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 in 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.

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.

Curriculum Requirements (by track)

Project Track

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUSI 6001</td>
<td>Music Perception and Cognition</td>
<td>3</td>
</tr>
<tr>
<td>MUSI 6003</td>
<td>Music Technology History and Repertoire</td>
<td>3</td>
</tr>
<tr>
<td>MUSI 6202</td>
<td>Digital Signal Processing for Music Analysis and Synthesis</td>
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Required Music Technology Research Courses

<table>
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<tr>
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<tbody>
<tr>
<td>MUSI 7100</td>
<td>Music Technology Research Laboratory</td>
<td>12</td>
</tr>
<tr>
<td>MUSI 6002</td>
<td>Computer Supported Interactive Music</td>
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Additional Music Technology Electives

- 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 6304 Computer Music Composition
- MUSI 8001 Research Methods
- MUSI 8002 Apprentice Teaching

Additional Elective Courses (subject to advisor approval) 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

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Additional Elective Courses (subject to advisor approval) 12

Thesis Credit Hours

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<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUSI 7000</td>
<td>Master's Thesis</td>
<td>6</td>
</tr>
</tbody>
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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.
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.