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.

Admissions

New York University's Office of Undergraduate Admissions supports the application process for all undergraduate programs at NYU. For additional information about undergraduate admissions, including application requirements, see How to Apply (https://www.nyu.edu/admissions/undergraduate-admissions/how-to-apply.html).

Program Requirements

Course	Title	Credits
Required Courses		
CS-UH 1001	Introduction to Computer Science	4
or ENGR-UH 1000	Computer Programming for Engineers	
MUSIC-UH 1002	Music Technology Fundamentals	4
Electives		
Select three of the following: [1]		12
CS-UH 1002	Discrete Mathematics	
CS-UH 1050	Data Structures	
CS-UH 1052	Algorithms	
Any elective in Computer Science		
ENGR-UH 3510	Data Structures and Algorithms	
ENGR-UH 3610	Signals and Systems	
ENGR-UH 3620	Analog and Digital Communication Theory	
ENGR-UH 3650		
MUSIC-UH 1001	Music Theory & Analysis I	
MUSIC-UH 1410 & MUSIC-UH 1420	and	
MUSIC-UH 2215		
MUSIC-UH 2416	Recording and Production Techniques	
MUSIC-UH 2413	Fundamentals of Digital Audio - Introduction to Pro Tools	
MUSIC-UH 2417	Advanced Musical Programming	
MUSIC-UH 2801	Music Theory & Analysis II	
Total Credits		**20**

[1]

Including at least one CS-UH or ENGR-UH numbered course, and one MUSIC-UH numbered course

Note 1: Students may double count no more than two courses for this minor.

Note 2: When registering for the electives, students have to make sure that they observe the specific prerequisite and corequisite requirements for those courses (e.g. Data Structures and Algorithms courses from Computer Science require Intro to CS and Discrete Mathematics as a prerequisite, while Engineering course Data Structures and Algorithms requires Computer Programming for Engineers).

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/).