## Undergraduate Program Requirements

## Music Program Requirements

Currently displaying program requirements for academic year: UNDG 2015-2016

## MUSIC TECH - Music BSC15

The BACHELOR of SCIENCE CANDIDATE (BSC) in MUSIC TECHNOLOGY is designed for entering MUSIC students who will apply for the BS upon completion of 45 credits. Students interested in MUSIC TECHNOLOGY may also enter the program through the Audio Arts \& Acoustics or Interactive Arts \& Media curriculum. Please note: The Music Technology BS program is particularly intensive in science and mathematics.

Acceptance into the BS program is determined by essay, portfolio, CGPA of 3.0 or higher, Calculus I, and completion of 45 credits, 24 of which come from applicant's home department. Applications are reviewed each spring semester for entry in the fall. 76-80 CREDITS ARE REQUIRED TO COMPLETE THE BACHELOR OF SCIENCE MAJOR:

MUSIC TECH 76-80 cr
Students will complete 24 credits of Core coursework in their primary (home) department:
PRIMARY CORE - 24 cr

MUSIC CORE - 24 cr Courses: 0

| 32-1110 | Aural Skills I | 2 | C |
| :---: | :---: | :---: | :---: |
| 32-1120 | Theory I | 2 | C |
| 32-1131 | Keyboard I | 2 | C |
| 32-2111 | Aural Skills II | 2 | C |
| 32-2121 | Theory II | 2 | C |
| 32-1132 | Keyboard II | 2 | C |
| 32-2122 | Theory III | 3 | C |
| 32-2611 | Music, Time, and Place I | 3 | C |
| 32-2612 | Music, Time, and Place II | 3 | C |
| 32-2211 | Composition I: The Composer in the Modern World | 3 | C |

Optional combination of Performance Ensembles, up to four (4) credits, AND/OR Private Lessons, up to eight (8) credits. (See Course Schedule for lists of these options.):

32-*8**
C

## SECONDARY CORE - 15 cr

In consultation with the Faculty Advisor, students will complete a total of 15 credits of Core coursework from Audio Arts \& Acoustics and/or Interactive Arts \& Media:

| $36-1010$ | Computational Media Development | $\mathbf{3}$ | C |
| :--- | :--- | :--- | :--- | :--- |
| $36-1501$ | Introduction to Programming | $\mathbf{3}$ | C |
| $36-2310$ | Prototyping Strategies | $\mathbf{1}$ | C |
| $36-3400$ | Sound Design for Games II | $\mathbf{3}$ | C |
| $43-2110$ | Basic Audio Systems | 3 | C |


| 43-2210 | Recording I | 4 | C |
| :---: | :---: | :---: | :---: |
| 43-2215 | Audio Production II | 4 | C |
| 43-2310 | Psychoacoustics | 3 | C |
| 43-2315 | Architectural Acoustics | 3 | C |
| 43-3210 | Recording II | 4 | C |

SONIC EXPERIENCE - 12 cr

SONIC EXP Courses-12 cr
Courses: 4/4

Course
Title
Students take four (4) consecutive semesters of Sonic Experience as listed below:

| $\mathbf{7 5 - 3 1 0 1}$ | The Sonic Experience | 3 |
| :--- | :--- | :--- |

3
C

C
The Sonic Experience 3
OR 1 of the following:

|  | 74-3101 The Sonic Experience | 3 |
| :--- | :--- | :--- |
| 75-3101 | The Sonic Experience | 3 |

74-3101 The Sonic Experience 3
The Sonic Experience 3
3
OR 1 of the following:
74-3101 The Sonic Experience

ADVANCED Courses - 9 cr

Course
Title
Credits
Grade
In consultation with the Faculty Advisor, students will complete a total of 9 credits from the following list:

| 32-2261 | Digital Music Composition and Performance I | 3 | C |
| :---: | :---: | :---: | :---: |
| 32-3262 | Digital Music Composition and Performance II | 3 | C |
| 32-2212 | Composition II | 3 | C |
| 32-3665 | Advanced Seminar in Musicology | 3 | C |
| 36-2600 | Object Oriented Programming | 3 | C |
| 36-2550 | C++ Programming I | 3 | C |
| 36-2551 | C++ Programming II | 3 | C |
| 36-3405 | Authoring Interactive Media II | 3 | C |
| 36-3444 | Emergent Web Technologies | 3 | C |
| 36-3520 | Data Design | 3 | C |
| 36-3630 | Physical Computing II | 3 | C |
| 43-2261 | Sound Art Electronics Workshop | 3 | C |
| 43-2720 | History of Audio | 3 | C |
| 43-3120 | Perception and Cognition of Sound | 3 | C |
| 43-3290 | Master Class in Sound Art | 3 | C |


| 43-3315 | Environmental Acoustics | 3 | C |
| :---: | :---: | :---: | :---: |
| 43-3320 | Acoustical Modeling | 3 | C |
| 43-3325 | Acoustical Testing I | 3 | C |
| 43-3610 | Sound System Design | 3 | C |
| 43-3720 | Principles of Digital Signal Processing | 3 | C |

SCIENCE REQ 3-7cr

SCIENCE REQ 3-7cr
Courses: $1 / 2$

Course
Title
Credits
Grade
In consultation with the Faculty Advisor, students will complete a minimum of one (1) science course from the following list:

| 56-1820 | Science of Electronics | 4 | C |
| :---: | :---: | :---: | :---: |
| 56-1881 | Physics of Musical Instruments | 4 | C |
| 56-2820 | The Science of Acoustics I | 3 | C |
| 56-2830 | Fundamentals of Physics I | 3 | C |

ADVANCED MATH 13-16cr

ADVANCED MATH 13-16cr

In consultation with the Faculty Advisor, students will complete a total of four (4) mathematics courses from the following list. Please note: Calculus I is required for acceptance into the Music Technology BS program:

| 56-2720 | Calculus 1 | 4 | C |
| :---: | :---: | :---: | :---: |
| 56-2721 | Calculus II | 4 | C |
| 56-3700 | Discrete Mathematics | 3 | C |
| 56-3710 | Calculus III | 3 | C |
| 56-3720 | Elementary Differential Equations | 3 | C |
| 56-3730 | Numerical Analysis | 4 | C |
| 56-3740 | Linear Algebra | 4 | C |

## OTHER CORE PATHWAYS

FOR THE STUDENT'S REFERENCE: Some students in the Bachelor of Science in Music Technology program will complete their Primary Core in Audio Arts \& Acoustics or Interactive Arts and Media, with their Secondary Core from the other two departments. The other pathways draw from the following list:

## OTHER CORE PATHWAYS

Courses: 0

| 36-1010 | Computational Media Development | 3 | C |
| :---: | :---: | :---: | :---: |
| 36-1300 | Digital Image Design | 3 | C |
| 36-1501 | Introduction to Programming | 3 | C |
| 36-2601 | Authoring Interactive Media | 3 | C |
| 36-1400 | Sound for Interaction | 3 | C |
| 36-2400 | Sound Design for Games I | 3 | C |
| 36-2510 | Game Engine Scripting | 3 | C |
| 36-2610 | Sound and Music for Interactive Visual Media | 3 | C |


| 36-3400 | Sound Design for Games II | 3 | C |
| :---: | :---: | :---: | :---: |
| 43-1110 | Introduction to Audio Theory | 3 | C |
| 43-1115 | Audio Production I | 4 | C |
| 43-2110 | Basic Audio Systems | 3 | C |
| 43-2210 | Recording I | 4 | C |
| 43-2215 | Audio Production II | 4 | C |
| 43-2220 | Live Sound Recording | 3 | C |
| 43-2310 | Psychoacoustics | 3 | C |
| 43-2325 | Studies in Applied Acoustics | 3 | C |
| 43-2725 | Studies in Hearing | 3 | C |
| 43-3210 | Recording II | 4 | C |
| 32-1131 | Keyboard I | 2 | C |
| 32-2111 | Aural Skills II | 2 | C |
| 32-2121 | Theory II | 2 | C |
| 32-1132 | Keyboard II | 2 | C |
| 32-2122 | Theory III | 3 | C |
| 32-2612 | Music, Time, and Place II | 3 | C |
| 32-2211 | Composition I: The Composer in the Modern World | 3 | C |
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