

# MUSIC TECHNOLOGY, CERTIFICATE

Program Code: CC.MUSICTECH

The Music Technology certificate gives students the core skills needed to enter the sound and music production industry.

For more information, contact David Badstubner, 503-594-6368 or [david.badstubner@clackamas.edu](mailto:david.badstubner@clackamas.edu).

## Outcomes Program Outcomes

Upon successful completion of this program, students should be able to:

- complete recording projects illustrating competence in professional audio recording technologies and the ability to complete the production process using appropriate software/hardware;
- complete recording projects that include elements of music and audio in digital format, including MIDI, sound sampling, synthesis, processing, editing, and mixing and display confidence in the use of associated software/hardware appropriate for these tasks in a professional setting;
- produce a final recording project that demonstrates preparedness for entry into a career related to music technology, and articulate how that project relates to professional opportunities in that field;
- critically analyze and discuss multimedia works (their own or others) in the context of music history and/or theory;
- demonstrate an awareness of ethical, legal, and business considerations involved when creating recorded audio works, including basic professional skills related to documentation and rights licensing for copyright, fair use, etc.

## Related Instruction Outcomes

### COMPUTATION

- 1 course - MTH-050 Technical Mathematics I or MTH-065 Algebra II or higher
- Use appropriate mathematics to solve problems.

### COMMUNICATION

- 1 course - WR-101 Workplace Writing or WR-121Z Composition I
- Read actively, think critically, and write purposefully and capably for professional audiences.

### HUMAN RELATIONS

- 1 course - COMM-100Z Introduction to Communication or COMM-126 Intro to Communication, Gender, and Sexuality or COMM-140 Introduction to Intercultural Communication or COMM-218Z Interpersonal Communication
- Engage in ethical communication processes that accomplish goals

## Requirements

Fall Term		Credits
MUS-107	Introduction to Audio Recording I	3.00
MUS-141	Introduction to the Music Business	3.00
MUS-142	Introduction to Electronic Music I: MIDI	3.00

MUS-188	Performance Attendance	0.00
WR-101 or WR-121Z	Workplace Writing or Composition I	4.00
<b>Program Basics (p. 1)</b>		<b>3.00</b>
<b>Electives (p. 2)</b>		<b>2.00</b>
<b>Credits</b>		<b>18</b>
<b>Winter Term</b>		
Select one of the following:		4.00
COMM-100Z	Introduction to Communication	
COMM-126	Intro to Communication, Gender, and Sexuality	
COMM-140	Introduction to Intercultural Communication	
COMM-218Z	Interpersonal Communication	
Select one of the following:		4.00-5.00
MTH-050	Technical Mathematics I	
MTH-065	Algebra II Higher Level Math or Statistics	
MUS-108	Introduction to Audio Recording II	3.00
MUS-140	Careers in Music	3.00
MUS-143	Introduction to Electronic Music II: Sequencing, Audio Looping, Sound EFX	3.00
MUS-188	Performance Attendance	0.00
<b>Program Basics (p. 1)</b>		<b>3.00</b>
<b>Electives (p. 2)</b>		<b>2.00</b>
<b>Credits</b>		<b>22-23</b>
<b>Spring Term</b>		
MUS-109	Introduction to Audio Recording III	3.00
MUS-144	Introduction to Electronic Music III: Digital Audio	3.00
MUS-188	Performance Attendance	0.00
MUS-280	Music/CWE	2.00
<b>Program Basics (p. 1)</b>		<b>3.00</b>
<b>Electives (p. 2)</b>		<b>2.00</b>
<b>Credits</b>		<b>13</b>
<b>Total Credits</b>		<b>53-54</b>

## Program Basics

Code	Title	Credits
MUP-100	Individual Lessons: Non-Music Majors	1.00-2.00
MUS-101	Music Fundamentals	3.00
MUS-102	Applied Music Fundamentals	3.00
MUS-103	Applied Music Fundamentals	3.00
MUS-105	Music Appreciation	3.00
MUS-111	Music Theory I	3.00
MUS-112	Music Theory I	3.00
MUS-113	Music Theory I	3.00
MUS-131	Group Piano: Piano for Pleasure	1.00
MUS-132	Group Piano: Piano for Pleasure	1.00
MUS-133	Group Piano: Piano for Pleasure	1.00
MUS-134	Group Voice: Anyone Can Sing	1.00
MUS-135	Group Voice: Anyone Can Sing	1.00
MUS-136	Group Voice: Anyone Can Sing	1.00

Code	Title	Credits
MUS-137	Group Guitar I	1.00
MUS-138	Group Guitar II	1.00
MUS-205	Music Literature: History of Jazz	4.00
MUS-206	Music Literature: History of Rock	4.00

## Electives

Code	Title	Credits
MUP-100	Individual Lessons: Non-Music Majors	1.00-2.00
MUP-102	Wind Ensemble	2.00
MUP-104	Jazz Combo	1.00
MUP-105	Jazz Ensemble	2.00
MUP-122	Vocal Ensemble	2.00
MUP-125	Advanced Vocal Ensemble	2.00
MUP-141	College Orchestra	1.00
MUP-150	Contemporary Music Ensemble	2.00
MUP-241	College Orchestra	1.00
MUS-101	Music Fundamentals	3.00
MUS-102	Applied Music Fundamentals	3.00
MUS-103	Applied Music Fundamentals	3.00
MUS-105	Music Appreciation	3.00
MUS-106	Audio Recording At Home	1.00
MUS-131	Group Piano: Piano for Pleasure	1.00
MUS-132	Group Piano: Piano for Pleasure	1.00
MUS-133	Group Piano: Piano for Pleasure	1.00
MUS-134	Group Voice: Anyone Can Sing	1.00
MUS-135	Group Voice: Anyone Can Sing	1.00
MUS-136	Group Voice: Anyone Can Sing	1.00
MUS-137	Group Guitar I	1.00
MUS-138	Group Guitar II	1.00
MUS-145	Location Audio, Livestreaming, and Advanced Audio Editing Techniques	3.00
or MUS-150 & MUS-151 & MUS-152	Location, Live, and Dialogue Sound Recording and Video and Audio for Livestream and Advanced Audio Editing Techniques	
MUS-147	Music, Sound & Moviemaking	1.00
MUS-148	Live Sound Engineering	3.00
MUS-160	Songwriting I	2.00
MUS-161	Songwriting II	2.00
MUS-170	Introduction to Scoring Music for Media	2.00
MUS-171	Sound Design	2.00
MUS-205	Music Literature: History of Jazz	4.00
MUS-206	Music Literature: History of Rock	4.00
MUS-247	Sound for Media	3.00

- recording/sound for advertising production
- video post-production engineer
- sound engineer for radio
- video production engineer
- film sound recording engineer
- film post production for mixed media
- film post production for sound only
- film sound designer (FX)
- film foley artist
- technical support for music production software companies
- technical development for music production hardware and software
- sound technical development for software companies

## Careers

Career opportunities include:

- recording engineer
- live sound engineer
- media and sound post-production for internet companies
- sound/music for video games
- sound/media engineer for TV