

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 study of both music composition and computer programming. The degree provides general courses from 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.

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 121 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.

Residency Requirement

A student must earn at least 60 credit hours at Roosevelt University.

Minimum Grade Requirements

C- is the minimum passing grade in MCMP 311, 312, 313, and 314. The grade of B- is the minimum passing grade in the Senior Capstone course.

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

Code	Title	Credit Hours
General Studies 3		
ARTL 101	THE PROFESSIONAL PERFORMING ARTIST IN SOCIETY	
Communication: 9		
ENG 101	COMPOSITION I: CRITICAL READING & WRITING	
ENG 102	COMPOSITION II: INTRODUCTION TO ACADEMIC RESEARCH	
Communication Elective		
Humanities/Fine and Performing Arts		
ART 101	INTRODUCTION TO THE VISUAL ARTS	3
MUHL 210	THE VERNACULAR MUSIC OF THE UNITED STATES	3
MUHL 253	HISTORY OF WESTERN MUSIC III	3
Social Science 9		
Mathematics 3		
MATH 121	COLLEGE ALGEBRA	
Science 7		
Total General Studies		40
Code Title Credit Hours		
Major Area 14		
MCMP 225	COMPOSITION SEMINAR	

MCMP 311	COMPOSITION V	
MCMP 312	COMPOSITION VI	
MCMP 313	COMPOSITION VII	
MCMP 314	COMPOSITION VIII	
MTA 325	INTRO ELECTROACOUSTIC MUSIC	
MTA 326	ELECTROACOUSTIC MUSIC II	
Supportive Courses in Music		26
MUSC 121A	MUSICIANSHIP I:WRITTEN SKILLS	2
MUSC 121B	MUSICIANSHIP I:AURAL SKILLS	1
MUSC 121C	MUSICIANSHIP I:PIANO SKILLS	2
MUSC 122A	MUSICIANSHIP II:WRITTEN SKILLS	2
MUSC 122B	MUSICIANSHIP II:AURAL SKILLS	1
MUSC 122C	MUSICIANSHIP II:PIANO SKILLS	2
MUSC 221A	MUSICIANSHIP III:WRITTEN SKILLS	2
MUSC 221B	MUSICIANSHIP III:AURAL SKILLS	1
MUSC 221C	MUSICIANSHIP III:PIANO SKILLS	2
MUSC 222A	MUSICIANSHIP IV:WRITTEN SKILLS	2
MUSC 222B	MUSICIANSHIP IV:AURAL SKILLS	1
MUSC 222C	MUSICIANSHIP IV:PIANO SKILLS	2
MTA 301	INSTRUMENTATION/ORCHESTRATION	
MTA 305	FORM AND ANALYSIS	
Total Music		40

Code	Title	Credit Hours
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		3
CST 317	OPERATING SYSTEMS	3
CST 333	DATABASE SYSTEMS	3
CST 348	SOFTWARE ENGINEERING I	3
CST 372	PROGRAMMING LANGUAGES	3
Elective:		
Select one of the following:		
CST 337	THEORY OF COMPUTATION	3
or CST 338	EFFICIENT COMPUTING	
CST 387	ALGORITHM DESIGN	
CST Project-Based Course		3
(chosen in consultation with CST adviser)		
CST Capstone Course		3
Total Credit Hours		41

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
ENG 101		3 ENG 102	3
ARTL 101		3 ART 101	3
MATH 121		3 MCMP 225	0
MCMP 225		0 MUSC 122A	2
MUSC 121A		2 MUSC 122B	1
MUSC 121B		1 MUSC 122C	2
MUSC 121C		2 CST 150	4
		14	15

Year 2

Fall	Credit Hours	Spring	Credit Hours
MUHL 210		3 MUHL 253	3
MCMP 225		0 MCMP 225	0
MUSC 221A		2 MUSC 222A	2
MUSC 221B		1 MUSC 222B	1
MUSC 221C		2 MUSC 222C	2
CST 250		4 MATH 246	3
MATH 245		3 Communications Elective	3
		Social Science #1	3
		15	17

Year 3

Fall	Credit Hours	Spring	Credit Hours
MCMP 225		0 MCMP 225	0
MCMP 311		2 MCMP 312	2
MTA 325		3 MTA 326	3
CST 280		3 BIOL 111 or 112	4
CST 317		3 CST 311	3
Social Science #2		3 CST 387	3
		14	15

Year 4

Fall	Credit Hours	Spring	Credit Hours
MCMP 225		0 MCMP 225	0
MCMP 313		2 MCMP 314	2
MTA 301		3 MTA 305	3
CST 372		3 CST 3XX (Project Based Course)	3
CST 333		3 CST 337, 338, or 387	3
CST 348		3 Social Science #3	3
Capstone		3 Physical Science ¹	3
		17	17

Total Credit Hours 124