# Georgia State University School of Music

**Music Technology Degree Course Outline**

### TWO-YEAR COURSE SEQUENCE

**YEAR 1: FALL TERM REQUIRED DEGREE COURSE**

**MTM 3110 – Introduction to Audio Recording Production (4 Credits)**

An introductory and overview course covering most aspects of the field, including equipment and tools, concepts, technical processes, scientific foundations, and aesthetic orientations. Hands-on experience in audio recording through guided projects in the studios. Emphasis is on Nuendo and ProTools DAW software and related technologies. Introduction to the CARA studio suites. Access to the SOM recording studios for course-related projects.

### YEARS 1 and 2: FALL TERM OPTIONAL ELECTIVE COURSES

**MTM 4999 / MUS 4999 – Independent Study – Only for those who have completed the MTM 3110 and MTM 3120 courses**

A project-oriented course that is student designed in consultation with faculty. Students propose and develop a project in the SOM recording studios and meet weekly with faculty for on-going critique and guidance. This course is REQUIRED for students who wish to work in the SOM recording studios outside of the MTM 3110, 3120, 3130 and 4900 courses. This course may be repeated for credit. Associated recording project and significant technical research paper are components required in the syllabus.

### MUS 4890 Selected Topics – Recording Studio Project – Only for those who have completed the MTM 3110, 3120, 3130 sequence

A project-oriented course that is student designed in consultation with faculty. Students propose and develop a project in the SOM recording studios and meet weekly with faculty for on-going critique and guidance. This course is REQUIRED for students who wish to work in the SOM recording studios during the summer semester. This course may be repeated for credit.

### MUS 4981/6981 – Computer Music Synthesis (3 Credits) – Open to all interested students

Sound explorations with Csound, Max/MSP, and related software emphasizing the tools and techniques of computer sound synthesis, electronic music composition, and advanced signal processing using computers. Experiences with both real-time and non-real-time techniques through guided projects and group critique. Access to the SOM computer music studio for course-related research and creative explorations.

### YEAR 1: SPRING TERM REQUIRED DEGREE COURSE

**MTM 3120 – Digital Audio Fundamentals and Recording Techniques – MIXING AUDIO (4 Credits)**

A project-oriented course in audio recording, emphasizing audio mixing and the Nuendo and ProTools DAW software applications. In-depth consideration of advanced topics in audio production within the DAW context through guided projects and group critique. Emphasis is on the fundamental aspects of digital audio theory, advanced mixing theory, and applications to modern recording and music productions techniques. Access to the SOM recording studios for course-related projects.

### YEARS 1 and 2: SPRING TERM OPTIONAL ELECTIVE COURSES

**MTM 4999 / MUS 4999 – Independent Study – Only for those who have completed the MTM 3110 and MTM 3120 courses**

A project-oriented course that is student designed in consultation with faculty. Students propose and develop a project in the SOM recording studios and meet weekly with faculty for on-going critique and guidance. This course is REQUIRED for students who wish to work in the SOM recording studios outside of the MTM 3110, 3120, 3130 and 4900 courses. This course may be repeated for credit. Associated recording project and significant technical research paper are components required in the syllabus.

### MUS 4890 Selected Topics – Recording Studio Project – Only for those who have completed the MTM 3110, 3120, 3130 sequence

A project-oriented course that is student designed in consultation with faculty. Students propose and develop a project in the SOM recording studios and meet weekly with faculty for on-going critique and guidance. This course is REQUIRED for students who wish to work in the SOM recording studios during the summer semester. This course may be repeated for credit.

### MUS 4982/6982 – Advanced Topics in Computer Music Synthesis (3 Credits) – Open to those students who have completed MUS 4981/6981

Advanced topics in Csound, Max/MSP, and related software emphasizing the tools and techniques of computer sound synthesis, electronic music composition, and advanced signal processing using computers. Emphasis is on the development of a term electroacoustic music project of the student’s own design. Experiences with both real-time and non-real-time techniques through guided projects and group critique. Access to the SOM computer music studio for course-related research and creative explorations.

### YEAR 2: FALL TERM

**The Internship (MTM 3080) is offered every term, including summer, and is typically undertaken in the second year (any term) of the degree concentration courses. However, students often elect to fulfill the Internship requirement after other university degree courses are completed should they wish.**

**REQUIRED DEGREE COURSE**

### MTM 3230 – Audio Post Production (4 Credits)

An introduction to sound restoration and mastering for compact disc pre-production using the Wavelab DAW applications iZotope Ozone, iZotope RX and associated tools. Emphasis on editing, sound design, sound for video, and signal processing for master recording preparation through guided projects and group critique. Access to the SOM recording studios for course-related projects.

### YEAR 2: SPRING TERM

**REQUIRED DEGREE COURSE**

### MTM 3130 – Advanced Topics in Audio Production (4 Credits)

A writing-intensive course in the degree concentration emphasizing the development of parametric analysis techniques for the deep investigation of audio recordings culminating in significant research papers. Complementing this investigation is a concurrent thread concerning the art of audio mastering (MTM 3230). Independent studio work in audio recording under faculty mentorship.

Access to the SOM recording studios for course-related projects.

### YEAR 2: SPRING TERM ONLY

**REQUIRED DEGREE COURSE**

**MTM 4900 – Music Technology Final Project (3 Credits)** *Note: this course is typically offered in the Spring Term ONLY.*

This is a **capstone project** of significant dimensions in music technology completed under close faculty mentorship and guidance, culminating in the presentation of the project to the *Critique Panel* comprised of faculty and area professionals for commentary and evaluation. Access to the SOM recording studios for course-related projects is part of this course. The Final Project often results in a tangible product that can be used as an example of professional level work upon graduation from the program such as a software application, portfolio of recorded materials or a significant research project similar to an undergraduate thesis.

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# MUSIC TECHNOLOGY COURSE OFFERINGS CALANDER

## Subject to Modification

***REQUIRED COURSES IN BOLD***

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| **Fall:** |
| **MTM 3110 – Introduction to Audio Production – YEAR 1** |
| MTM 3040 – Music Technology Practicum |
| **MTM 3080 – Music Technology Internship** |
| **MTM 3230 – Audio Post Production and Mastering – YEAR 2** |
| APCP 4000/8000 – Applied Composition |
| MUS 4981/6981 – Computer Music |
| MUS 4890 – Recording Studio Project |
| MTM 499 / MUS 4999 – Independent Study |
|  |
| **Spring:** |
| **MTM 3120 – Digital Audio Technology and Recording Techniques – YEAR 1** |
| MTM 3040 – Music Technology Practicum |
| **MTM 3080 – Music Technology Internship** |
| **MTM 3130 – Advanced Topics in Audio Production – YEAR 2** |
| APCP 4000/800 – Applied Composition |
| **MTM 4900 – Music Technology Final Project – YEAR 2** |
| MUS 4982/6982 – Advanced Topics in Computer Music |
| MUS 4890 – Recording Studio Project |
| MTM 499 / MUS 4999 – Independent Study |
|  |
| **Summer:** |
| **MTM 3080 – Music Technology Internship** |

***Please note that the course listing above is subject to modification.***

### OTHER COURSES AND GENERAL INFORMATION

**Music Technology Practicum – MTM 3040 - ELECTIVE**

The music technology program provides two opportunities for experiences outside of the traditional classroom setting at the undergraduate level. The first of these is an optional course, **MTM 3040 Music Technology Practicum**. This course is student-designed in consultation with faculty and provides opportunities for specific study and experience in a variety of areas within the broad field of music technology. This course is developed in light of the individual student’s interests and goals. The Music Technology Practicum may be an on-campus experience with direct faculty guidance or may be an off-campus “internship” experience under the guidance of an internship host. Since this is an elective course, it is not required for the degree.

### Music Technology Internship – MTM 3080 - REQUIRED

The Music Technology Internship is a required course and is an important capstone experience in the undergraduate music technology sequence. The Internship provides highly valuable, real-world experience in music technology in a professional, off-campus, context. Atlanta’s entertainment and technology industries provide numerous opportunities for the dedicated student to learn important on-the-job skills and also

develop contacts and opportunities that often lead to employment in the field. Students are encouraged to develop internship opportunities that match their interests. Possibilities range from professional recording studios and post-production companies to established businesses in media production, sound design, radio, television, and film. The Music Technology Internship is an off-campus experience under faculty guidance, together with the internship host. This is a required course for the music technology degree.

### Independent Study Opportunities:

Student-developed projects and studies can be accommodated as well using the Directed Readings Course (MUS 4999 or MUS 6999, for example). If you are interested in doing a directed readings course with Dr. Thompson, you may feel free to discuss your ideas in office hours with the view of developing a course proposal.

### Special Topics Courses:

In addition to the courses listed here, there are, from time to time, various other Special Topics courses that are offered as unique opportunities for study. These are elective courses and therefore, are not required in the degree program. Students are advised to be aware of any Special Topics courses that might be offered that would be of interest.

### Experiences in Composition Studies:

If you are interested in experiences in Music Composition, Film Music, Sound Design, and Electronic (Electroacoustic) Music Composition studies you are invited to consult with Dr. Thompson about your interests. There are several opportunities for composition study outside of the established composition degree program that may be of interest.

These courses would be electives within the undergraduate music technology degree program.

### Advisement:

Consistent and careful advisement with your assigned university advisor is required of all students. Please feel free to meet with your assigned advisor frequently and whenever the need arises during your studies. Consistent advisement typically leads to enhanced success in the program and well beyond.

### Suggested Equipment and Software:

The School of Music provides a large array of music technology equipment and software for student use as a central aspect of course work. The six recording studio spaces are consistently upgraded, and equipment and software is procured on an on-going basis.

However, students often find it helpful to have some software and hardware of their own to use during their studies. These days, a good quality laptop and a pair of reasonable quality headphones are about all one needs to supplement the opportunities afforded by our SOM equipment and software holdings.

### Online and Distance Learning:

Each of our courses includes an online and off-campus component. Course projects, assignments, examinations, and the like are often facilitated through Skype, Dropbox, JoinMe and other online tools. This technology provides a context to take our course experiences beyond the classroom and encourages student dialogue, active learning, and an expanded educational context.

### Recital Hall, Live Sound, and Practical Experience:

Each of the major courses in your program includes a unique and interesting component in live sound, concert production, recording, mastering, and duplication in service of the various programs within the School of Music. This aspect of your coursework is coordinated and supervised by Dr. Thompson, together with our facilities manager, Mr. Bram Creighton. More information about this is included in the course syllabi.

*Version date: May, 2020*