## DOCTOR OF PHILOSOPHY WITH A MAJOR IN MUSIC TECHNOLOGY

The PhD in Music Technology is a full-time residential program. Students accepted into the PhD program in Music Technology are expected to hold a Masters degree in Music Technology or from an allied field, such as computing, music, engineering, or media arts and sciences. All applicants must demonstrate mastery of core masters-level material covered in Music Technology. This includes proficiency in: Music theory, performance, composition, and/or analysis; Music Information Retrieval, Digital Signal Processing and Synthesis; Interactive Music Systems Design; and Music Cognition.

Proficiency will be assessed through review of a portfolio of the applicant's work and an interview process. Students may waive the requirement to enroll in specific courses by appealing to the Music Technology Graduate Program Committee. Such appeals will typically be granted only if the student has already taken the same course at Georgia Tech or has taken a substantially equivalent course at another institution, and if the student has earned an exceptional grade in that course.

The Graduate Record Examination (GRE) is required for all applicants. A minimum TOEFL score of 600 (paper-based), 250 (computer-based), or 100 (Internet-based) is required for all non-native English speaking applicants.

School of Music

All PhD programs must incorporate a standard set of Requirements for the Doctoral Degree.

## **Program of Study**

Requirements of the Ph.D. with a major in Music Technology will include completion of core courses, a minor, elective coursework, a qualifying paper, comprehensive exams and a dissertation.

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
MUSI 8001		3
MUSI 8002	Apprentice Teaching <sup>3</sup>	6
Required Music Technology Research Courses		
MUSI 7100	Music Technology Research Laboratory	12
Required Music Technology Creative Course		
MUSI 6002	2 Computer Supported Interactive Music	
MUSI 6004	Technology Ensemble	
MUSI 6203	Project Studio in Music Technology	
Minor Field of	f Study <sup>1</sup>	9
Additional Mu	isic Technology Electives	6
MUSI 6005	Music Ensemble for Graduate Students	
MUSI 6103	Music Recording and Mixing	
MUSI 6104	Integrating Music into Multimedia	

Total Credit Hours	
Additional Elective Courses (subject to advisor approval) $^2$	
MUSI 6304 Computer Music Composition	
MUSI 6303 Network Music	
MUSI 6302 The Musical Mind	
MUSI 6301 Music Interface Design	
MUSI 6201 Audio Content Analysis	
MUSI 6106 Audio Software Engineering	
MUSI 6105 Digital Media Production and Mastering	

- Minors, which are selected by students in consultation with their advisor, are designed to enable the student to apply knowledge from other fields toward work in Music Technology. The student is responsible for the full range of knowledge, at the level of professional competence, for the Minor field selected. Minors often focus on traditional fields of study associated with other professions, such as human-computer interaction, digital signal processing, and digital media. Minors typically constitute 9 hours of coursework.
- <sup>2</sup> Students must take an additional 18 credits of electives. These elective courses may include additional MUSI courses and/or courses in other academic units that are approved by the student's advisor.

<sup>3</sup> MUSI 8002 is a 3-credit course which must be taken twice