

SOUND AND MUSIC COMPUTING (MINOR)

Program Description

Sound and Music Computing is an emerging field combining music, computer science and engineering. Addressing topics that range from procedural audio or music for video games to automatic genre detection for music recommendation systems such as iTunes or Spotify, Sound and Music Computing has established itself as an important multidisciplinary field that opens up key areas of enquiry, interesting opportunities for graduate study, as well as new professional opportunities for those interested in combining music and computing.

The minor in Sound and Music Computing at NYU Abu Dhabi is a cross-divisional collaboration between the Music, Computer Science, and Engineering Programs that is open to all students. In this minor, students become familiarized with the state of the art in this field by learning current approaches to digital signal processing, music information retrieval, and procedural generation of music and audio.

Program Requirements

Course	Title	Credits
Minor Required Courses		
CS-UH 1001 or ENGR-UH 1000	Introduction to Computer Science Computer Programming for Engineers	4
MUSIC-UH 2419	Computational Approaches to Music and Audio I	4
Minor Electives (see lists below)		
Complete 1 Computer Science or Engineering elective		4
Complete 1 Music elective		4
Complete 1 additional elective from either of the categories above		4
Total Credits		20

Computer Science and Engineering Electives

Code	Title	Credits
CS-UH 1002	Discrete Mathematics	4
CS-UH 1050	Data Structures	4
CS-UH 1052	Algorithms	4
CS-UH 1052G	Algorithms	4
ENGR-UH 3510	Data Structures and Algorithms	4
ENGR-UH 3610	Signals and Systems	4
ENGR-UH 3620	Analog and Digital Communication Theory	4

Music Electives

Code	Title	Credits
IM-UH 2322	Live Coding	4
IM-UH 3116	Music Devices	4
MUSIC-UH 1001	Music Theory & Analysis I	4
MUSIC-UH 1002	Music Technology Fundamentals	4
MUSIC-UH 2416	Recording and Production Techniques	4
MUSIC-UH 2418	Immersive Audio Storytelling for Motion Picture	4
MUSIC-UH 2801	Music Theory & Analysis II	4
MUSIC-UH 3417	Computational Approaches to Music and Audio II	4

Policies

NYU Policies

University-wide policies can be found on the New York University Policy pages (<https://bulletins.nyu.edu/nyu/policies/>).

NYU Abu Dhabi Policies

A full list of relevant policies can be found on NYU Abu Dhabi's undergraduate academic policies page (<https://bulletins.nyu.edu/undergraduate/abu-dhabi/academic-policies/>).