MSc in Sound & Music Computing

The MSc in Sound and Music Computing responds to a growing skills shortage in industry for engineers and computer scientists trained specifically in sound and music processing, as digital media become ever more advanced and ubiquitous.

Developed by the acclaimed Centre for Digital Music (C4DM), this programme offers you a broad range of study options in methods of processing, analysis, synthesis and manipulation of musical signals. You will develop the knowledge and skills required for careers in the technical aspects of audio production, sound engineering, broadcasting, intelligent signal processing, computational music analysis, music information retrieval and other areas sound and music computing. You will acquire an in-depth understanding of data analysis and signal processing techniques related to human speech and hearing, psychoacoustics and masking, and instrument and room acoustics.

C4DM hosts a soundproof listening room for recording, a performance space with lighting and motion capture and a control room fully equipped for recording and production.

The MSc is intended for graduates in a related discipline, who wish to hone and enhance their skills, and for industrialists with experience of sound and music computing, seeking formal qualifications. The taught modules are fully supported with computing and laboratory work.

You will graduate with an understanding of how today's audio and music technology works, possessing the potential to become a pioneer in developing future generations of leading edge music technologies. Previous graduates from our programmes have gone on to work for companies such as Ableton, Creative Labs, EMI, Mix Genius and Rockstar Games.

For more information and to apply visit:
http://www.qmul.ac.uk/postgraduate/coursefinder/courses/129308.html

Programme structure

Semester 1 *(Maximum of 4 modules to be taken in Semester 1)*

At least two core modules from:
- Fundamentals of DSP (required if equivalent background is missing)
- Music Perception and Cognition
- One of the following modules:
    o Sound Recording and Production Techniques
    o Interactive Digital Multimedia Techniques

Plus one or two option(s) from:
- Machine Learning (highly recommended)
- Advanced Transform Methods
- XML and Structured Documents
- Mobile and Wireless Technologies

Semester 2 *(Maximum of 4 modules to be taken in Semester 2)*

At least two core modules from:
- Music & Speech Processing
- Digital Audio Effects
- Music Analysis & Synthesis
- Real-Time DSP

Plus up to two optional modules from:
- Interactive System Design
- The Semantic Web
- Digital Media and Social Networks
- Information Retrieval

Semester 3

- Research Project