###). Reason is a stand-alone studio for your computer. This software comes with an extraordinary array of synthesizers, samplers, drum machines, loop players and effects devices. Reason is a MIDI based program which means you cannot record outside audio (we use Cubase for that), however if you are not familiar with the power of MIDI recording, this will change the way you look at creating music. Reason is an incredibly deep program, but this course covers all aspects from the use of the instruments to working with effects, to routing for special effects. This program is very hands on with each student working on practical projects throughout. Reason is cross platform software so it does not matter whether you work on a Mac or PC.

### Learning Outcomes:

- create a music score using copyright free loops
- create a music score that uses original structure
- recognize and implement basic song structure
- recognize and implement sonic interest
- recognize the difference between synthesizers, sampler, sequencers and loop based programming
- use basic synthesis, sampling, sequencing and drum programming
- create effective atmospheres with music
- make an effective mix
- use filters
- use effects
- use reverb, delay and distortion to enhance their work
- use a pattern based sequencer
- export audio to a variety of formats and implement it into other software

## MULTI-TRACK RECORDING (CUBASE)

Course Length: 10 Weekly 3 hr Sessions

Course Fee: \$495.00

Prerequisites: None

The Multi-track Recording course teaches students how to blend both midi recording programs such as Reason and live audio recording onto their computer using Cubase (you can see a full description of this software on page ###). This software allows students to plug in instruments such as electric guitars or basses as well as microphones for recording vocals or acoustic instruments and record their scores onto a music sequencer. Programs such as Reason can open seamlessly in Cubase which means every instrument track in Reason can be opened on a track in Cubase, so you can accompany your analogue instruments or vocals with as many synthesizers, instrument samplers, drum tracks and effects as you wish. Cubase also allows you to use an enormous range of outside VST (Virtual Studio Technology) instruments such as Reaktor synthesizers and open them in Cubase.



### Learning Outcomes:

- distinguish between all common audio formats and when to use those formats
- create a basic recording using preamps and basic microphone techniques
- make good edits between audio clips
- apply fade-ins, fade-outs and cross-fades
- use a mixing console
- effectively create a good multi-track mix
- export audio in a variety of popular formats
- apply effects effectively to audio clips
- understand the applications of VST and other plug in protocols
- make a basic budget/ timeline for a variety of audio products
- successfully communicate with audio professionals
- make a good basic audio product (i.e. a radio commercial, a piece of loop based music etc.)
- set up and lead a basic recording session

## DRUM & BASS PROGRAMMING

Course Length: 10 Weekly 3 hr Sessions

Course Fee: \$495.00

Prerequisites: Reason, Cubase or Equivalent

This course is designed to teach students the fundamentals of working with drum machines and sequencers through programs such as Reason, Cubase, Live or Reaktor. These software packages allow users quite a few different way of creating extremely complex drum patterns and breaks through programming (with a drum machine) or by manipulating a MIDI Pattern or audio clip on a loop player. This course is particularly useful for musicians such as keyboardists or guitarist who are not percussionists. It can be very frustrating for a guitarist or keyboard player to create an effective and beautifully styled percussion score to go with their instrumentals, when they are not familiar with drum patterns and styles. This course goes far beyond simply teaching students the technical aspects of laying down MIDI drum tracks, it spends quite a bit of time on drum patterns, styles and techniques as they relate to musical genres such as rock, jazz, house or dance, etc. Actually, this course is also highly relevant to percussionists – often when a score is being recorded, the producer will prefer to work on MIDI drums rather than acoustic drums, as these can be quite finicky to record. If a MIDI drum score is being used, it is infinitely preferable that the score be created by a percussionist, so it is our opinion that drummers should be just as capable at programming drums as they are at playing them.



### Learning Outcomes:

- program drum patterns and bass lines for a wide variety of styles
- effects on drum and bass sounds to get professional results
- listen and analyze different drum and bass styles from motown to current trends
- successfully recreate beats from existing records
- successfully emulate bass and drum sounds heard on music tracks
- synthesis & sample techniques to create their own sounds and kits
- apply the learned techniques towards their own music /songs
- make educated decisions which sounds to add other then bass and drums to create a track
- distinguish between Latin, pop, R&B, Hip Hop, soul, house, world and other drum, bass styles to successfully apply elements from one style to another's.

## SAMPLING, SYNTHESIS & SOUND DESIGN

Course Length: 10 Weekly 3 hr Sessions

Course Fee: \$495.00

Prerequisites: Reason, Cubase or Equivalent

In this course students explore and learn to design their own sounds by using sound, sampling and synthesis programming techniques through programs such as Reaktor (you can see a full description of this software on page ###). Subtractive, granular, wavetable and additive synthesis will all be explored and explained. Extensive filtering and envelope shaping and combinations of the methods will learn to a better understanding of sound design and the diverse synthesis techniques. In the sampling part of the course students learn to work with their own recorded material as well as with existing samples. Re-sampling and combining synthesis and sampling will lead to a solid understanding of the capabilities of sampling. At the end of the course students should be able to access techniques to create any kind of sound they want for a huge variety of music, sound design or post production styles.



### Learning Outcomes:

- create a great variety of sounds with confidence using all the synthesizer and sample methods
- use subtractive, wavetable, granular and additive synthesis
- use sampling
- create modulating sounds with simple and complex envelopes and filters
- distinguish which synthesis method is most effective for the sound the students want to create
- use LFO and other modulating techniques effectively
- create their own sound and soundbanks with all original sound
- sound design for a variety of products and clients
- comprehend what is necessary to keep their sounds fresh in a market of presets
- access a online market were there is a possibility of selling sounds

## MIXING & MASTERING

Course Length: 10 Weekly 3 hr Sessions

Course Fee: \$495.00

Prerequisites: Reason, Cubase or Equivalent

In this hands on course students learn how to mix and master using Waves Mastering Software (you can see a full description of this software on page ###) as well as market final products. A good mix doesn't sound good, a good mix sounds great! In part one of the course students use existing or their own tracks to mix music properly. EQ, Effects and correct balancing need to be learned to create the 'perfect' mix. Students not only learn the software and what, exactly, it does, they learn to train their ears so they can isolate and mix individual instruments in a score. In part II the students make a stereo track and delve into the basic of good mastering, the final process in music making. Using Compression, Limiting and EQ students will create a mastered track that sounds good on all speaker systems. The last part of the course answers the question: "I have a great track so now what?" Students learn how to effectively market their music and make choices (Do I contact a record company? Do I sell it online? Etc).



### Learning Outcomes:

- create good mixes with a variety of prerecorded materials
- create good mixes out of their own material
- know the difference between mixing and mastering
- apply effective limiting, compression, EQ, phase balancing
- listen and determine problem areas in a mix and or recording
- create a good mastered track of the final mix
- clearly distinguish between good and bad mastering
- apply mastering tools to re-master older material
- hear the difference in monitor (speaker) systems
- make sure their final product will sound the same /similar on all speaker systems
- comprehend basic psycho acoustics that determine how we interpret sound and the effects that has on the mixing , mastering job
- access a variety of sources to market their material
- prepare to create an effective demo CD/DVD
- determine which marketing route will be the most effective for their style of music

## LIVE ELECTRONIC MUSIC & DJ'S

Course Length: 10 Weekly 3 hr Sessions

Course Fee: \$495.00

Prerequisites: Reason, Cubase or Equivalent

In this course students learn to prepare and create live performances using Ableton Live software (you can see a full description of this software on page ###), Reason and Cubase. With this software students learn to change tempo, pitch and synchronize any music loop with any other music loop without affecting it's original sound. Students will be able to change and trigger loops while playing back other loops. That means it is possible to do live music jamming without a traditional instruments. Ableton Live is also a very capable sequencer like Reason or Cubase and also allows users to record audio direct to create your own loops. At the end of the course students will perform a live song or short electronic DJ set with the material created in the course. A wide range of different music styles will be used.



### Learning Outcomes:

- create a live set of samples and loops
- play live songs with the pre-prepared material & instantly change it
- use build up to create an exciting listening experience
- use all the tools in Ableton Live
- make instant and dramatic changes with sounds and samples during performances
- prepare an exciting live set out of a variety of material
- use MIDI keyboard mapping for chromatic, tempo-synchronized playing of sound files.
- use Optional real-time quantization to avoid rhythmical errors when launching sound files.
- Adjust various Launch Modes adjustable per clip; trigger, gate, toggle and repeat
- Use Theater/Show oriented scene concept for stepping through a prepared list of cues
- Tap Tempo function for following musicians or records
- Private pre-listening of tracks and samples via separate audio output
- Use the DJ mixer-style crossfader: Perform crossfades across any number of tracks

## THEORY & REASON: MUSIC FUNDAMENTALS

Course Length: 10 Weekly 3 hr Sessions

Course Fee: \$400.00

Prerequisites: None

In this course students will learn every essential aspect of music theory - notes, chords, scales, modes and rhythm will all be discussed and illustrated by practical and audio examples. The course starts at the basics and moves up to an intermediate level.

Students learn about notes, how music is organized into bars, all about time signatures and rhythms. Also explored are key signatures, and how they can be used to your advantage. For those of us who are self-taught musicians and a bit nervous of music theory, this course gives a tremendous insight into song structure and sonic interest. If you wish to write your own work (or already do), this course will not make you a mechanical player, it will significantly increase your creativity

### Learning Outcomes:

- use The Grand Staff, Notes, The Keyboard
- recognize Note Duration's, Note Duration's II, Measures (bars)
- understand Intervals, Major Scales, Key Signatures
- use time Signature, Measure Completion, Tonic/Dominant Triads
- recognize and use Key Identification, Triads/Roman Numerals, Octave Transposition
- know Cadences, Modes, Other Clefs



## KEYBOARD PLAYING SKILLS

Course Length: 10 Weekly 3 hr Sessions

Course Fee: \$350.00

Prerequisites: None

In this course students learn the basic skills for successful keyboard playing. The course is particularly useful for either students who are new to music, or for musicians such as guitarists who will need to use the keyboard to perform accompanying MIDI instruments. In the first part of the course students explore basic finger positions, basic chords and exercise left and right hand. Reading basic sheet music is also included (programs such as Cubase come with score editors which will write your compositions for you). In the second part of the course scales, intermediate and advanced chords as well as basic chord structure will be taught. In order to be successful it is crucial the students have a keyboard, synthesizer or piano to study on outside of school.

### Learning Outcomes:

- be comfortable playing keys using the correct technique
- play and recognize basic chords
- play and recognize most intermediate chords
- play scales
- have an understanding of advanced chords and how they are built
- read basic sheet music
- play from basic sheet music



## PRODUCING SCORES FOR FILM, TV & MULTIMEDIA

Course Length: 10 Weekly 3 hr Sessions

Course Fee: \$495.00

Prerequisites: Reason, Cubase or Equivalent

Music is one of the most essential parts of a movie to create mood or a particular atmosphere. In this course students learn fundamentals of scoring for visuals (Film, Television, Commercials, Web, Theater etc.). Using Reason, Ableton Live and Cubase students will work on existing scenes from movies, television, commercials and theater to effectively enhance the scenes presented to them. Choosing the right musical style, musical score Vs sound scape (soundtrack), basic orchestration will all be discussed and applied. Students will present a score to a visual product of their choice at the end of the course. This course is also relevant to web & interactive designers.

Note: this course does not deal with sound effects (folly)

### Learning Outcomes:

- prepare for a score and collect sounds and elements necessary for a successful score
- set a realistic schedule for composing a score /soundtrack
- distinguish between a score and a soundtrack
- create an effective score or soundtrack for a variety of products
- implement scoring elements without overpowering the visuals
- apply music and sound effectively to create a variety of emotions
- export the product in the correct formats for further processing
- export the product for showcasing purposes
- distinguish the different needs for theater, film, TV, web et cetera scores
- deal with critiques on their work

## SONGWRITING TECHNIQUES

Course Length: 10 Weekly 3 hr Sessions

Course Fee: \$450.00

Prerequisites: Reason, Cubase or Equivalent

In this course students learn effective song writing. Song structure, lyric writing and re-writing for a large variety of styles will be studied and applied. The students will deal in depth with concept of rhythm and lyrics, rhyming vs. non-rhyming, metrum, telling stories and simple vs. complex songwriting. Vocal arranging and melody writing are also an important part of the course.

Writing for yourself and writing for others will both be explored by the student. Using Reason and/or Cubase and/or Ableton Live students create at least 2 finished songs and present them at the end of the course.



### Learning Outcomes:

- write lyrics for a variety of styles
- the ability to recognize flaws in writing and correct them
- create song structure & deconstruct and analyze song structure
- implement rhythm into the lyric writing
- access writing and creative tools more effectively
- translate personal and non personal stories into songs
- use software to create a basic backing track for their lyrics
- experiment with someone else's lyrics
- use harmonies and melody writing tools
- have basic insight in vocal arranging
- complete songs more effectively

## THE DIGITAL GUITARIST

Course Length: 10 Weekly 3 hr Sessions

Course Fee: \$450.00

Prerequisites: None

This course is designed for both the electric and acoustic guitarist. Many of you will find that emulating a guitar via MIDI is no easy task - even with some pretty eye-opening software such as Virtual Guitarist. Besides, most guitarists would obviously play the real thing than a MIDI imitation. Software has become an enormous resource for guitarists, and not just in the recording environment - it is not unusual to see a guitarist live on stage with a laptop right beside him or her. There is software available, exclusively designed for the guitar that not only gives you the typical array of effects such as reverb, delay, phasers and distortion, but also is able to exactly emulate the sound of almost every guitar amp ever built (including the warmth of the old vacuum tube amplifiers). Students will learn how programs such as Amplitude or Guitar Rig can be used along with multi-track recording software such as Cubase to lay down as many guitar tracks as you wish, and then accompany those tracks with a host of other instruments or synthesizers.

### Learning Outcomes:

- Understand what effects devices are available for guitar
- Be able to mic and record acoustic guitars effectively
- Understand how to use filter envelopes to manipulate the guitar
- Use a variety of software packages to emulate different guitar amps
- Understand how to use programs such as Cubase or Waves to master and perfect a recorded guitar track
- Understand how to record elements of a guitar performance and use programs such as Live to turn it into a loop
- Learn a host of effects and settings to create a wide variety of tones and effects with your guitar.

