

BACHELOR OF SCIENCE IN COMPUTATIONAL MEDIA - ARTIFICIAL INTELLIGENCE- FILM & MEDIA STUDIES

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 Requirement		
CS 2110	Computer Organization and Programming ¹	4
CS 4001	Computing, Society, and Professionalism ¹	3
	or CS 3001 Computing, Society, and Professionalism	
	or CS 4726 Privacy, Technology, Policy, and Law	
	or SLS 311C Technology and Sustainable Community Development	

Junior Design Options (Capstone)

Junior Design Option ^{1,2}	6
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Artificial Intelligence Requirements

CS 3510	Design and Analysis of Algorithms ¹	3
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CS 3600	Introduction to Artificial Intelligence ¹	3
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Embodied Intelligence (select one) ¹	3
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CS 3630	Introduction to Perception and Robotics
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or CS 3790 Introduction to Cognitive Science

or PSYC 3040 Sensation and Perception

CS 3790	Introduction to Cognitive Science
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PSYC 3040 Sensation and Perception

Approaches to Intelligence (select three): ¹	9
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CS 4476	Introduction to Computer Vision
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CS 4510	Automata and Complexity Theory
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CS 4635	Knowledge-Based Artificial Intelligence
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CS 4641	Machine Learning
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CS 4649	Robot Intelli Planning
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CS 4650	Natural Language Understanding
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CS 4731	Game AI
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Film & Media Studies Requirements⁵	
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LMC 2400	Introduction to Media Studies ¹	3
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LMC 4813	Special Topics (Media/Design Capstone) ¹	3
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Film and Media Making course ¹	3
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LMC 4720	Interactive Narrative
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Any LMC 27XX course

Any LMC 37XX course

Film and Media Studies courses ¹	9
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LMC 2400	Introduction to Media Studies
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LMC 2500	Introduction to Film
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LMC 2600	Introduction to Performance Studies
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LMC 3206	Communication and Culture
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LMC 3314	Technologies of Representation
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LMC 3352	Film and/as Technology
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LMC 3402	Graphic and Visual Design
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LMC 3406	Video Production
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Any LMC 325X, 37XX, 38XX course

CM or Media Courses (LMC 2XXX, 3XXX, 4XXX courses) ¹	9
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Total Credit Hours	122
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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 3432, LMC 3431, CS 3311, CS 3312.

- Option 2 - ECE VIP courses and LMC 3403.

- Option 3 - Satisfy Georgia Tech Research Option.

- Option 4 - CS 2701 (3 hours), CS 4699-I2P (3 hours), LMC 3403 (3 hours) = 9 hours OR CS 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-up 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 credit hours 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.