# Bachelor of Arts in Music – Music Technology Option

## Course plan

### School of Music Core Requirements (BA)

<table>
<thead>
<tr>
<th>Hours</th>
<th>Music Theory Core (BA)</th>
</tr>
</thead>
<tbody>
<tr>
<td>8</td>
<td>MUS 101, 102, 201, and 202 - Music Theory I-IV</td>
</tr>
<tr>
<td>7</td>
<td>MUS 107, 108, 207, 208 - Aural Skills I-IV</td>
</tr>
<tr>
<td>3</td>
<td>Advanced music theory</td>
</tr>
<tr>
<td>18</td>
<td>(TOTAL)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Hours</th>
<th>Music History and Literature Core (BA)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>MUS 110 - Introd Art Mus I</td>
</tr>
<tr>
<td>6</td>
<td>MUS 313 and 314 - The History of Music I and II</td>
</tr>
<tr>
<td>3</td>
<td>Advanced music history</td>
</tr>
<tr>
<td>11</td>
<td>(TOTAL)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Hours</th>
<th>Performance Studies (BA)</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>MUS 172 and 173 - Group Piano I and II</td>
</tr>
<tr>
<td>4</td>
<td>(TOTAL)</td>
</tr>
</tbody>
</table>

Twelve hours of 400-level courses in music must be taken on this campus.

### Music Technology Option (BA)

A Music Technology option should consist of a total of 20 hours including 8-9 hours from School of Music courses and 11-12 hours taken from outside the School of Music.

#### School of Music Requirements (8-9 hours)

<table>
<thead>
<tr>
<th>Hours</th>
<th>Course</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>MUS 402 - Musical Acoustics</td>
</tr>
<tr>
<td>3</td>
<td>MUS 407 - Electroacoustic Techniques I</td>
</tr>
</tbody>
</table>

Select one additional course from the following:

2 MUS 404 - Contemporary Compositional Techniques
   *(MaxMsp or Algorithmic Design of Music)*
2 MUS 409 - Electroacoustic Techniques II
3 MUS 448 - Introduction to Computer Music
3 MUS 415 - Music and Media
2 MUS 447 - Intermediate Music Education Technology
2 MUS 499 - *(Music Business)*

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1 See Appendix A for descriptions of required courses.

*Updated Fall 2014*
Senior Project: demonstrate originality and proficiency within a given course track. Advised by a C/T faculty member and passed by a vote of the division.

Example advising track for concentration in electro-acoustics: 402, 407, 409
Example advising track for concentration in music programming: 402, 407, 404 or 448
Example advising track for concentration in real-time audio: 402, 407, 404
Example advising track for concentration in business: 402, 407, 415 or 499

Outside Requirements (11-12 hours)

<table>
<thead>
<tr>
<th>Hours</th>
<th>Course</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>INFO 103/CS103 - Introduction to Programming</td>
</tr>
<tr>
<td>3</td>
<td>INFO 202 - Social Aspects of Information Technology</td>
</tr>
</tbody>
</table>

Select at least two additional courses from the following technology related courses offered outside the school of music. The purpose of this requirement is to provide an opportunity for the BA student to broaden/deepen their degree experience through engagement with technological perspectives and concerns beyond the School of Music. A number of these outside courses have requirements that would be waived for Music Technology students. For the others, the BA student has 30 “unclaimed” hours that can be used to fulfill unwaived requirements in areas they wish to pursue.

3 ARTS 341 - Image Practice
3 ARTS 344 - Interaction 1
3 ARTS 343 - Time Arts 1
3 ARTS 443 - Time Arts 2
4 CS 125 - Intro to Computer Science
3 CS 173 - Discrete Structures
4 CS 225 - Data Structures
3 CS 414 - Multimedia Systems Design
3 CS 467 - Social Visualization
2 DANC 362 - Choreographic Process II (*Interactive Technologies*)
4 ECE 110 - Introduction to Electrical and Computer Engineering
4 ECE 210 - Analog Signal Processing
4 ECE 310 + 311 – Digital Signal Processing + Lab
3 ECE 402 - Electronic Music Synthesis
3 ECE 403 - Audio Engineering
3 PSYC 316 - Introduction to Psychology of Hearing
4 PHYS 406 - Acoustical Physics of Music
3 THEA 453 - Theatre Sound Technology (*Sound reinforcement for theatre*)
3 THEA 454 - Sound Design, I
2 THEA 455 - Audio Production
2 THEA 459 - Sound Systems

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2 See Appendix B for supporting letter from Informatics.

*Updated Fall 2014*
Appendix A

Descriptions - Music Technology Option Core Courses

MUS 402 Musical Acoustics (3 hours)
Theory and application of simple resonators, wave motion, resonances of strings and pipes; perception of loudness, pitch, and timbre; musical scales; acoustics of rooms and musical instruments; tuning systems; computer analysis of sounds; psychoacoustics; digital representation of sound.

MUS 407 Electroacoustic Techniques I (3 hours)
Introduces electroacoustic music, including historical background, music literature, techniques of notation and realization, sound synthesis, analog and digital recording, mixing and processing, compositional applications in the areas of musique concrete, electronic music, and technology as applied to electroacoustic concert art music.

CS/INFO 103 Introduction to Programming (3 hours)
Introduction to computer programming with non-technical focus. Elementary principles of object-oriented programming. Problem solving in various domains.

INFO 202 Social aspects of Information Technology (3 hours)
Explores the way in which information technologies have and are transforming society and how these affect a range of social, political and economic issues from the individual to societal levels.