MUSIC AND SONIC ARTS

pcc.edu/programs/music-and-sonic-arts/

CAREER AND PROGRAM DESCRIPTION

The Music & Sonic Arts program at PCC's Cascade Campus seeks students interested in contemporary, commercial music and students excited to explore the limits of what is technologically and artistically possible through the creation of new sounds, new instruments, and new methods of performance and composition.

In an environment that combines music, art, science, coding, and design, students develop tools that prepare them for leadership in artistic, technical, educational, entrepreneurial and research efforts.

In addition, students learn to value the contributions of people of diverse backgrounds and to imagine the important roles of music and technology in the advancement of equity and the creation of economically and culturally vibrant communities.

The Music and Sonic Arts program is located at the Cascade Campus. PCC offers stackable degree options in Music & Sonic Arts: a less than one-year Music & Sonic Arts Career Pathway Certificate as well as a two-year AAS Degree in Music & Sonic Arts. Additionally, PCC offers a certificate in Creative Coding & Immersive Technologies.

DEGREES AND CERTIFICATES OFFERED

ASSOCIATE OF APPLIED SCIENCE DEGREE

Creative Coding & Immersive Technologies Music & Sonic Arts

LESS THAN ONE-YEAR: CAREER PATHWAY CERTIFICATE

Creative Coding & Immersive Technologies Music & Sonic Arts

Academic Prerequisites

None

Academic Requirements

• The following professional music courses will be required of all program students. All sequential courses must be taken and passed in sequence.

Non-Academic Prerequisites

• None

Non-Academic Requirements

• None

ASSOCIATE OF APPLIED SCIENCE DEGREE

Creative Coding & Immersive Technologies Music & Sonic Arts (p. 1)

CREATIVE CODING & IMMERSIVE TECHNOLOGIES AAS DEGREE

Minimum 92 credits. Students must also meet Associate Degree Comprehensive Requirements and Associate of Applied Science Requirements. Students must complete a total of four courses of General Education. Some courses specified within the program may be used as General Education. Math/computation competency is met through the math course(s) required in the program of study or by satisfying MTH 58/65 competency. Students should consult with program advisors for course planning.

Course of Study

The coursework listed below is required. The following is an example of a term-by-term breakdown.

First Term	(Credits		
MUC 218	Digital Arts & Equity	4		
MUC 270	Audio Programming I: Introduction to Max/MSP	4		
MUC 272	Creative Coding I	4		
MUC 274	Microcontrollers for Artists	4		
Second Term				
MUC 219	Sonic Constructions of Identity	4		
MUC 271	Audio Programming II: Intermediate Max/ MSP	4		
MUC 277	Microcontrollers II	4		
MUC 282	Creative Coding II	4		
Third Term				
MUC 233	Math in the Arts ${}^{\$}$	4		
or MTH 58	or Math Literacy I			
or MTH 65	or Introductory Algebra - Second Term			
MUC 252	Computer Vision	4		
or CS 161	or Computer Science I	7		
MUC 275	Creative Coding Capstone	4		
General Education:	1 course			
Fourth Term				
MM 242	Game Design & Interactive Media	4		
MUC 240	Interactive Portfolio Studio	4		
or CIS 140L	or Introduction to Linux/UNIX			
MUC 261	Data Visualization & Sonification	4		
MUC 263	Experience Design with TouchDesigner	4		
Fifth Term				
MUC 250	AI & Machine Learning in the Arts I	4		
MUC 262	Interface Design	4		
General Education: 2 courses				
Sixth Term				
MM 271	Interactive Storytelling	4		
MUC 206	Body Interface Design	4		
MUC 251	Natural Language Processing	4		
or CS 160	or Exploring Computer Science			
General Education: 1 course				
	Total Credits	92		

§ Course cannot be substituted with another course.

MUSIC & SONIC ARTS AAS DEGREE

Minimum 90 credits. Students must also meet Associate Degree Comprehensive Requirements and Associate of Applied Science Requirements. Students must complete a total of four courses of General Education. Some courses specified within the program may be used as General Education. Math/computation competency is met through the math course(s) required in the program of study or by satisfying MTH 58/65 competency. Students should consult with program advisors for course planning.

Course of Study

The coursework listed below is required. The following is an example of a term-by-term breakdown.

First Term		Credits
MUS 111	Music Theory I [*]	3
MUS 111C	Sight Singing and Ear Training I	1

MUSIC AND SONIC ARTS

MUSIC AND SONIC ARTS

MUC 130A MUS 170	Rhythm Training I	1 3	MUC 106	Wearable Technologies I: Tools & Processes	1
	Music Technology: Beats and Basics		MUC 107	Wearable Technologies II: Design &	1
MUS 191P	Class Piano I	2 3	100 107	Culture	
MUC 223	Recording Technology I: Analog Fundamentals	3	MUC 115	Sonic Arts Singing Workshop	1
Second Term	- difeditionalo		MUC 126	Sound for Picture	4
MUS 112	Music Theory II	3	MUC 127	Sound for Picture: Sound Design	4
MUS 112C	Sight Singing and Ear Training II	1	MUC 144	Contemporary Singing I	2
MUC 130B	Rhythm Training II	1	MUC 144B	Contemporary Singing II	2
MUS 171	Music Technology: Record and Mix	3	MUC 144C	Contemporary Singing III	2
MUS 192P	Class Piano II	2	MUC 154A	Band Performance Workshop	2
MUC 224	Recording Technology II: Signal	3	MUC 154B	Band Performance Workshop	2
	Processing & Tracking	0	MUC 154C	Band Performance Workshop III	2
Third Term			MUC 166	Songwriting and Music Publishing	2
MUS 113	Music Theory III	3	MUC 170A	Intro to Ableton I: Art of Beat Making	1
MUS 113C	Sight Singing and Ear Training III	1	MUC 170B	Intro to Ableton II: Analyze, Deconstruct,	1
MUC 130C	Rhythm Training III	1		Rebuild	
MUS 172	Music Technology: Record, Remix and DJ	3	MUC 170C	Intro to Ableton III: Record, Produce, Perform	1
MUS 193P	Class Piano III	2	MUC 181	Music as a Career	3
MUC 225	Recording Technology III: Running a	3	MUC 182	Introduction to Pro Tools	1
	Studio		MUC 185	Introduction to Logic Pro	1
Fourth Term			MUC 201	Analog Modular Synthesis	3
MUC 200A	Composition I: Principles and	3	MUC 203	Sonic Arts Capstone	2
	Techniques		MUC 236	Studio Recording Technology IV	3
MUS 211A	Music Theory IV	3	MUC 237	Studio Recording Technology V	3
MUC 218	Digital Arts & Equity	4	MUC 238	Studio Recording Technology VI	3
MUC 270	Audio Programming I: Introduction to	4	MUC 250	AI & Machine Learning in the Arts I	4
Music and Canie	Max/MSP	0	MUC 272	Creative Coding I	4
	Arts Music Electives	3	MUC 273	Programming Interactive Video	4
Fifth Term	Occurrentifica II. Electronic Music	0	MUC 274	Microcontrollers for Artists	4
MUC 200B	Composition II: Electronic Music Composition	3	MUC 275	Creative Coding Capstone	4
MUC 250	AI & Machine Learning in the Arts I	4	MUC 277	Microcontrollers II	4
MUC 271	Audio Programming II: Intermediate Max/	4	MUC 278	Generative Art on the Web	4
1000 271	MSP	-	MUC 280A	Cooperative Education: Vocational Music	1-3
Music and Sonic	Arts Music Electives	3	MUC 282	Creative Coding II	4
General Education: 1 course			MUC 285	Game Audio: Design	4
Sixth Term			MUC 286	Game Audio: Music	4
MUC 200C	Composition III: Multimedia &	3	MUC 287	Game Audio: Implementation	4
	Multichannel Channel Comp	-	MUS 141	Introduction to Contemporary	4
MUC 233	Math in the Arts ${}^{\$}$	4		Songwriting	
or MTH 58	or Math Literacy I		MUS 216	History of Hip Hop Music and Culture	4
or MTH 65	or Introductory Algebra - Second Term		MUS 217	History of Electronic Music	4
Music and Sonic	Arts Music Electives	3	LESS THAN	I ONE-YEAR: CAREER PATHWAY	
General Educatio		0	CERTIFICA ⁻	TE	
WR 121	Composition I (WR121=WR121Z) ^Z	4		& Immersive Technologies (p. 2)	
	Total Credits	90	Music & Sonic A		
		30			

CREATIVE CODING & IMMERSIVE

Title

Max/MSP

CERTIFICATE

Courses

MUC 270

Code

TECHNOLOGIES: CAREER PATHWAY

Minimum 24 credits. Students must meet certificate requirements. Creative Coding & Immersive Technologies

Audio Programming I: Introduction to

* Could be used as General Education.

§ Course cannot be substituted with another course.

Z This course is part of Oregon Common Course Numbering. WR 121 and WR 121Z are equivalent.

MUSIC & SONIC ARTS MUSIC ELECTIVES

Code	Title	Credits
MUC 104	Enclosures I: Tools & Processes	1
MUC 105	Enclosures II: Design & Culture	1

Credits

4

MUSIC AND SONIC ARTS

MUC 271	Audio Programming II: Intermediate Max/ MSP	4
MUC 272	Creative Coding I	4
MUC 274	Microcontrollers for Artists	4
MUC 277	Microcontrollers II	4
MUC 282	Creative Coding II	4
Total Credits		24

MUSIC & SONIC ARTS: CAREER PATHWAY CERTIFICATE

Minimum 39 credits. Students must meet certificate requirements.

Course of Study

The coursework listed below is required. The following is an example of a term-by-term breakdown.

First Term		Credits
MUS 111	Music Theory I	3
MUS 111C	Sight Singing and Ear Training I	1
MUC 130A	Rhythm Training I	1
MUS 170	Music Technology: Beats and Basics	3
MUS 191P	Class Piano I	2
MUC 223	Recording Technology I: Analog Fundamentals	3
Second Term		
MUS 112	Music Theory II	3
MUS 112C	Sight Singing and Ear Training II	1
MUC 130B	Rhythm Training II	1
MUS 171	Music Technology: Record and Mix	3
MUS 192P	Class Piano II	2
MUC 224	Recording Technology II: Signal Processing & Tracking	3
Third Term		
MUS 113	Music Theory III	3
MUS 113C	Sight Singing and Ear Training III	1
MUC 130C	Rhythm Training III	1
MUS 172	Music Technology: Record, Remix and DJ	3
MUS 193P	Class Piano III	2
MUC 225	Recording Technology III: Running a Studio	3
	Total Credits	39