

MASTER OF SCIENCE IN MUSIC TECHNOLOGY

Technology has always driven cultural and social transformations in the manner in which we make, perform, distribute and listen to music. Recent technological developments in areas such as artificial intelligence, brain and cognitive science, robotics, education and networking have fundamentally changed musical practices and created a need in the industry and academia for well-educated music and audio technologists able to design, develop, and creatively employ the next generation of musical software and hardware for composition, performance, recording and distribution. The Georgia Tech School of Music's Master of Science in Music Technology program prepares students for careers in professional software, hardware and audio companies, the arts and entertainment industries, as well as in the education/academic markets. This interdisciplinary degree program enables students to extend their skills in areas such as music, computing, electrical engineering, mechanical engineering, and industrial design, all within a research-focused program that emphasizes the intersections between technical innovation and creative practice.

The Master of Science in Music Technology is a four-semester program for a total of 48 credit hours. Applicants will be admitted to the program with an undergraduate degree in music, computing, engineering, or a related degree. Applicants will have to demonstrate their musical background in performance, composition and/or theory, as well as basic skills in computing and/or engineering in order to be admitted to the program. The School of Music's graduate admissions committee reviews applications and a portfolio of applicant creative and technical work to determine an applicant's qualifications. Upon acceptance, each student will be assigned a faculty advisor who will consult and approve student's course selections. After the first year of study and with the approval of their faculty advisor, students will choose between two academic tracks:

Project Track: Students will complete a set of requirements that will include at least 18 music technology course credit hours, 18 elective course credit hours, and 12 research credit hours leading to the development of a final MS project in Music Technology. A minimum of 30 course credit hours must be taken at the 6000-level or higher.

Thesis Track: Students will complete a set of requirements that will include at least 18 music technology course credit hours, 12 elective course credit hours, 12 research hours and 6 Thesis Preparation credit hours, leading to the completion and submission of an MS Thesis in Music Technology. A minimum of 30 course credit hours must be taken at the 6000-level or higher.

Curriculum Requirements (by track)

Project Track

Code	Title	Credit Hours
Required Music Technology Core Courses		
MUSI 6001	Music Perception and Cognition	3
MUSI 6003	Music Technology History and Repertoire	3
MUSI 6202	Digital Signal Processing for Music Analysis and Synthesis	3
Required Music Technology Research Courses		
MUSI 7100	Music Technology Research Laboratory	12

Required Music Technology Creative Course		3
MUSI 6002	Computer Supported Interactive Music	
MUSI 6004	Technology Ensemble	
MUSI 6203	Project Studio in Music Technology	
Additional Music Technology Electives		6
MUSI 6005	Music Ensemble for Graduate Students	
MUSI 6103	Music Recording and Mixing	
MUSI 6104	Integrating Music into Multimedia	
MUSI 6105	Digital Media Production and Mastering	
MUSI 6106	Audio Software Engineering	
MUSI 6201	Audio Content Analysis	
MUSI 6301	Music Interface Design	
MUSI 6302	The Musical Mind	
MUSI 6303	Network Music	
MUSI 6304	Computer Music Composition	
MUSI 8001	Research Methods	
MUSI 8002	Apprentice Teaching	
Additional Elective Courses (subject to advisor approval) ¹		18
Total Credit Hours		48

¹ Elective courses may include additional Music courses and/or courses in other academic units that are approved by the student's advisor.

Thesis Track

Code	Title	Credit Hours
Required Music Technology Core Courses		
MUSI 6001	Music Perception and Cognition	3
MUSI 6003	Music Technology History and Repertoire	3
MUSI 6202	Digital Signal Processing for Music Analysis and Synthesis	3
Required Music Technology Research Courses		
MUSI 7100	Music Technology Research Laboratory	12
Required Music Technology Creative Course		3
MUSI 6002	Computer Supported Interactive Music	
MUSI 6004	Technology Ensemble	
MUSI 6203	Project Studio in Music Technology	
Additional Music Technology Electives		6
MUSI 6005	Music Ensemble for Graduate Students	
MUSI 6103	Music Recording and Mixing	
MUSI 6104	Integrating Music into Multimedia	
MUSI 6105	Digital Media Production and Mastering	
MUSI 6106	Audio Software Engineering	
MUSI 6201	Audio Content Analysis	
MUSI 6301	Music Interface Design	
MUSI 6302	The Musical Mind	
MUSI 6303	Network Music	
MUSI 6304	Computer Music Composition	
MUSI 8001	Research Methods	
MUSI 8002	Apprentice Teaching	
Additional Elective Courses (subject to advisor approval) ¹		12
Thesis Credit Hours		

MUSI 7000	Master's Thesis	6
Total Credit Hours		48

¹ Elective courses may include additional Music courses and/or courses in other academic units that are approved by the student's advisor.

For more information see - <http://gtcmt.gatech.edu/?p=2530>

BS/MS Option in Music Technology

Students will be eligible to apply for the program after completion of 30 semester credit hours at Georgia Tech and appropriate progress in their degree program. As a practical matter, students should apply for the program at least three semesters prior to graduation in order to take graduate-level courses prior to receiving their BS degree. Students must have a Georgia Tech GPA of 3.5 or higher for admission into the BS/MS Program in Music Technology. This program is available only to those completing a Bachelor's degree in music technology. Admissions decisions will be based on GPA and a portfolio review by the School of Music's Graduate Program Committee.

Students in the joint BS/MS program remain undergraduates until they meet the requirements for the bachelor's degree, at which point they will receive the BSMT degree. Their status will then be changed to graduate status. Graduate school application fees and the GRE requirements are waived. Once admitted, a GPA of at least 3.0 must be maintained to remain in the program. Additionally, students in the BS/MS program are eligible to use the Graduate Course Option even if their cumulative grade-point average is below 3.5 at the time they complete their bachelor's degree. The program will not penalize students who opt out after the bachelor's degree.

Note the following:

- BS/MS students may combine any concentration in the Bachelor of Science in Music Technology with either the project or thesis track in the Master of Science in Music Technology.
- BS/MS students will be expected to complete Intro to Audio Technology II before enrolling in any graduate-level coursework. This course is typically taken by students in their fourth semester of undergraduate study.
- Six credit hours may be counted towards both the undergraduate and graduate degrees as follows:
 - MUSI 6001 (Music Perception & Cognition), a requirement for the MS degree, can also fulfill the requirement of MUSI 4677 (Music Perception & Cognition) for the BS degree.
 - MUSI 6103 (Music Recording & Mixing), an elective for the MS degree, can also fulfill the requirement of MUSI 4630 (Music Recording & Mixing) for the BS degree.
 - Any other MUSI 6XXX course that fulfills a core or elective requirement for the MSMT can also be used to fulfill the MUSI Upper Division Elective Requirement for the BSMT.