BACHELOR OF SCIENCE IN COMPUTATIONAL MEDIA - INTELLIGENCE - GAMES

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 [3]	4
or MATH 15	Linear Algebra with Abstract Vector Spaces	
Social Sciences		
Any SS [4]		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 [3]	2
Major Requirements		
CS 2110	Computer Organization and Programming	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	
Junior Design Options (Capstone)		
Junior Design Option [1,2]		6

Intelligence Requirements		
CS 3510	Design and Analysis of Algorithms [1]	3
CS 3600	Introduction to Artificial Intelligence [1]	3
Embodied Intelligence (select one): [1]		3
CS 3630	Introduction to Perception and Robotics	
CS 3790	Introduction to Cognitive Science	
PSYC 3040	Sensation and Perception	
Approaches to Intelligence (select three): [1]		9
CS 4476	Introduction to Computer Vision	
CS 4510	Automata and Complexity Theory	
CS 4635	Knowledge-Based Artificial Intelligence	
CS 4641	Machine Learning	
CS 4649	Robot Intelli Planning	
CS 4650	Natural Language Understanding	
CS 4731	Game AI	
Games Requirements [5]		
LMC 2410	Introduction to Game Studies [1]	3
LMC 4710	Game Studio [1]	3
Design course (select one): [1]		3
LMC 2730	Constructing the Moving Image	
LMC 3710	Principles of Interaction Design	
Game Design courses (select three): [1]		9
LMC 4720	Interactive Narrative	
LMC 4725	Games Design as a Cultural Practice	
LMC 4730	Experimental Digital Art	
LMC 4731	Game AI	
CM or Media Courses (select three): [1]		9
LMC 2400	Introduction to Media Studies	
LMC 2500	Introduction to Film	
LMC 3206	Communication and Culture	
LMC 3314	Technologies of Representation	
LMC 3406	Video Production	
LMC 3402	Graphic and Visual Design	
Any LMC 27XX, 37XX, 47XX, 325X		
Total Credit Hours		**122**

Pass Fail is allowed for Free electives.

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

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.

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

[4] PSYC 1101 is not required but strongly recommended as it is a pre-requisite for many upper-level major course requirements.

[5] LMC courses cannot count in two thread areas at the same time. There is no double counting.