

B.S.C. IN IMMERSIVE MEDIA

Overview

The Bachelor of Science in Communication in Immersive Media is an interdisciplinary program that prepares students for careers in research and applications of immersive media by providing them with knowledge of virtual reality and augmented reality technology, 3D modeling, game development engines, writing, and design thinking. Students will build experiences in education, gaming, architecture, software, and entertainment for various industries by combining industry-standard design processes and aesthetic methodologies with cutting-edge technology. Students are expected to attain both a strong historical, ethical, and practical understanding of immersive technologies as well as a grasp of the rapidly emerging technologies undoubtedly shaping the evolution of our computing landscape. Graduates will be able to work as artists, immersive designers, and creative technologists in fields including the arts, computer science, simulation, architecture, healthcare, and more.

Curriculum Requirements for Immersive Media

Code	Title	Credit Hours
Core Courses		
CIM 101	Internet, Media, and Society	3
CIM 102	Interaction Design	3
CIM 458	Immersive Storytelling	3
COM 250 or PHI 115	Freedom of Expression and Communication Ethics Social and Ethical Issues in Computing	3
Advanced Writing and Communication Skills Requirement		
Select one of the following writing skills courses:		3
CCA 126	Introduction to Screenwriting	
JMM 108	Writing for the Digital Age	
Select one of the following presentation skills courses:		3
COS 211	Public Speaking	
COS 333	Business Communication	
Digital Skills Course:		
CIM 203	Intro to Creative Coding	3
Track Requirement		
Choose one of the following:		12
Designer Track		
CIM 422	Human-Centered Design	
CIM 423	Building Virtual Worlds	
CIM 433	Augmented Reality	
CCA 523	Advanced 3D Character Design and Motion Capture	
Developer Track		
CSC 115 or ECE 118	Python Programming for Everyone Introduction to Programming	
CSC 120 or ECE 218	Computer Programming I Data Structures	
CSC 220 or ECE 318	Computer Programming II Algorithms	
CSC 329 or CIM 423 or CIM 433	Introduction to Game Programming Building Virtual Worlds Augmented Reality	
Practicum Requirement		
Take one credit sequentially for three semesters		
CIM 459	Immersive Media Studio (NEW COURSE: Immersive Media Studio)	3
Select four Electives from the following list below		12
CIM 104	Introduction to Game Studies	
CIM 202	User Experience Design	
CIM 204	Introduction to Game Design	

CIM 383	Physical Computing	
CIM 412	Human-Computer Interaction	
CIM 413	Mobile Application Development	
CIM 422	Human-Centered Design	
CIM 423	Building Virtual Worlds	
CIM 433	Augmented Reality	
CIM 444	Designing Games for Impact	
CIM 453	Dynamic Data	
CIM 469	Interactive Media Internship	
CIM 499	Projects and Directed Research	
JMM 407	Media Entrepreneurship	
CSC 329	Introduction to Game Programming	
CSC 330	Android Programming	
CSC 529	Introduction to Computer Graphics	
CSC 545	Introduction to Artificial Intelligence	
ECE 101	Introduction to Mobile Computing	
ECE 110	Introduction to Innovation: Learning About Innovation by Innovating	
ECE 318	Algorithms	
PHI 359	Immersive Experience and Virtual Reality	
General Education Requirements		
Written Communication Skills:		
WRS 105	First-Year Writing I	3
WRS 106	First-Year Writing II	3
or WRS 107	First-Year Writing II: STEM	
Quantitative Skills:		3
MTH 113	Finite Mathematics (for the Designer Track)	
MTH 108	Precalculus Mathematics II (for the Developer Track)	
Areas of Knowledge:		
Arts and Humanities Cognate		9
People and Society Cognate		9
STEM Cognate (9 credits) (fulfilled through the major)		
Additional Requirements		
Minor or Second Major and Electives		45
Total Credit Hours		120

* School of Communication students are required to complete a minimum of a minor (inside or outside of the school) in addition to their Communication major to graduate. For an optional 2nd major, please see your advisor.

* School of Communication students must complete 6 credits of Written Communication Skills unless exempt based on SAT/ACT score or AP/IB exam, 3-6 credits of Mathematics, <https://cognates.miami.edu/> and the Advanced Writing and Communication Skills Proficiency requirement.

Upper Level Elective Requirement

36 credits at the 300 level or higher are required for graduation. These credits may be earned from your major, minor and/or second major, and electives.

Suggested Plan of Study for Immersive Media

Freshman Year		
Fall		Credit Hours
CIM 101	Internet, Media, and Society	3
CIM 203	Intro to Creative Coding	3
WRS 105	First-Year Writing I	3
MTH 108 or 113	Precalculus Mathematics II or Finite Mathematics	3

Minor, Second Major or Elective		3
Credit Hours		15
Spring		
CIM 458	Immersive Storytelling	3
Select 3 credits in either Designer Track or Developer Track		3
WRS 106 or 107	First-Year Writing II or First-Year Writing II: STEM	3
Arts and Humanities Cognate		3
People and Society Cognate		3
Credit Hours		15
Sophomore Year		
Fall		
Select 3 credits in either Designer Track or Developer Track		3
CIM 102	Interaction Design	3
Arts and Humanities Cognate		3
People and Society Cognate		3
Minor, Second Major or Elective		3
Credit Hours		15
Spring		
CIM 459	Immersive Media Studio	1
COS 211 or 333	Public Speaking or Business Communication	3
Select 3 credits in either Designer Track or Developer Track		3
Arts and Humanities Cognate		3
People and Society Cognate		3
Minor, Second Major or Elective		2
Credit Hours		15
Junior Year		
Fall		
CIM 459	Immersive Media Studio	1
Select 3 credits in either Designer Track or Developer Track		3
Minor, Second Major or Elective		3
Minor, Second Major or Elective		3
Minor, Second Major or Elective		3
Minor, Second Major or Elective		2
Credit Hours		15
Spring		
CIM 459	Immersive Media Studio	1
Select 3 credits in Immersive Media Electives from UM Bulletin		3
COM 250 or PHI 115	Freedom of Expression and Communication Ethics or Social and Ethical Issues in Computing	3
Minor, Second Major or Elective		3
Minor, Second Major or Elective		3
Minor, Second Major or Elective		2
Credit Hours		15
Senior Year		
Fall		
CCA 126 or JMM 108	Introduction to Screenwriting or Writing for the Digital Age	3
Select 3 credits in Immersive Media Electives from UM Bulletin		3
Select 3 credits in Immersive Media Electives from UM Bulletin		3
Minor, Second Major or Elective		3

Minor, Second Major or Elective	3
Credit Hours	15
Spring	
Select 3 credits in Immersive Media Electives from UM Bulletin	3
Minor, Second Major or Elective	3
Minor, Second Major or Elective	3
Minor, Second Major or Elective	3
Minor, Second Major or Elective	3
Credit Hours	15
Total Credit Hours	120

Mission

We aim to prepare graduates who are empowered with the knowledge, skills, and attitudes to be stewards of the new and emerging field of immersive computing. We will cultivate students who design, build, and deploy these technologies responsibly from the start. We want our students to be at the forefront of this revolution and in a position to accelerate the adoption of immersive tools like virtual reality and augmented reality in a responsible and ethical manner.

Goals

To promote:

- Knowledge and understanding of immersive media technologies and the impact they will have on society.
- Consideration of best practices in designing and developing tools and experiences for immersive media.
- Knowledge of how to leverage immersive media to communicate, educate, and share experiences.

Student Learning Outcomes

- Students will be able to understand the impact virtual reality and artificial intelligence could have on business, society, and people.
- Students will be able to explore how virtual space alters the dimension of the human experience.
- Students will be able to shape how communities will organize in virtual spaces; and how virtual reality will open new spaces for communities.
- Students will be able to design, build, and deploy immersive content and technologies responsibly.