

# 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 Brian Rose, 503-594-3340 or [brianr@clackamas.edu](mailto:brianr@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 Communication Skills: Occupational Writing or WR-121 English Composition
- Read actively, think critically, and write purposefully and capably for professional audiences.

### HUMAN RELATIONS

- 1 course - COMM-100 Basic Speech Communication or COMM-126 Introduction to Gender Communication or COMM-140 Introduction to Intercultural Communication or COMM-218 Interpersonal Communication
- Engage in ethical communication processes that accomplish goals

## Requirements

Course	Title	Credits
<b>Fall Term</b>		
MUS-107	Introduction to Audio Recording I	3

Course	Title	Credits
MUS-141	Introduction to the Music Business	3
MUS-142	Introduction to Electronic Music I: MIDI	3
WR-101 or WR-121	Communication Skills: Occupational Writing or English Composition	3-4
<b>Program Basics (p. 1)</b>		3
<b>Electives (p. 2)</b>		2

**Credits 17-18**

<b>Winter Term</b>		
Select one of the following:		3-4
COMM-100	Basic Speech Communication	
COMM-126	Introduction to Gender Communication	
COMM-140	Introduction to Intercultural Communication	
COMM-218	Interpersonal Communication	

Select one of the following:		4-5
MTH-050	Technical Mathematics I	
MTH-065	Algebra II	
Higher Math		

MUS-108	Introduction to Audio Recording II	3
MUS-140	Careers in Music	3
MUS-143	Introduction to Electronic Music II: Sequencing, Audio Looping, Sound EFX	3

<b>Program Basics (p. 1)</b>		3
<b>Electives (p. 2)</b>		2

**Credits 21-23**

<b>Spring Term</b>		
MUS-109	Introduction to Audio Recording III	3
MUS-144	Introduction to Electronic Music III: Digital Audio	3
MUS-280	Music/CWE	2
<b>Program Basics (p. 1)</b>		3
<b>Electives (p. 2)</b>		2

**Credits 13**

**Total Credits 51-54**

## Program Basics

Code	Title	Credits
MUP-100	Individual Lessons: Non-Music Majors	1
MUS-101	Music Fundamentals	3
MUS-102	Music Fundamentals	3
MUS-103	Music Fundamentals	3
MUS-105	Music Appreciation	3
MUS-111	Music Theory I	3
MUS-112	Music Theory I	3
MUS-113	Music Theory I	3
MUS-131	Group Piano: Piano for Pleasure	1
MUS-132	Group Piano: Piano for Pleasure	1
MUS-133	Group Piano: Piano for Pleasure	1
MUS-134	Group Voice: Anyone Can Sing	1
MUS-135	Group Voice: Anyone Can Sing	1
MUS-136	Group Voice: Anyone Can Sing	1

Code	Title	Credits
MUS-137	Group Guitar I	1
MUS-138	Group Guitar II	1
MUS-205	Music Literature: History of Jazz	4
MUS-206	Music Literature: History of Rock	4

## Electives

Code	Title	Credits
MUP-100	Individual Lessons: Non-Music Majors	1
MUP-102	Wind Ensemble	2
MUP-104	Pep Band/Combo-Improv	1
MUP-105	Jazz Ensemble	2
MUP-122	Chamber Choir	2
MUP-125	Vocal Jazz Ensemble: Mainstream	2
MUP-141	College Orchestra	1
MUP-150	Contemporary Music Ensemble	2
MUP-241	College Orchestra	1
MUS-101	Music Fundamentals	3
MUS-102	Music Fundamentals	3
MUS-103	Music Fundamentals	3
MUS-105	Music Appreciation	3
MUS-106	Audio Recording At Home	1
MUS-131	Group Piano: Piano for Pleasure	1
MUS-132	Group Piano: Piano for Pleasure	1
MUS-133	Group Piano: Piano for Pleasure	1
MUS-134	Group Voice: Anyone Can Sing	1
MUS-135	Group Voice: Anyone Can Sing	1
MUS-136	Group Voice: Anyone Can Sing	1
MUS-137	Group Guitar I	1
MUS-138	Group Guitar II	1
MUS-145	Introduction to Digital Sound, Video & Animation	3
MUS-147	Music, Sound & Moviemaking	1
MUS-148	Live Sound Engineering	3
MUS-149	Advanced Pro Tools Editing Techniques	1
MUS-160	Songwriting I	2
MUS-161	Songwriting II	2
MUS-170	Introduction to Scoring Music for Media	2
MUS-171	Sound Design	2
MUS-205	Music Literature: History of Jazz	4
MUS-206	Music Literature: History of Rock	4
MUS-247	Sound for Media	3

- 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
- recording/sound for advertising production
- video post-production engineer