

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
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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 courses in the program of study indicated with a § symbol. Students should consult with program advisors for course planning. 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 |
| MUC 252 | Computer Vision or CS 161 or Computer Science I | 4 |
| MUC 275 | Creative Coding Capstone | 4 |
| General Education: 1 course | | |
| Fourth Term | | |
| MM 242 | Game Design & Interactive Media | 4 |
| MUC 240 | Interactive Portfolio Studio or CIS 140L or Introduction to Linux/UNIX | 4 |
| 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 or CS 160 or Exploring Computer Science | 4 |
| 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 courses in the program of study indicated with a § symbol. Students should consult with program advisors for course planning. 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 |
| 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 |
| Fourth Term | | |
| MUC 200A | Composition I: Principles and Techniques | 3 |
| MUS 211A | Music Theory IV | 3 |
| MUC 218 | Digital Arts & Equity | 4 |
| MUC 270 | Audio Programming I: Introduction to Max/MSP | 4 |
| Music and Sonic Arts Music Electives | | 3 |
| Fifth Term | | |
| MUC 200B | Composition II: Electronic Music Composition | 3 |
| MUC 250 | AI & Machine Learning in the Arts I | 4 |
| MUC 271 | Audio Programming II: Intermediate Max/MSP | 4 |
| Music and Sonic Arts Music Electives | | 3 |
| General Education: 1 course | | |
| Sixth Term | | |
| MUC 200C | Composition III: Multimedia & Multichannel Channel Comp | 3 |
| MUC 233 | Math in the Arts § | 4 |
| Music and Sonic Arts Music Electives | | 3 |
| General Education: 1 course | | |
| WR 121 | Composition I (WR121=WR121Z) Z | 4 |
| Total Credits | | 90 |

* 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 |
| MUC 106 | Wearable Technologies I: Tools & Processes | 1 |

| | | |
|----------|--|-----|
| MUC 107 | Wearable Technologies II: Design & Culture | 1 |
| MUC 115 | Sonic Arts Singing Workshop | 1 |
| MUC 126 | Sound for Picture | 4 |
| MUC 127 | Sound for Picture: Sound Design | 4 |
| MUC 144 | Contemporary Singing I | 2 |
| MUC 144B | Contemporary Singing II | 2 |
| MUC 144C | Contemporary Singing III | 2 |
| MUC 154A | Band Performance Workshop | 2 |
| MUC 154B | Band Performance Workshop | 2 |
| MUC 154C | Band Performance Workshop III | 2 |
| MUC 166 | Songwriting and Music Publishing | 2 |
| MUC 170A | Intro to Ableton I: Art of Beat Making | 1 |
| MUC 170B | Intro to Ableton II: Analyze, Deconstruct, Rebuild | 1 |
| MUC 170C | Intro to Ableton III: Record, Produce, Perform | 1 |
| MUC 181 | Music as a Career | 3 |
| MUC 182 | Introduction to Pro Tools | 1 |
| MUC 185 | Introduction to Logic Pro | 1 |
| MUC 201 | Analog Modular Synthesis | 3 |
| MUC 203 | Sonic Arts Capstone | 2 |
| MUC 236 | Studio Recording Technology IV | 3 |
| MUC 237 | Studio Recording Technology V | 3 |
| MUC 238 | Studio Recording Technology VI | 3 |
| MUC 250 | AI & Machine Learning in the Arts I | 4 |
| MUC 272 | Creative Coding I | 4 |
| MUC 273 | Programming Interactive Video | 4 |
| MUC 274 | Microcontrollers for Artists | 4 |
| MUC 275 | Creative Coding Capstone | 4 |
| MUC 277 | Microcontrollers II | 4 |
| MUC 278 | Generative Art on the Web | 4 |
| MUC 280A | Cooperative Education: Vocational Music | 1-3 |
| MUC 282 | Creative Coding II | 4 |
| MUC 285 | Game Audio: Design | 4 |
| MUC 286 | Game Audio: Music | 4 |
| MUC 287 | Game Audio: Implementation | 4 |
| MUS 141 | Introduction to Contemporary Songwriting | 4 |
| MUS 216 | History of Hip Hop Music and Culture | 4 |
| MUS 217 | History of Electronic Music | 4 |

LESS THAN ONE-YEAR: CAREER PATHWAY CERTIFICATE

Creative Coding & Immersive Technologies (p. 2)
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CREATIVE CODING & IMMERSIVE TECHNOLOGIES: CAREER PATHWAY CERTIFICATE

Minimum 24 credits. Students must meet certificate requirements.

Creative Coding & Immersive Technologies Courses

| Code | Title | Credits |
|---------|--|---------|
| MUC 270 | Audio Programming I: Introduction to Max/MSP | 4 |
| 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 |