MUSIC AND COMPUTING, BA

The goal of this interdisciplinary degree program is to enable students to create original applications such as music software, music authoring systems, algorithmic composition, and video game music through the study of both music composition and computer programming. The degree provides general courses in both music composition and computer science, including musicianship and music history, music composition techniques, advanced music theoretical studies, electroacoustic music, mathematics, database systems, operating systems, software engineering, algorithmic design, and programming languages. The goals of the program are for all students to develop in the following areas:

Originality – We are training students to be creative individuals and critical thinkers.

Craftsmanship – We are training students to be equipped with the technical knowledge and skills to perform tasks within their field.

Professionalism – We are preparing students to be professional musicians within the larger musical industry.

Admission Requirements

Please consult the CCPA Admission and Audition (https://www.roosevelt.edu/admission/ccpa/) Information web page for audition requirements for prospective Music and Computing majors.

Program Requirements

The degree entails 122 credit hours, comprising general studies, music and music composition, and computer science. During the senior year, students will complete a Capstone Project that demonstrates creative ability in combining music and computer programming.

Grade Requirements:

C- is the minimum passing grade in MCMP 201 MUSIC COMPOSITION (LOWER DIV). B- is the minimum passing grade in the Senior Capstone course.

GPA Requirements:

A student must earn a GPA of at least 3.0 in all major area coursework.

Residency Requirements:

The final 30 credit hours toward a student's degree must be completed at Roosevelt University, or a minimum of 60 hours must be taken in residence at Roosevelt University.

Code	Title	Credit Hours
MAJOR COURSEWORK (MUSIC)		
MCMP 201	MUSIC COMPOSITION (LOWER DIV) (four semesters; 2 credits per semester)	8
MCMP 225	COMPOSITION SEMINAR (eight semesters; 1 credit per semester)	8
MUSC 121	MUSICIANSHIP I, WRITTEN/AURAL	3
MUSC 123	MUSICIANSHIP I: PIANO SKILLS	2
MUSC 122	MUSICIANSHIP II, WRITTEN/AURAL	3
MUSC 124	MUSICIANSHIP II: PIANO SKILLS	2
MUSC 221	MUSICIANSHIP III WRITTEN/AURAL	3
MTA 301	INSTRUMENTATION/ORCHESTRATION	3
MTA 305	RHYTHM, METER, FORM, AND GENRE	3
MTA 325	INTRO ELECTROACOUSTIC MUSIC	3
MTA 326	ELECTROACOUSTIC MUSIC II	3
PERF 340	THE BUSINESS OF MUSIC	2
FIN 202	FINANCIAL MANAGEMENT FOR PERFORMING ARTISTS	1
MAJOR COURSEWORK (COMPUTER SCIENCE)		
MATH 245	DISCRETE STRUCTURES	3
MATH 246	LINEAR ALGEBRA	3
CST 150	COMPUTER SCIENCE I	4
CST 250	COMPUTER SCIENCE II	4
CST 280	INTRODUCTION TO ALGORITHMS	3
CST 311	NETWORK SCIENCE	3
CST 317	OPERATING SYSTEMS	3
CST 333	DATABASE SYSTEMS	3
CST 348	SOFTWARE ENGINEERING I	3
CST 372	PROGRAMMING LANGUAGES	3
CST 337	THEORY OF COMPUTATION	3
or CST 338	EFFICIENT COMPUTING	
or CST 387	ALGORITHM DESIGN	
CST Project-Based Course at the 300-level (chosen in consultation with CST advisor)		3
CST Capstone Course (chosen in consultation with CST advisor)		3
GENERAL STUDIES		
ARTL 101	THE PROFESSIONAL PERFORMING ARTIST IN SOCIETY	2
ARTL 201	BEING THE PERFORMING ARTIST IN SOCIETY	1
Communication		
ENG 101	COMPOSITION I: CRITICAL READING & WRITING	3
ENG 102	COMPOSITION II: INTRODUCTION TO ACADEMIC RESEARCH	3
ART 101	INTRODUCTION TO THE VISUAL ARTS	3
Humanities/Fine and Performing Arts		
MUHL 251	WORLD VERNACULAR ARTISTRY (rev. WORLD VERNACULAR ARTISTRY)	3
MUHL 252	CONSTRUCTS OF WESTERN THEATRE AND MUSIC (rev. CONSTRUCTS OF WESTERN THEATRE AND MUSIC)	3
MATH 121	COLLEGE ALGEBRA	3
Science		7
One biological science and one physical science; at least one must include a 1-credit lab. (FIT 100 recommended)		
Social Science		9
(PSYC 203 recommended)		
Total Credit Hours		**122**

Your degree map is a general guide suggesting courses to complete each term on the academic pathway to your degree. It is based on the most current scheduling information from your academic program. Your program's degree map is reviewed annually and updated as schedules change (although you retain the same course requirements as long as you are continuously enrolled in your degree program).

Always work closely with your academic advisor to understand curriculum requirements and scheduling, as each student's academic plan can look slightly different.

Year 1

Fall	Credit Hours	Spring	Credit Hours
MCMP 225	1	MCMP 225	1
MUSC 121	3	MUSC 122	3
MUSC 123	2	MUSC 124	2
ARTL 101	2	CST 150	4
ENG 101	3	ENG 102	3
MATH 121	3	ART 101	3
	14		**16**

Year 2

Fall	Credit Hours	Spring	Credit Hours
MCMP 225	1	MCMP 225	1
MUSC 221	3	MATH 246	3
MATH 245	3	MUHL 252	3
CST 250	4	Science Elective w/ Lab	4
MUHL 251	3	General Studies	3
General Studies	3		
	17		**14**

Year 3

Fall	Credit Hours	Spring	Credit Hours
MCMP 201	2	MCMP 201	2
MCMP 225	1	MCMP 225	1
MTA 325	3	MTA 305	3
PERF 340	2	MTA 326	3
FIN 202	1	CST 311	3
CST 280	3	CST 337, 338, or 387	3
CST 317	3		
ARTL 201	1		
	16		**15**

Year 4

Fall	Credit Hours	Spring	Credit Hours
MCMP 201	2	MCMP 201	2
MCMP 225	1	MCMP 225	1
MTA 301	3	CST Project-Based Course (300-level)	3
CST 333	3	General Studies	3
CST 348	3	General Studies	3
CST 372	3		
CST Capstone	3		
	18		**12**

Total Credit Hours 122