# **Music Technology MS**

Center for the Performing and Cinematic Arts / BOYER COLLEGE OF MUSIC AND DANCE

Learn more about the Master of Science in Music Technology.

# About the Program

Over the past several decades, music technology has become a major factor in virtually every area of the music industry. Music technology fuses musical skill and technological knowledge that enables one trained in these areas to create works and/or pursue employment or graduate education in an extremely wide variety of areas. Some of these include music composition, editing and publishing, equipment installation, performance, production, recording and editing, software and hardware development, and systems design, as well as numerous audio fields such as the recording and editing of concerts, events, films and television, and games, among others.

The Master of Science in Music Technology program offers students holding a bachelor's degree in music or its equivalent an opportunity to further advance their experience and understanding of music technology research and practice at the graduate level. Students prepare for professional work, as well as for the possibility of entrance into a doctoral program, through specialized research, creative work and practical experience in the field.

Time Limit for Degree Completion: 6 years

Campus Location: Main

Full-Time/Part-Time Status: The degree program can be completed on a full- or part-time basis.

Accreditation: Temple University is accredited by the National Association of Schools of Music (NASM).

Areas of Specialization: The program offers advanced study in music and music technology whereby students are encouraged to develop diverse abilities in the field, while allowing them also to focus on an area of expertise of their interest.

Job Prospects: Students are prepared for employment in numerous facets of the music industry, higher education teaching in music technology, or pursuit of further graduate education in music and/or technology. The U.S. Bureau of Labor Statistics *Occupational Outlook Handbook* shows continued strong demand for positions in the computer and computer music industry.

Non-Matriculated Student Policy: With permission from the Dean's Office, individuals may be granted permission to enter the College as a nonmatriculated student, taking up to 9 graduate credits (excluding private lessons) before applying for admission to a program.

**Financing Opportunities:** Boyer College of Music and Dance offers a number of assistantships and academic internships to full-time matriculated graduate students. Full awards carry a stipend plus full tuition remission for the Fall and Spring terms. Partial awards also are available in values of a quarter, half, or three quarters of a full award. Duties for assistantships and internships vary, but typically include teaching, tutoring, classroom assistance, research, artistic performance and/or direct service related to academic programs. All incoming graduate students are automatically considered for an award by the department and Dean of Admissions.

# Admission Requirements and Deadlines

#### **Application Deadline:**

Fall: February 1

Decisions regarding admission are rendered after receipt of all required credentials. Late applications may be considered for admission.

APPLY ONLINE to this graduate program.

# Letters of Reference:

Number Required: 2

From Whom: Letters of recommendation should be obtained from evaluators who can provide insight into the applicant's abilities, talents and aptitude for graduate study.

**Coursework Required for Admission Consideration:** All applicants must present credentials that are the equivalent of the appropriate Bachelor of Music degree at Temple University, which is based on a curriculum of 124 to 135 hours.

Bachelor's Degree in Discipline/Related Discipline: Entry to the program is contingent on completion of an undergraduate degree in music or its equivalent. Typically, applicants have an overall undergraduate GPA of at least 3.33 (B+).

Applicants not holding a bachelor's degree in music should hold an undergraduate degree in a closely related field (e.g. Computer Science, Computer Engineering, Recording Arts) and have a thorough background in reading and performing music. Applicants not holding a music degree but who are

admitted to the MS degree in Music Technology may be assigned additional undergraduate deficiency coursework at the time of admission to bring the student to the level of holding an equivalent degree in music. Deficiency coursework will be in addition to the 31 required graduate credits for the Master of Science degree.

Statement of Goals: Share your special interests within the discipline and expectations for the program.

#### Standardized Test Scores:

Applicants who earned their baccalaureate degree from an institution where the language of instruction was other than English, with the exception of those who subsequently earned a master's degree at a U.S. institution, must report scores for a standardized test of English that meet these minimums:

- TOEFL iBT: 79
- IELTS Academic: 6.5
- PTE Academic: 53

**Entrance Exam:** All admitted students are required to take the master's Diagnostic Examinations in Sound Recording, Sound Editing, Written Music Theory, and Aural Theory prior to the first term of study. See the Program Requirements tab for details.

**Portfolio:** Applicants must demonstrate proficiency in music technology through submission of an entrance portfolio. The music technology entrance portfolio and audition video (see directly below) are submitted through Acceptd.

Audition: All applicants must submit a brief vocal audition or an audition on an acoustic or digital instrument of three to five minutes in length, along with their music technology entrance portfolio. The audition repertoire and genre are left to the prerogative of the applicant; however, the applicant and their instrument (if applicable) should be clearly seen and heard in the video. The audition video and music technology entrance portfolio are submitted via Acceptd.

Resume: Current resume required.

Writing Sample: A separate written document explaining the development and creation of the portfolio must be submitted.

**Transfer Credit:** A student who wishes to transfer credit should speak with their academic advisor and obtain a "Request for Transfer of Graduate Credit" form, found in TUportal under the Tools tab within "University Forms." Transfer credits must be approved by the advisor, the department chair and the Associate Dean. The maximum number of credits a student may transfer is 6.

**Other:** Due to the large number of applications for admission and the competitive nature of its music programs, the College admits only a portion of its applicants. In addition to the general admissions credentials required of all Temple University graduate applicants, specialized admission criteria (i.e., auditions, portfolios, interviews, recommendations, departmental term papers and standardized examinations) are very heavily weighted in admission decisions of the Boyer College of Music and Dance. Graduate applicants may be rejected for admission for failing to obtain the required level of proficiency in any one area of the specialized admission criteria regardless of the level of success in meeting the Temple University general admission criteria. In addition to the level of success demonstrated in the above-mentioned criteria, a final admission factor is the College's Optimum Enrollment Policy. This policy may preclude the admission of any student who meets the minimum requirements.

### **Program Requirements**

#### **General Program Requirements:**

Number of Credits Required Beyond the Baccalaureate: 31

Required Courses:

Year 1		
Fall		Credit Hours
MUST 5701 or MUST 8701	Research in Music or Research in Music	3
MUST 5728 or MUST 8728	Advanced Audio Production or Advanced Audio Production	3
MUST 5773 or MUST 8773	Digital Signal Processing for Music or Digital Signal Processing for Music	3
	Credit Hours	9
Spring		
MUST 5750 or MUST 8750	Special Topics in Music Technology or Special Topics in Music Technology	3
Music Technology Elective	4	3
Elective in Music, Music Studies, or Music Education		3
	Credit Hours	9

Year 2		
Fall		
MUST 5760 or MUST 8760	Special Topics in Music Technology or Special Topics in Music Technology	3
Elective in Music, Music Studies, or Music Education		3
Elective <sup>2</sup>		3
	Credit Hours	9
Spring		
MUST 5730 or MUST 8730	Electronic Music Ensemble or Electronic Music Ensemble	1
MUST 9995	Final Project: Music Studies	3
	Credit Hours	4
	Total Credit Hours	31

Select one of the following: MUST 5706 Live Recording and Mixing for Broadcast (3 s.h.), MUST 5707 Computer Programming for Musicians (3 s.h.), MUST 5724 Printing Musical Scores and Parts (3 s.h.), MUST 5726 Computer Synthesis (3 s.h.), MUST 5732 Programming in Max (3 s.h.), MUST 5733 Music Mixing in Pro Tools for Music Technology (3 s.h.), MUST 5763 Analog and Modular Sound Synthesis (3 s.h.), MUST 5764 Scoring for Film and Digital Media (3 s.h.), MUST 5765 Scoring and Audio Design for Video Games (3 s.h.), MUST 5774 Hearing Music: Acoustics and Psychoacoustics of Music (3 s.h.), MUST 8706 Live Recording and Mixing for Broadcast (3 s.h.), MUST 8707 Computer Programming for Musicians (3 s.h.), MUST 8722 Scoring for Film and Digital Media (3 s.h.), MUST 8724 Printing Musical Scores and Parts (3 s.h.), MUST 8726 Computer Synthesis (3 s.h.), MUST 8727 Electronic Music Composition: Practice, History, Theory (3 s.h.), MUST 8732 Programming in Max (3 s.h.), MUST 8733 Music Mixing in Pro Tools for Music Technology (3 s.h.), MUST 8774 Hearing Music: Acoustics of Music (3 s.h.), MUST 8778 Scoring and Audio Design for Video Games (3 s.h.), MUST 8778 Analog and Modular Sound Synthesis (3 s.h.).

<sup>2</sup> This elective can be selected from among the graduate courses offered in the Boyer College of Music and Dance or any other graduate course available at Temple University.

Language Examination: A language examination is not required for the MS in Music Technology.

#### Additional Requirements:

#### Diagnostic Examinations:

Prior to the first semester of study in the Music Technology MS program, entering students take Diagnostic Examinations in Written Music Theory and Aural Theory administered by the Department of Music Studies, as well as a two-part examination in Sound Recording and Sound Editing administered by the Music Technology faculty.

- Graduate Diagnostic Exam in Written Music Theory: Students must pass the Written Music Theory Diagnostic Examination prior to the first semester
  of graduate study. Students who fail the exam are required to satisfactorily pass the 1-credit written theory review course, MUST 5001 Diatonic
  Harm. Review during the Fall term. Credits earned in MUST 5001 do not count toward the 31 required graduate credits for the MS degree in Music
  Technology.
- Graduate Diagnostic Examination in Aural Theory: Students must pass the Aural Theory Diagnostic Examination prior to the first semester of graduate study. Students who fail the exam are required to satisfactorily pass the 3-credit aural theory review course, MUST 5004 Grad Aural Theory Review during the Spring term. Credits earned in MUST 5004 do not count toward the 31 required graduate credits for the MS degree in Music Technology.
- Graduate Diagnostic Examination in Sound Recording: Music Technology faculty administer the Graduate Diagnostic Examination in Sound Recording. Questions are selected from a test-bank of questions currently used in the final exam for the sound recording course, MUST 4713. These objective, self-graded questions are administered through the Canvas learning management system.
- Graduate Diagnostic Examination in Sound Editing: Music Technology faculty also administer the Graduate Diagnostic Examination in Sound Editing. Questions are selected from a test-bank of audio files currently used in the final exam of the sound editing course, MUST 4714. Using the audio files provided, students are asked to edit and mix a recording session in Pro Tools with careful attention to best practices, including dynamic compression, volume maximization, equalization, clipping and signal routing. Students have 24 hours to complete the exam and must provide a screen capture video approximately 5 minutes in length displaying the Pro Tools session wherein the examinee discusses the choices and techniques utilized throughout the editing and mixing process. Additionally, the examinee is required to submit the complete Pro Tools session with proper asset management.
  - Passing the Sound Diagnostic Examinations: Students must pass the Diagnostic Examinations in Sound Recording and Sound Editing prior to the first semester of graduate study. Students who pass both parts of the exam will be permitted to register for MUST 8728 Advanced Audio Production for graduate credit during the first semester of graduate study in the Music Technology MS program. Students who do not pass one or both parts of the Diagnostic Examinations in Sound Recording and Sound Editing are required to complete the 3-credit course MUST 5006 Sound Recording and Editing Techniques with a grade of "P" (i.e., "Pass") during the first semester of graduate study in the program and prior to being permitted to register for MUST 8728 Advanced Audio Production. MUST 5006 is an intensive semester-long 3-credit course that

integrates both sound recording and sound editing topics using Pro Tools software. The course utilizes Linked-In Learning videos available through TUportal, with self-guided learning activities, as well as recording studio and class lecture time. Credits earned in MUST 5006 do not count toward the 31 required graduate credits for the MS degree in Music Technology.

- Conditions for Exemption from Diagnostic Examinations: The requirement to take the Diagnostic Examinations in any area is waived only for graduates of the Boyer College of Music and Dance who:
  - matriculate and enroll in the term immediately following completion of all undergraduate degree requirements (e.g., Spring undergraduate graduation followed by Fall matriculation in the MS program); and
  - received grades of "B-" or better in every undergraduate course taken in each individual examination area to be waived.

Further, entering Music Technology MS students may waive taking the Diagnostic Examinations in Sound Recording and Sound Editing. If they so choose, however, they are required to complete MUST 5006 satisfactorily with a grade of "P" (i.e., "Pass") prior to taking MUST 8728 Advanced Audio Production. Credits earned in MUST 5006 do not count toward the 31 required graduate credits for the MS degree in Music Technology.

Also note the following:

- Undergraduate senior music majors who want to apply for the Music Technology MS program may elect to take MUST 5006 during the senior year. MUST 5006 will not, however, count toward the 31 graduate credits required for the graduate program.
- If a Boyer student has already taken MUST 4725 Advanced Audio Production at the undergraduate level with a grade of "B-" or better earned, they may waive this course at the graduate level and replace it with a different 3-credit graduate music technology course.
- Remedial coursework must be completed by the end of the first year of study.

**Culminating Events:** Evidence of student learning is assessed through a combination of course-embedded assessments and projects, written examinations, and a capstone final project presented to the Music Studies Department that demonstrates the application of integrated music technology.

# Contacts

## Program Web Address:

https://www.temple.edu/academics/degree-programs/music-technology-ms-bc-mute-ms

## **Department Information:**

Dept. of Music Studies Center for the Performing and Cinematic Arts/Boyer College of Music and Dance 2001 N. 13th Street Philadelphia, PA 19122-6079 edward.latham@temple.edu 215-204-8498

## Submission Address for Application Materials:

https://apply.temple.edu/Boyer/

## **Department Contacts:**

Admissions: James Short jshort@temple.edu 215-204-8598

Graduate Chairperson: Dr. Edward Latham edward.latham@temple.edu 215-204-8498