

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

Code	Title	Credit Hours
<b>Wellness Requirement</b>		
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	
<b>Core IMPACTS</b>		
<b>Institutional Priority</b>		
CS 1301	Introduction to Computing <sup>1</sup>	3
	or CS 1315 Introduction to Media Computation	
<b>Mathematics and Quantitative Skills</b>		
MATH 1552	Integral Calculus	4
<b>Political Science and U.S. History</b>		
HIST 2111	The United States to 1877	3
	or HIST 2117 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	
<b>Arts, Humanities, and Ethics</b>		
Any HUM		6
<b>Communicating in Writing</b>		
ENGL 1101	English Composition I	3
ENGL 1102	English Composition II	3
<b>Technology, Mathematics, and Sciences</b>		
Lab Science		8
MATH 1551	Differential Calculus	2
MATH 1554	Linear Algebra <sup>3</sup>	4
	or MATH 15 Linear Algebra with Abstract Vector Spaces	
<b>Social Sciences</b>		
Any SS <sup>4</sup>		9
<b>Field of Study</b>		
CS 1331	Introduction to Object Oriented Programming <sup>1</sup>	3
CS 1332	Data Structures and Algorithms for Applications <sup>1</sup>	3
CS 2050	Introduction to Discrete Mathematics for Computer Science <sup>1</sup>	3
CS 2340	Objects and Design <sup>1</sup>	3
LMC 2700	Introduction to Computational Media <sup>1</sup>	3
MATH 2550	Introduction to Multivariable Calculus <sup>3</sup>	2
<b>Major Requirement</b>		
CS 2110	Computer Organization and Programming <sup>1</sup>	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 311C Technology and Sustainable Community Development	

## Junior Design Options (Capstone)

Junior Design Option <sup>1,2</sup>	6
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## Intelligence Requirements

CS 3510	Design and Analysis of Algorithms <sup>1</sup>	3
CS 3600	Introduction to Artificial Intelligence <sup>1</sup>	3
Embodied Intelligence (select one) <sup>1</sup>		3

CS 3630 Introduction to Perception and Robotics

or CS 3790 Introduction to Cognitive Science

or PSYC 3040 Sensation and Perception

CS 3790 Introduction to Cognitive Science

PSYC 3040 Sensation and Perception

Approaches to Intelligence (select three): <sup>1</sup>	9
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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

Film & Media Studies Requirements <sup>5</sup>	
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LMC 2400	Introduction to Media Studies <sup>1</sup>	3
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LMC 4813	Special Topics (Media/Design Capstone) <sup>1</sup>	3
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Film and Media Making course <sup>1</sup>	3
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LMC 4720 Interactive Narrative

Any LMC 27XX course

Any LMC 37XX course

Film and Media Studies courses <sup>1</sup>	9
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LMC 2400 Introduction to Media Studies

LMC 2500 Introduction to Film

LMC 2600 Introduction to Performance Studies

LMC 3206 Communication and Culture

LMC 3314 Technologies of Representation

LMC 3352 Film and/as Technology

LMC 3402 Graphic and Visual Design

LMC 3406 Video Production

Any LMC 325X, 37XX, 38XX course

CM or Media Courses (LMC 2XXX, 3XXX, 4XXX courses) <sup>1</sup>	9
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<b>Total Credit Hours</b>	<b>122</b>
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Pass Fail is allowed for Free electives.

<sup>1</sup> Minimum grade of C required.

<sup>2</sup> 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.

<sup>3</sup> Two credit hours of MATH 1554 may count along with MATH 2550 to give Field of Study 18 credit hours.

<sup>4</sup> PSYC 1101 is not required but strongly recommended as it is a pre-requisite for many upper-level major course requirements.

<sup>5</sup> LMC courses cannot count in two thread areas at the same time. There is no double counting.