BACHELOR OF SCIENCE IN COMPUTATIONAL MEDIA-MUSIC TECHNOLOGY-MEDIA

Code	Title	Credit Hours
Wellness Requirement		
APPH 1040	Scientific Foundations of Health	2
or APPH 10	The Science of Physical Activity and Health	
or APPH 10	Flourishing: Strategies for Well-being and Resilience	
Core IMPACTS		
Institutional Priority		
CS 1301	Introduction to Computing [1]	3
or CS 1315	Introduction to Media Computation	
Mathematics and Quantitative Skills		
MATH 1552	Integral Calculus	4
Political Science and U.S. History		
HIST 2111	The United States to 1877	3
or HIST 2112	The United States since 1877	
or INTA 1200	American Government in Comparative Perspective	
or POL 1101	Government of the United States	
or PUBP 3000	American Constitutional Issues	
Arts, Humanities, and Ethics		
Any HUM		6
Communicating in Writing		
ENGL 1101	English Composition I	3
ENGL 1102	English Composition II	3
Technology, Mathematics, and Sciences		
Lab Science		8
MATH 1551	Differential Calculus	2
MATH 1554	Linear Algebra [4]	4
or MATH 15	Linear Algebra with Abstract Vector Spaces	
Social Sciences		
Any SS		9
Field of Study		
CS 1331	Introduction to Object Oriented Programming [1]	3
CS 1332	Data Structures and Algorithms for Applications [1]	3
CS 2050	Introduction to Discrete Mathematics for Computer Science [1]	3
CS 2340	Objects and Design [1]	3
LMC 2700	Introduction to Computational Media [1]	3
MATH 2550	Introduction to Multivariable Calculus [4]	2
Major Requirement		
Junior Design Options (Capstone)		
Junior Design Option [1,3]		6
Media Requirements		
CS 2261	Media Device Architectures [1]	4
CS 4001	Computing, Society, and Professionalism	3
or CS 3001	Computing, Society, and Professionalism	
or CS 4726	Privacy, Technology, Policy, and Law	
or SLS 3110	Technology and Sustainable Community Development	
Media Technology (select three): [1]		9
CS 3451	Computer Graphics [1]	
CS 4455	Video Game Design and Programming	
CS 4460	Introduction to Information Visualization	
CS 4464	Computational Journalism	
CS 4475	Computational Photography	
CS 4480	Digital Video Special Effects	
CS 4488	Procedural Content Generation	
CS 4496	Computer Animation	
CS 4590	Principles and Applications of Computer Audio	
Music Technology Requirements		
MUSI 2010	Fundamentals of Musicianship I [1]	3
MUSI 2011	Fundamentals of Musicianship II [1]	3
MUSI 2525	Introduction Audio Technology I [1]	3
MUSI 2526	Introduction to Audio Technology II [1]	3
MUSI 3770	Project Studio: Technology [1]	4
Music Thread Electives [1]		12
MUSI 4450	Integrating Music Into Multimedia	
MUSI 4456	Music Technology History and Repertoire	
MUSI 4457	Computational Music and Audio Analysis	
MUSI 4458	Computer Music Composition	
MUSI 4459	Digital Signal Processing for Music	
MUSI 4630	Music Recording and Mixing	
MUSI 4650	Music and Sound Design	
MUSI 4670	Music Interface Design	
MUSI 4677	Music Perception and Cognition	
Ensemble [5]		
Free Electives		
Free Electives		8
Total Credit Hours		**122**

Pass-Fail is allowed for Free Electives.

[1] Minimum grade of C required.

[3] Junior Design Options are as follows (students must pick one option and may not change):
- Option 1
  - LMC 3432, LMC 3431LMC 3431LMC 3431LMC 3431LMC 3431, CS 3311CS 33 CS 3312CS 3312CS 3312CS 3312CS 3312.
- Option 2 - ECE VIP courses and LMC 3403.
- Option 3 - Satisfy Georgia Tech Research Option
- Option 4- CS 2701CS 2701CS 2701CS 2701 (3 hours), CS 4699CS 4699CS 4699CS 4699-I2P (3 hours), LMC 3403LMC 3403LMC 3403LMC 3403 (3 hours) = 9 hours OR CS 4699- I2P (6 hours), LMC 3403LMC 3403LMC 3403LMC 3403 (3 hours) = 9 hours
- Option 5 - CS 4723 (3 hours), LMC 3403 (3 hours) = 6 hours

See advisor for requirements to substitute Research Option OR VIP Option for Junior Design OR Create X OR MUSI 4705/MUSI 4706
Six credits of the Junior Design option are used as Major Requirements and the overage credits of research/VIP (5 credit hours/2 credit hours) may be used as free electives. Students completing VIP for their junior design requirement will be required to complete at least three

semesters of VIP. (VIP 1 + VIP 2 + VIP 3) (for a total of 5 credit hours) + LMC 3403 = 8 hours of VIP credit.

Students using CREATE-X for junior design take at least 6 hours of CREATE-X Start-ip Lab and Idea 2 Prototype (I2P) and 3 of the 6 hours must be I2P. Students take these 6 hours with LMC 3403 (3 hours) for a total of 9 hours. Extra three hours for CREATE-X option can be used in free electives.

[4] Two credit hours of MATH 1554 may count along with MATH 2550 to give Field of Study 18 credit hours.

[5] Four (4) credit hours of Ensemble maximum