



Queen Mary
University of London



MSc in Sound and Music Computing

As digital media becomes ever more advanced and ubiquitous in the modern world, our MSc in Sound and Music Computing responds to a growing skills shortage for engineers and computer scientists specifically trained in sound and music processing.

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GROUP

MSc in Sound and Music Computing

■ Why study with us?

As an established Russell Group university, we offer an invigorating academic experience within a research-intensive environment. Our MSc in Sound and Computing has been developed by the acclaimed Centre for Digital Music (C4DM), and offers a broad range of study options in methods of processing, analysis, synthesis and manipulation of musical signals. It is well-supported by a range of excellent facilities, including a soundproof listening room, a performance space with lighting and motion capture, and a control room specially equipped for recording and production.

■ Course overview

Our programme offers an in-depth understanding of data analysis and signal processing techniques related to human auditory perception, music information retrieval, music analysis, audio engineering, expressive performance and new instrument design. As a student with us, you will develop the knowledge and skills required for technical careers in audio production, sound engineering, broadcasting, intelligent signal processing, computational music analysis, music information retrieval and further areas of sound and music computing.

■ Programme structure

Our modules involve a mixture of formal lectures and group seminars designed to generate informed discussion around set topics. You will be fully supported on all taught modules with computing and laboratory work, and we will expect you to commit to additional hours of independent learning and research to expand your own knowledge, understanding and critical ability.

■ Careers

Our MSc programme is intended for graduates in a related discipline wishing to enhance their skills, along with individuals

Semester One

You will take a maximum of four modules, with at least two core options:

- Fundamentals of Digital Signal Processing (DSP) – required without equivalent background
- Music Perception and Cognition
- Sound Recording and Production Techniques OR Interactive Digital Media Techniques

These are joined with option(s) from:

- Machine Learning (highly recommended)
- Advanced Transform Methods
- XML and Structured Documents
- Mobile and Wireless Technologies

Semester Two

You will take a maximum of four modules, with at least two core options:

- Music and Speech Processing
- Digital Audio Effects
- Music Analysis and Synthesis
- Real-Time DSP

These are joined with option(s) from:

- Interactive System Design
- The Semantic Web
- Digital Media and Social Networks
- Information Retrieval

Semester Three

You will undertake a Research Project under the supervision of an academic advisor. A 10,000 – 15,000 Dissertation

experienced in the sound and music computing industries seeking formal qualifications. You will graduate with a strong foundation of knowledge and innovation at the cutting edge of today's audio and music technology field.

Our postgraduates progress to a variety of careers, bolstering their academic skills with extra-curricular activities and work experience throughout their time with us. Previous graduates have moved on to work with music software and production companies such as Ableton, Creative Labs and Mix Genius; music labels such as EMI; and media developers such as Rockstar Games.

94 per cent of postgraduates in the School of Electronic Engineering and Computer Science are in employment and/or study within six months following graduation, and possess a strong earning power with a median salary of £37k.

■ Fees

UK/EU: £8,200

Overseas: £16,450

■ The Centre For Digital Music (C4DM)

The C4DM is a world-leading multidisciplinary research group in sound and music computing with strong links to industry leaders. Our areas of interest and influence stretch across the field of music and audio technology, from pioneering work on Digital Power Amplification (DPA) to developing systems for automatic playlisting (SoundBite), 'looking inside' the audio (Sonic Visualiser), and drumming synchronisation (B-Keeper). Our current projects include research into Musical Ontology and the Semantic Web.

■ Assessment

Modules are assessed through a combination of coursework and written examinations with particular focus on a Research Project undertaken during your third semester, which allows greater exploration of a specific area of interest.

Disclaimer: We have made every effort to ensure that the information published on this poster is accurate and up-to-date. Queen Mary University of London does not accept legal liability for errors or omissions and reserves the right to make changes to some or all the information.

Further information

Postgraduate Contact:
Virginia Elgar – Postgraduate Administrator
Tel: +44 (0)20 7882 7333
Fax: +44 (0)20 7882 7064
msc-enquiries@eecs.qmul.ac.uk



For more information and to apply visit:
www.eecs.qmul.ac.uk/msc-snd-msc-comp