Data-Driven Music Performance and Composition (PhD)

The University of Oregon offers a Doctor of Philosophy in Data-Driven Music Performance and Composition, Music Composition, Music Education, Music Theory, and Musicology.

Program Learning Outcomes

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

- Demonstrate substantial skill and knowledge related to real-time performance and composition of electroacoustic music with data-driven musical instruments,
- Demonstrate substantial skill and knowledge related to design and fabrication of data- driven musical instruments.
- Demonstrate substantial skill and knowledge related to data- mapping strategies and techniques.
- Demonstrate substantial skill and knowledge related to sound synthesis techniques.
- Demonstrate substantial skill and knowledge related to data-driven instrumental performance techniques.
- Demonstrate substantial skill and knowledge related to data sonification techniques.

The proposed Data-driven Music Performance and Composition degree consists of General Degree Requirements, and Area Requirements, and Other. Additionally, there are comprehensive exam and dissertation requirements.

Code	Title	Credits
General Degree Requirements		**27-30**
MUS 611	Research Methods in Music	
MUS 665	Music in the 20th Century	
Artist/Brand Development Course		
Aesthetics and Design Course		
Elective Courses		
Area Requirements		
MUE 639	Pedagogy and Practicum: [Topic]	3
MUS 693	Oregon Electronic Device Orchestra	2
MUP 765	Music Performance Studies: [Topic]	24
MUS 550	Sensor Music	3
MUS 570	History of Electroacoustic Music	3
MUS 571	Musical Performance Networks	3
MUS 579	Data Sonification	4
Dissertation		**18**
Total Credits		**87-90**

General Degree Requirements – 27-30 credits:

MUS 611 Research Methods in Music (3 cr.)
MUS 665 Twentieth Century Music (3 cr.)
------ ------ Artist/Brand Development Course (selected from evolving menu of courses, 4 cr.)* ------ ------ Aesthetics and Design Course (selected from evolving menu of courses, 4 cr.)* ------ ------ Cultural Discourse Course (selected from evolving menu of courses, 4 cr.)* ------ ------ Elective Courses (9-12 cr.)

Area Requirements – 42 credits

MUE 639 Pedagogy and Practicum for Data-driven Instruments (3 cr.)
MUS 693 Oregon Electronic Device Orchestra (2 cr.)
MUP 769 Data-driven Instrument Performance (24 cr., 4 cr. x 6 terms)
MUS 550 SensorMusik (3 cr.)

MUS 570 History of Electroacoustic Music (3 cr.) MUS 571 Musical Performance Networks (3 cr.) MUS 579 Data Sonification (4 cr.)

Other – 0 credits:

Solo Recital and Portfolio Requirement (0 cr.)

Recital requirement – 0 credits

The solo recital requirement will be fulfilled by the presentation on the University of Oregon campus of a solo recital containing five original electroacoustic compositions to be performed with data-driven instruments that employ a variety of interface devices as the front-end to the data-driven instrument. Expected total duration will be approximately one hour.

Portfolio Requirement – 0 credits

The six works included in the digital video portfolio must be musically substantial and well-executed compositions. All of the compositions of the portfolio must have received a public performance. Only one of the portfolio compositions may include other musical performers. The videos of the six works should be created as studio productions and not produced from recordings of live performances (except in rare cases when audience impact is vital to the work itself). The quality of the final audio/video product must be excellent.

Comprehensive Exams – 0 credits

There will be a comprehensive exam that concentrates on musical and technical areas of music technology.

Dissertation, MUS 603 – 18 credits:

The dissertation will be comprised of 1) an original large-scale computer music composition of a substantial and ambitious scope that is at least fifteen minutes in duration, that is performed with a data-driven instrument, and that is documented with a high- definition audio video recording; 2) the original software that contributes to documentation of the composition and that forms an essential component to the data-driven instrument; and 3) a text document that analyzes and describes the composition and the data-driven instrument.

At least one full-time academic year, the residency year, must be completed. The year of residency is expected to be the first year after admission as the doctoral student (as specified by the UO Graduate School).