

# MUSIC TECHNOLOGY (PHD)

Department Website (<http://steinhardt.nyu.edu/music/>)

NYSED: 31846 HEGIS: 1099.00 CIP: 40.0809

## Program Description

The PhD program in Music Technology prepares students for research and teaching careers in academia and industry at the constantly changing intersection of music, sound, and technology. This degree program involves research in the fields of computer music, immersive audio, music psychology and neuroscience, sound and music computing, and data science, as well as in cutting-edge technologies for music experiences, interaction, education, creation, production, and accessibility.

The program of study is distributed among foundation courses, cognate course work related to the student's area of specialization, content and dissertation proposal seminars, course work in specialized research methods, and research requirements. Students are mentored closely by music technology faculty while benefiting from courses, facilities, resources, and research opportunities across across the University, including the Courant Institute of Mathematical Sciences, Tandon School of Engineering, Center for Data Science, Tisch School of the Arts, and the Graduate School of Arts & Science.

## NYU Abu Dhabi Fellowship

Music Technology PhD candidates may choose to become NYU Abu Dhabi Fellows. NYUAD Fellows commence their degree work in New York, taking full-time coursework for a year before continuing on to Abu Dhabi to complete coursework, research, and their dissertation, all while maintaining close contact with faculty in New York, including regular research visits. Opportunities in Abu Dhabi include extensive facilities, world-class faculty in computer music, recording, machine learning, and (ethno)musicology, and collaboration with the Music and Sound Cultures ([https://wp.nyu.edu/music\\_and\\_sound\\_cultures/](https://wp.nyu.edu/music_and_sound_cultures/)) (MaSC) research group, which develops groundbreaking work on the computational analysis and understanding of music from the Arabian Gulf and surrounding regions. Interested applicants should include in their statement of purpose ideas as to how their research interests could be applied in the NYUAD context.

## Admissions

Admission to graduate programs in the Steinhardt School of Culture, Education, and Human Development requires the following minimum components:

- Résumé/CV
- Statement of Purpose
- Letters of Recommendation
- Transcripts
- Proficiency in English

See NYU Steinhardt's Graduate Admissions website (<https://steinhardt.nyu.edu/admissions/how-apply/graduate-students/>) for additional information on school-wide admission. Some programs may require additional components for admissions.

See How to Apply (<https://steinhardt.nyu.edu/degree/phd-music-technology/how-apply/>) for admission requirements and instructions specific to this program.

## Program Requirements

The program requires the completion of 48 credits, comprised of the following:

Course	Title	Credits
<b>Major Requirements</b>		
<i>Foundations</i>		
Graduate Music Courses (by advisement)		6
Graduate Technology Courses (by advisement)		6
<i>Content and Dissertation Proposal Seminars</i>		
MPATE-GE 3060	Doctoral Symposium in Music Technology	3
MPAIA-GE 3097	Dissertation Proposal Seminar	3
<b>Electives<sup>1</sup></b>		
Research Electives		15
Specialization Electives		15
<b>Total Credits</b>		<b>48</b>

<sup>1</sup> Students entering with a master's degree may receive advanced standing following a careful review of their transcripts and may be able to complete their doctoral studies for as few as 36 credits by taking fewer research and specialization electives.

## Additional Program Requirements

### Teaching Requirement

Doctoral Candidates are expected to complete at least one semester as a teaching assistant working with a full-time faculty member in preparing and teaching a class, as well as providing assistance to the students in that class. The student will further be expected to fulfill at least one semester of independent teaching after completing their experience as a teaching assistant. This experience is intended both to prepare students for teaching careers in higher education, as well as to further foster the mentoring relationship between the candidate and the faculty with whom they will be working on curricular development and teaching.

### Doctoral Candidacy Exams

Doctoral degree candidacy in Music Technology is based on an oral examination and a written examination. The student will be required to take the doctoral candidacy exam after completing no more than 30 credits toward the degree.

## Graduate Music Theory and History Requirements

Proficiency in music theory and history is a requirement for all graduate students in the NYU Steinhardt Department of Music and Performing Arts Professions. The music theory and history requirements outlined here apply to all students enrolling in Masters, PhD, DMA, or Advanced Certificate/Diploma programs in the following areas:

- Instrumental Performance (String Studies, Woodwind Studies, Brass Studies, Percussion Studies, and Jazz)
- Music Composition (Concert Music, Songwriting, and Screen Scoring)
- Music Education

- Music Technology
- Piano Studies
- Vocal Performance
- Music Therapy

Students applying to the Masters, PhD, or Advanced Certificate/Diploma programs who have completed a music degree in the Department of Music and Performing Arts Professions at NYU Steinhardt within the last five years are exempt from the music theory and history entrance requirements. This exemption is granted based on 1) passing scores on prior MPAP music theory and history entrance exams, or 2) successful completion of prior remedial coursework required by former placement exam scores. *All DMA applicants are required to take the exam regardless of prior degrees from the department.*

Music Theory Diagnostic Exam

Graduate students in music must complete a music theory diagnostic exam at any point before registering for the first semester of coursework. DMA applicants are required to complete the exam as part of the application process, no later than the first week of December for Fall enrollment.

The diagnostic exam gauges students' knowledge of written theory, aural theory, and sight-singing. Students who do not pass the exam (or portions thereof) will be required to complete a maximum of four credits from the courses listed below, assigned in accordance with their exam results:

- MPATC-GE 2301 Music Fundamentals
- MPATC-GE 2232 Graduate Review of Tonal Theory
- MPATC-GE 2035 Graduate Review of Aural Skills

Music History Requirement

Students who have completed a minimum of two music history courses (equivalent to two 2-credit history courses at NYU) as part of their undergraduate or graduate degrees prior to arrival are exempt from supplemental coursework in music history.

Evaluation of course equivalence will be completed by the student's academic program based on student transcripts. History courses must have been completed within the last five years for Masters and Advanced Certificate/Diploma programs and within the last 7 years for doctoral programs.

Students missing this foundational coursework must complete up to two 2-credit music history courses offered through the Music and Performing Arts Department. Students should consult with their advisors on the most appropriate music history courses for their degree program.

Additional Information

Courses taken to satisfy a proficiency requirement are supplemental to those required by any graduate degree program. Remedial courses cannot be used to meet degree requirements.

Graduate Remedial Coursework

Course	Title	Credits
Music Theory Courses		
MPATC-GE 2301	Music Fundamentals	2
MPATC-GE 2232	Graduate Review of Tonal Theory	1
MPATC-GE 2035	Graduate Review of Aural Skills	1
Music History Courses		

MPATC-GE 2067	Music History I: Medieval & Renaissance	2
MPATC-GE 2068	Music History II: Baroque & Classical	2
MPATC-GE 2077	Music History III: Romantic	2
MPATC-GE 2078	Music History IV: Twentieth Century	2
MPATC-GE 2323	Global Soundscapes: A Survey of Musical Traditions	2
MPATC-GE 2248	Music History: Gender and Sexuality in Music	2
MPATC-GE 2550	Screen Music: History, Analysis, and Aesthetics.	2
MPATC-GE 2086	Music of East and Southeast Asia, Past and Present	2
MPAJZ-GE 2121	Jazz History	2
MPATE-GE 2138	Global Electronic Music I	3
MPATC-GE 2079	Music History: Music & Protest	2
American Music History		

Sample Plan of Study

Course	Title	Credits
1st Semester/Term		
MPATE-GE 3060	Doctoral Symposium in Music Technology	0
Foundations Technology Course		3
Foundations Music Course		3
Research Elective		3
Specialization Elective		3
Credits		12
2nd Semester/Term		
MPATE-GE 3060	Doctoral Symposium in Music Technology	0
Foundations Technology Course		3
Foundations Music Course		3
Research Elective		3
Specialization Elective		3
Credits		12
3rd Semester/Term		
MPATE-GE 3060	Doctoral Symposium in Music Technology	0
Research Elective		3
Research Elective		3
Specialization Elective		3
Specialization Elective		3
Credits		12
4th Semester/Term		
MPATE-GE 3060	Doctoral Symposium in Music Technology	3
Research Elective		3
Specialization Elective		3
Credits		9
5th Semester/Term		
MPAIA-GE 3097	Dissertation Proposal Seminar	3
MPATE-GE 3060	Doctoral Symposium in Music Technology	0
Credits		3
Total Credits		48

Following completion of the required coursework for the PhD, students are expected to maintain active status at New York University by enrolling in a research/writing course or a Maintain Matriculation (MAINT-GE 4747) course. All non-course requirements must be fulfilled prior to degree conferral, although the specific timing of completion may vary from student-to-student.

Students who only need to complete 36 credits due to advanced standing can be advised to take 9 credits per term instead of 12.

## Learning Outcomes

Upon successful completion of the program, graduates will:

1. Have the ability to make a significant and original contribution to scholarly work at the intersection of music, science and technology.
2. Have the ability to critically analyze/apply/discuss the theories, concepts and critical issues in the fields of computer music, music cognition, audio recording and production, sound and music computing, music theory, performance and composition, and immersive audio environments.
3. Show proficiency in the use of common methodologies for scientific experimentation and evaluation, with a focus on the explanation of observable phenomena by measuring evidence and applying inductive reasoning, and the testing of these explanations, or hypotheses, by means of carefully-designed, statistically-rigorous and reproducible experimental studies.
4. Obtain in-depth knowledge and proficiency in the use of various methods and techniques from the applied sciences and mathematics, in areas such as computer programming, digital signal processing, machine learning, time-series analysis, neuroscience, cognitive sciences, computational modeling, acoustics and electronics.
5. Show proficiency in oral and written communication appropriate to the discipline.
6. Have the ability to produce works that are of sufficient quality for publication in scientific journals and conference proceedings.
7. Have the ability to teach and mentor college students.

## Policies

### Program Policies

Students in this program must maintain a minimum cumulative GPA of 3.0 and a term GPA of 3.0.

### STEM OPT Benefits for International Students

If you're an international student, you may be able to work in the United States after graduation for an extended period of time. Most students studying on F-1 visas will be eligible for 12 months of Optional Practical Training (OPT) off-campus work authorization. F-1 students in this program may also be eligible for the STEM (Science, Technology, Engineering, or Mathematics) OPT extension, allowing you to extend your time in the United States to pursue degree-related work experience for a total of 36 months or 3 years. For more information on who can apply for this extension visit NYU's Office of Global Services: STEM OPT (<http://www.nyu.edu/students/student-information-and-resources/student-visa-and-immigration/alumni/extend-your-opt/stem-opt.html>).

### Department Policies

#### Academic Advisement

Academic advisement is a shared responsibility. As a student, you will be responsible for making decisions about your academic, professional, and personal path. You will work in partnership with your assigned advisor(s) to develop an academic plan and a course of study in alignment with your career goals. In particular, you will:

- Understand the philosophy that guides the discipline/major
- Learn about degree requirements, including prerequisites, electives, and course sequencing
- Develop and maintain an academic plan that meets the requirements for the successful completion of the degree and maintenance of good academic standing

- Plan a program of study that integrates other academic options and opportunities (e.g. study abroad, honors courses, co-curricular and professional activities, minors, etc.)
- Be aware of and adhere to the policies, procedures, and deadlines that guide undergraduate study (e.g. drop/add, registration, pass/fail option, etc.)
- Initiate meetings and actively prepare for advising meetings by bringing a planned schedule and concerns and/or questions for discussion
- Be familiar with school/university student services and resources and actively seek assistance when needed
- Pursue professional development opportunities by engaging with faculty, alumni/alumnae, professional organizations, and career resources on campus

Engaging with the above responsibilities requires checking your NYU email on a regular (i.e. daily) basis and responding to emails from your advisor in a timely manner. Students who have questions about their academic plan or how courses are falling in their Degree Progress Report should contact their advisors as soon as these questions arise to seek clarification and updates, if needed.

#### Add/Drop

Registration changes, including credit changes, must be completed before the end of the add/drop period. These dates may be found on the academic calendar. After the add/drop period is over, students may not change the number of credits for which they are registered in a variable credit course. After the end of add/drop, students may not drop a course but must withdraw. Withdrawing from a course is indicated by a "W" on a student's transcript.

#### Attendance

Attendance is mandatory for Departmental courses. All students are expected to attend class regularly and to actively participate in class activities. Students who must miss class are required to notify the instructor in advance via email, and are responsible for all material covered during the missed class meeting.

Our Department does not permit students to "zoom" into in-person courses if they are ill. If a student is unwell and unable to attend class, they will be marked as absent and are responsible for missed course material.

Religious observance, illness, and family emergencies are grounds for excused absences. If a student cannot attend class for any of the above reasons, they must email the instructor in advance, and all assignments must still be submitted within 24 hours of the due date. If the nature of the absence prevents a student from sending advance notice, they must communicate via email with the instructor as soon as possible for the absence to be excused.

If a student misses more than one week of class or has repeated absences during the term, the instructor will use NYU Connect to notify the student's advisor about attendance concerns so that the advisor can provide appropriate support to the student. Repeated absences may have an impact on the student's participation grade.

#### Auditing

The Department of Music and Performing Arts Professions does not permit students to audit courses. Students must be registered for the course in order to be able to attend the course.

## Change of Major

1. Interested students may apply for Fall or Spring change of major.
2. Students may not apply for a change of major before their second semester of study.
3. At latest, students may begin study at a new NYU school/program as a first-semester junior.
4. For Music Programs: Students must have completed, or placed out of, Music Fundamentals. If students have completed Theory and Practice 1 and Aural Skills 1, they must have received a passing grade. (Educational Theatre students do not require Music Core courses.)
5. Students wishing to transfer into Music Technology must take MPATE-UE 1801 and MPATE-UE 1037/1047 before applying.
6. Students wishing to transfer to Music Business must take MPAMB-UE 100 before applying.
7. Students must complete an online application, submit a statement of purpose (a rationale for their request no more than 350 words), and provide one letter of recommendation from a professor or advisor.
8. Applications must be received by March 1 for Fall changes of major and November 1 for Spring changes of major. Programs that require auditions are: Instrumental Performance, Music Education, Vocal Performance. Programs that require portfolio review are Music Technology and Music Composition. Decisions will be made by April 15 for Fall changes of major, and December 15 for Spring change of major.
9. Internal Steinhardt students who are not MPAP majors, before following the above process, must contact the program advisor for the program to which they plan to apply:
  - a. Music Business: Brennan Stack
  - b. Music Technology: Heather Hardy
  - c. Instrumental Performance: Chris Bush
  - d. Music Composition - Screen Scoring: Sergi Casanelles
  - e. Music Composition - Songwriting: Phil Galdston
  - f. Music Composition - Concert Composition: Robert Honstein
  - g. Vocal Performance: Monique Henry
  - h. Piano Studies: Manuel Laufer Fair
  - i. Educational Theatre: Nan Smithner and Joe Salvatore

## Double Major

1. Students requesting a Double Major in Steinhardt must complete the Non-Primary (Double) Major Declaration form. Detailed instructions are listed on the form.
2. Students who wish to declare a Double Major in an MPAP program must meet with the advisor of that program and also the advisor for their primary major to discuss possible course schedule options. The student must then meet with a program representative of the MPAP program of their non-primary major.
  - a. You must declare a non-primary major during or prior to the spring term of your junior year before you complete 96 points towards your degree.
  - b. You must declare a non-primary major in a field of study different from your primary major.
  - c. If you are pursuing a non-primary major you may need to earn units in excess of your degree requirements.
  - d. Please note that adding a non-primary major does not mean that you will receive two degrees. You will receive only one diploma printed with the school name and the academic department name of the primary major, not the name of the major itself.

- e. Both primary majors, non-primary majors and minors appear on the transcript.

## Incomplete Grades

Students can request an incomplete grade only:

- If a student is matriculated under exceptional circumstances
- At the discretion of the instructor
- If the student has already completed 50% or more of the coursework required
- It is at least the 9th week of the term

Note that visiting and/or non-degree students may not apply for an incomplete.

The instructor will determine the timeframe the student will have to complete the work, but it cannot be later than the last day of classes in the following term. If the student does not complete the outstanding work by the agreed date, the incomplete grade (I) automatically turns to an F.

Incomplete grades may result in failure to meet satisfactory academic progress by the Office of Financial Aid. Students need to submit a signed Incomplete Grade Agreement to their advisor when an Incomplete Grade is assigned.

## Independent Study

An Independent Study is designed by the student and sponsoring faculty to investigate an area or field of specialization not normally offered in scheduled course offerings. It is an opportunity to work one-on-one with a faculty member to complete directed reading, a creative project and/or supervised research. Students must consult with their advisors before undertaking an Independent Study to understand program-specific requirements and policies.

- Only full-time faculty may sponsor an Independent Study.
- Only matriculated students are eligible to complete an Independent Study. Independent Study carries 1 to 6 units. The number of units will be determined by the work to be completed and should be comparable in rigor to that of a classroom course.
- Minimum hours required per unit: 45 hours of work per credits per term
- Maximum credits allowed: As part of specialization: as determined by each department/program
  - Total allowed
    - For undergraduate students, a maximum of 6 units over the course of the undergraduate career
    - For graduate students, the number of units will be specified by the program
  - Cannot be used to satisfy liberal arts requirements
- Registering for Independent Study: Students first meet with the academic advisors to determine if the student should undertake an Independent Study; they then meet with the sponsoring faculty to complete the NYU Steinhardt Independent Study form, obtaining the signatures of the sponsoring faculty member, the sponsoring faculty member's department chair and the student's advisor. Students should self-enroll in the course via Albert.
- Independent Study Title and Description: The title of an Independent Study will appear on the student transcript prefaced by the word "Independent Study". The description of the Independent Study should include its theme which may be stated as a question or issue to be explored or creative technique to be examined; its type and scope, e.g. paper or special project. Students should use

the Independent Study Form to have the correct title listed on their academic transcript. These forms should be submitted via email to: [steinhardt.advisement.registration@nyu.edu](mailto:steinhardt.advisement.registration@nyu.edu).

### **International Students**

International students should review information on the OGS webpage to understand their legal requirements. International students should make sure to register for full-time enrollment every fall and spring semester, and also not begin any work before receiving authorization. International Students are expected to work closely with their academic advisor to ensure that they are meeting their degree requirements. Any questions regarding immigration and visa support can be directed to the Office of Global Services.

### **Mental Health and Wellness**

For students experiencing undue personal and/or academic stress during the semester that may be interfering with their ability to perform academically, the NYU Wellness Exchange (212 443 9999) offers a range of services to assist and support. The Wellness Exchange offers drop-in services on campus on a regular basis. Information may be found at <https://www.nyu.edu/students/health-and-wellness/wellness-exchange.html>.

### **Minor in Music in Global Communities**

For the 2023-2024 academic year, any students who declared the previous MPAP music minor may permit the following exceptions in counting their courses towards the new minor curriculum: we will accept any previous Music Theory coursework towards the new minor's theory requirements, and any other Steinhardt music classes for the music electives. These exceptions will not be permitted following the end of the Spring 2024 semester.

### **NYU Email**

All student, faculty, and administrative communications must be done using NYU email addresses, not personal email addresses. Anyone who experiences issues with their NYU email may find more information here.

### **Pass/Fail Grading Option**

MPAP follows NYU Steinhardt's policy on the pass/fail grading option. Undergraduate MPAP students are permitted to request pass/fail grades for courses satisfying their CORE liberal arts requirements (with the exception of Expository Writing courses) so long as they meet the other requirements noted in Steinhardt's policy. MPAP programs have differing policies regarding other classes part of a student's Program of Study that may be eligible for the pass/fail grading option (such as electives) - students who have questions about pass/fail course eligibility must speak with their academic advisor for more information on program-specific policies.

### **Private Lessons**

Students may find more information about private lessons via the Major Lesson Information Sheet and the Non-Major Lesson Information Sheet.

MPAP Majors may only take one secondary lesson per semester, and it must be for 2 credits if they are already taking a 3-credit lesson. Students may not take primary and secondary lessons through the Theory and Composition program in the same semester.

Non-Majors may register for only one private lesson course per semester. (This does not include Group Lessons). Non-majors who do not abide by this policy will be dropped from all private lessons.

### **Student Accessibility**

New York University is committed to providing equal educational opportunity and participation for all students, and academic accommodations are available for qualified students who disclose their disability to the Moses Center. Students requesting academic accommodations are advised to reach out to the Moses Center for Student Accessibility as early as possible in the semester for assistance (telephone: 212-998-4980 / website: [www.nyu.edu/csa/](http://www.nyu.edu/csa/) / email: [mosescsa@nyu.edu](mailto:mosescsa@nyu.edu))

### **Study Away**

MPAP majors who are interested in studying abroad may find more information here. Important dates for study abroad may be found here. NYU Global policies and procedures can be found here. Students seeking study away opportunities should also consult with their academic advisor for program-specific policies.

Studying away is a program requirement for undergraduate Music Technology students. Music Technology students who are requesting to waive this requirement due to personal, academic, or financial hardship must first meet with the academic advisor for Music Technology to discuss their rationale and to review resources that may be in place to address these concerns. Following this discussion, students must submit a written petition that clearly states the reasons for their request via email to Paul Geluso, program director for Music Technology, who will review and approve or deny the request.

### **Technology in the Classroom**

Each instructor may decide the extent to which students in their classes may be permitted to use their mobile phones or laptops. Instructors must communicate this policy to students clearly, preferably in their syllabus, letting students know what they can and cannot use, and why.

Students who require accommodations to use technology in the classroom – for example, students with dyslexia, ADHD, or visual impairments who use computers to take notes and access cloud-based assistive technologies – may contact the Moses Center.

Students requesting academic accommodations are advised to reach out to the Moses Center for Student Accessibility as early as possible in the semester for assistance (telephone: 212-998-4980 / website: [www.nyu.edu/csa/](http://www.nyu.edu/csa/) / email: [mosescsa@nyu.edu](mailto:mosescsa@nyu.edu)).

### **Tutoring**

Students enrolled in MPAP Theory and Aural Courses receive access to free tutoring for these courses. Students can also access tutoring services through the University Learning Center and the Steinhardt Writing Center for undergraduate and graduate students. Students are also encouraged to consult with their advisor regarding possible program-specific tutoring resources.

### **NYU Policies**

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

### **Steinhardt Academic Policies**

Additional academic policies can be found the Steinhardt academic policies page (<https://bulletins.nyu.edu/graduate/culture-education-human-development/academic-policies/>).