INTERACTIVE MEDIA (CIM)

CIM 101. Internet, Media, and Society. 3 Credit Hours.
Internet, Media, and Society is a foundational course intended to give perspectives on the continuing progression of technology through the lens of media and popular culture. Students will learn about the historical roots of the internet and early tech pioneers, including the various technologies, trends, and subcultures that bubble up along the way, creating our current media and technological landscapes. From this perspective, students will gain an appreciation and greater understanding of how things came to be, especially the Internet's role in shaping society and their everyday lives.
Components: LEC.
Grading: GRD.
Typically Offered: Fall & Spring.

CIM 102. Interaction Design. 3 Credit Hours.
In this class, students will familiarize themselves with the disciplines of user experience (UX) and interaction design (IxD), including design principles, postures, patterns, and visual design concepts specific to designing interactive digital products. Students will learn how to use a digital prototyping tool in order first to design low-fidelity, structural wireframes and then turn them into high-fidelity interactive prototypes.
Components: LEC.
Grading: GRD.
Typically Offered: Fall & Spring.

CIM 103. Web Lab. 3 Credit Hours.
This course is a practical introduction to web design. Students will learn how to produce websites using the latest web practices and techniques. Throughout each unit of the course, students will learn the skills to plan, layout, and build websites using HTML, CSS, and Javascript. Students will also learn how to optimize and market their websites.
Components: LEC.
Grading: GRD.
Typically Offered: Fall & Spring.

CIM 104. Introduction to Game Studies. 3 Credit Hours.
This course is an introduction to the study of games as cultural, historical, and socially relevant artifacts. Students will gain an understanding of how games are used to accomplish specific communications goals and will also learn how society can often shape and be shaped by games. The course provides students with the foundation needed to be effective at critiquing, designing, and evaluating games.
Components: LEC.
Grading: GRD.
Typically Offered: Fall & Spring.

CIM 106. Introduction to Virtual Reality. 3 Credit Hours.
Spatial Computing (AR/VR/MR) is becoming mainstream, with over ten million systems being used in the United States alone. This class examines Spatial Computing from the viewpoint of various disciplines, including popular culture, engineering, behavioral science, and communication.
Components: LEC.
Grading: GRD.
Typically Offered: Fall & Spring.

CIM 112. Innovation & Design. 3 Credit Hours.
In this course students will be introduced to the design thinking process and apply human-centered design techniques to implement interactive systems. The course provides opportunities to apply new ways of thinking and techniques through class exercises and a course project, enabling students to develop innovative concepts and prototypes on an assigned topic.
Components: LEC.
Grading: GRD.
Typically Offered: Fall.

CIM 121. Prototyping. 3 Credit Hours.
This course covers accepted prototyping techniques introducing students to a wide variety of approaches for different kinds of user experience design problems and platforms. Students will learn to develop preliminary iterations of a solution to a design problem in order to communicate the essence of their idea without committing to a costly implementation.
Components: LEC.
Grading: GRD.
Typically Offered: Offered by Announcement Only.

CIM 202. User Experience Design. 3 Credit Hours.
This course will employ a problem-based learning model (PBL) of instruction through group work and frequent critique sessions by peers. In PBL, students will work in small teams to iteratively generate and refine interactive design concepts and thoroughly document their design process as they solve open-ended design problems. At the end of the semester, students will have (a) an overview of how to apply creative and abstract thinking skills and sketching techniques, (b) an understanding of how to conduct research that informs a goal-driven design and user-centered design of a digital product, (c) the ability to articulate concepts through user scenarios, mapping, wireframing, and prototyping; and (d) the ability to produce design deliverables for real-world practice.
Pre-Requisite: CIM 102.
Components: LEC.
Grading: GRD.
Typically Offered: Fall & Spring.

CIM 203. Intro to Creative Coding. 3 Credit Hours.
This course will introduce students to the building blocks of creative coding and will enable them to learn to create and communicate dynamic content and interfaces that can be deployed across platforms. Students will learn programming fundamentals that can be translated into virtually all programming settings.
Components: LAB.
Grading: GRD.
Typically Offered: Fall & Spring.

CIM 204. Introduction to Game Design. 3 Credit Hours.
This is an introductory course about game design, theory, and development and how games align themselves as a lens of study for all interactive media.
Pre-Requisite: CIM 104.
Components: LAB.
Grading: GRD.
Typically Offered: Fall & Spring.

CIM 299. Sophomore Portfolio Review. 2 Credit Hours.
In the Department of Interactive Media, all MSC students must create a digital portfolio as a fundamental academic requirement. The portfolio is a canvas to showcase innovative and creative abilities representing the students' competence with the Interactive Media program's learning outcomes, an essential tool to kickstart their future careers. The portfolio undergoes mandatory reviews during the sophomore and senior years. The Sophomore Portfolio Review (SPR) aims to assess, evaluate and approve the acquired knowledge and skills required. This process is overseen by faculty advisors who are committed to guide, support and help students to excel and achieve excellence in their portfolios. A grade of B or higher is required to fulfill the requirements in this course.
Requisite: Sophomore Standing.
Components: LEC.
Grading: GRD.
Typically Offered: Spring.

CIM 332. Visual Design for Interactive Media. 3 Credit Hours.
Visual Design for Interactive Media explores the visual design of product interactions, the impact of design on human behavior, and the aesthetics and style of visual communication. Students learn about visual perception of information, visualization methods, and industry best practices. Through in-class exercises and design projects, students develop their practical skills and apply visual concepts to bring ideas to life, encourage innovation, and communicate effectively with a specific audience. Students gain comprehensive insights into visual design and the skills to create visually stunning and compelling designs that inform and delight a target audience.
Components: LAB.
Grading: GRD.
Typically Offered: Fall.

CIM 343. Front End Fundamentals. 3 Credit Hours.
This course focuses on job-ready skills and production workflow techniques in highest demand for front-end web developers. Students will learn, practice, and demonstrate the skills and principles needed to make effective use of these technologies.
Components: LAB.
Grading: GRD.
Typically Offered: Fall & Spring.

CIM 383. Physical Computing. 3 Credit Hours.
This course explores how to build a bridge between the physical and digital world. Students will learn to develop software and hardware to sense and respond to physical interaction. Through various projects, students will learn how to program sensors and other electronic components to convert the human senses into creative inputs and outputs, such as lights, sounds, and movement. Students will learn the ideation and design process through challenges presented in their assignments and personal projects. In this course, students will also learn how to design for and use various digital fabrication tools, such as 3D printing, laser and paper cutting, and CNC milling. Students will have access to work hands-on with these fabrication tools to enhance and build their prototypes.
Components: STU.
Grading: GRD.
Typically Offered: Fall & Spring.

CIM 389. Special Topics in Interactive Media. 3 Credit Hours.
This course is designed to keep up with the fast-changing world of interactive media allowing for contemporary classes to be periodically added to the curriculum. Special topics classes will be added to the Interactive Media curriculum as electives.
Components: LEC.
Grading: GRD.
Typically Offered: Offered by Announcement Only.

CIM 393. Wearable Technologies. 3 Credit Hours.
This studio course focuses on wearable technology, electronic textiles, soft computing and will give students hands-on experience in building wearable computing platforms. Students will design and develop concepts into functional wearables through learning to integrate electronics and fiber art techniques using sensors, microcontrollers, and basic programming. Additionally, they will better understand and be able to analyze the relationship of technology to the body, social interaction, and environment.
Pre-Requisite: CIM 383.
Components: LEC.
Grading: GRD.
Typically Offered: Spring.

CIM 412. Human-Computer Interaction. 3 Credit Hours.
This course will teach students about the importance of human-computer interaction (HCI) in design, implementation, and evaluation of interactive computing systems for human use. The course will provide both practical application and theoretical knowledge of HCI, with practical concerns balanced by a discussion of relevant theory from the literature of computer science, human factors, and interaction design.
Pre-Requisite: CIM 102 and CIM 202 Requisite: Sophomore or Higher.
Components: LEC.
Grading: GRD.
Typically Offered: Fall.

CIM 413. Mobile Application Development. 3 Credit Hours.
This course will provide students with the ability to conceptualize, design, and develop a mobile application of their choosing. It covers various approaches to developing mobile software applications using current development environments, frameworks, and programming paradigms. This course focuses on hands-on learning through which students practice with programming assignments and demonstrate the apps through virtual simulators and physical mobile devices.
Prerequisite: CIM 203 Or ECE 118 Or CSC 120.
Components: STU.
Grading: GRD.
Typically Offered: Spring & Summer.

CIM 418. Internet and Media Activism. 3 Credit Hours.
In this course, students will examine the role of media in shaping social reform to document social issues such as poverty, human rights, social inequities, the environment, and powerless groups. We will review the philosophy and history of media as activism ranging from photography, documentary, cinema, the Internet, social media, and newer forms of media. Emphasis is placed on developing a critical understanding of current media advocacy practices with a conscious goal; awareness, change minds, to affect policy and action. At the end of the semester, students will have a fully developed project concept.
Requisite: Sophomore Standing or Higher.
Components: LEC.
Grading: GRD.
Typically Offered: Spring.

CIM 422. Human-Centered Design. 3 Credit Hours.
This course takes a comprehensive look at human limitations and abilities and how they are key to interaction design and a great user experience. Students will learn about human behavior and how to apply UX guidelines to the design of digital interfaces. Students will also learn how to produce design deliverables for real-world practice.
Pre-Requisite: CIM 102 and CIM 202 Requisite: Sophomore Standing or Higher.
Components: STU.
Grading: GRD.
Typically Offered: Spring.

CIM 423. Building Virtual Worlds. 3 Credit Hours.
The purpose of this course is to explore the construction of virtual environments. Students will learn the principles of constructing interactive 3D environments using a game engine. Students will be responsible for creating a world that can be interacted with on various platforms, including virtual and mixed reality.
Prerequisite: CIM 203 Or ECE 118 Or CSC 120.
Components: LAB.
Grading: GRD.
Typically Offered: Fall & Spring.

CIM 433. Augmented Reality. 3 Credit Hours.
This course will provide students with the ability to design and develop augmented reality apps. It covers various approaches to designing and programming augmented reality apps using the latest technologies and devices. Students will be given hands-on programming assignments and learn about the key advantages of each of the approaches via in-class discussions.
Prerequisite: CIM 203 Or ECE 118 Or CSC 120.
Components: STU.
Grading: GRD.
Typically Offered: Spring.

CIM 442. The Human Element: Designing Meaningful Digital Experiences. 3 Credit Hours.
The Human Element: Designing Meaningful Digital Experiences is a research-driven course on how various technologies shape and mediate human interactions. From video conferencing to virtual reality, the course investigates how we use technology to communicate, empathize, and engage with others and social issues. By examining both synchronous and asynchronous forms of communication, students will develop a nuanced understanding of how technological mediums influence our relationships and perceptions of others.
Pre-Requisite: CIM 102.
Components: LEC.
Grading: GRD.
Typically Offered: Spring.

CIM 444. Designing Games for Impact. 3 Credit Hours.
Students will explore the use of games as a communication tool for social good and will create their own game-based interventions.
Prerequisite: CIM 204.
Components: STU.
Grading: GRD.
Typically Offered: Spring.

CIM 453. Dynamic Data. 3 Credit Hours.
This course teaches data analysis through the development of interactive web applications. The course focuses on communicating through computer programming. Students will learn to build and use databases as a primary source and explore data as content. For this course, students will be required to build custom software solutions through web programming languages that utilize third-party APIs to interpret, analyze and manipulate data.
Pre-Requisite: CIM 103 or CIM 203 or CIM 443 or JMM 341.
Components: LEC.
Grading: GRD.
Typically Offered: Fall.

CIM 454. Intro to 3D Design. 3 Credit Hours.
Students will gain familiarity with the 3D art production process for game pipelines, understand the entire 3D workflow, including modeling, texturing, lighting, rendering, rigging, and animation, and develop the ability to think and approach tasks like a skilled 3D artist.
Components: LAB.
Grading: GRD.
Typically Offered: Fall.

CIM 458. Immersive Storytelling. 3 Credit Hours.
A hands-on course dedicated to designing, producing, and evaluating a variety of virtual reality experiences. Through a wide selection of materials, including videos, 360° films, games, immersive experiences, articles, and presentations, students will develop a strong foundation for storytelling techniques, technologies, and best practices used across immersive media.
Components: LEC.
Grading: GRD.
Typically Offered: Fall.

CIM 459. Immersive Media Practicum. 1-3 Credit Hours.
The Immersive Media Practicum continues the escalation of scale and complexity within immersive modalities and reinforces the relationship between spatial definition, interactions, and systems. This course is taught over three semesters as a one-credit studio session. This sequence will increase the variables one must consider in designing and developing immersive media products. The studio recognizes that making immersive media is often a team process with various roles played by various individuals. Students will work fluidly and collaboratively within a team. Because of this, students should have a broad set of skills and be motivated to learn by the time they take this class.
Pre-Requisite: CIM 102 and (CIM 203 or CSC 120 or ECE 218) and CIM 423.
Components: STU.
Grading: GRD.
Typically Offered: Fall & Spring.

CIM 464. Video Game Spectatorship and Esports. 3 Credit Hours.
This course covers the historical and contemporary practices of game spectatorship, journalism, and Esports. It teaches the industry and best practices used in sharing video games through traditional media, streaming services, and Esports.
Components: LEC.
Grading: GRD.
Typically Offered: Spring.

CIM 469. Interactive Media Internship. 1-3 Credit Hours.
The internship is designed to provide valuable career-related work experience in a real - world setting, e.g., institutions, organizations and/or businesses. Students will identify an opportunity, supervisor, and write a proposal as to the relevancy to their goals. The Internship may be paid or unpaid.
Requisite: Sophomore Status, Cumulative GPA 2.5.
Components: THI.
Grading: GRD.
Typically Offered: Fall, Spring, & Summer.

CIM 474. 2D Character Design. 3 Credit Hours.
This is a comprehensive course devoted to the development of skills in creating characters for 2D animation and games. Students will develop an understanding of how shape language relates to the character's personality through the creation of weekly exercises. The course will be delivered in the form of studio projects, individual and class critiques, lectures, discussions, workshops, and readings.
Components: STU.
Grading: GRD.
Typically Offered: Fall.

CIM 484. Advanced 3D Design. 3 Credit Hours.
Students will develop and understand advanced 3D art skills using multiple software applications that are heavily used in the industry. This course emphasizes both technical and artistic skills, applying hands-on skills to produce engaging and immersive environments. Students will gain experience thinking and approaching tasks like a skilled 3D artist/technical artist.
Pre-Requisite: CIM 454.
Components: LAB.
Grading: GRD.
Typically Offered: Spring.

CIM 489. Special Topics in Interactive Media. 3 Credit Hours.
This course is designed to keep up with the fast-changing world of interactive media allowing for contemporary classes to be periodically added to the curriculum. Special topics classes will be added to the Interactive Media curriculum as electives.
Requisite: Junior Standing or Higher.
Components: LEC.
Grading: GRD.
Typically Offered: Offered by Announcement Only.

CIM 499. Projects and Directed Research. 1-3 Credit Hours.
Individual study. No more than three credits may be counted toward a Communication major or minor.
Components: THI.
Grading: GRD.
Typically Offered: Fall, Spring, & Summer.

CIM 504. Designing Playful Experiences. 3 Credit Hours.
Students will analyze and design games to gain vocabulary and tools to design playful interactive systems. Students will be exposed to a range of popular game prototyping technologies and will create several mini-projects as well as one final game project created using the platform of their choice.
Prerequisite: CIM 104 and CIM 204.
Components: STU.
Grading: GRD.
Typically Offered: Offered by Announcement Only.

CIM 505. Technology Trends. 3 Credit Hours.
A foundation course intended to promote a dialogue about the current and future state of business, art, health, culture, and innovation. This real-world analysis of current trends is essential for understanding the future. The course reveals a systemic way of evaluating new ideas, distinguishing real trend from hype.
Components: LEC.
Grading: GRD.
Typically Offered: Offered by Announcement Only.

CIM 511. Interactive Media Studio. 3 Credit Hours.
The Interactive Media Studio is designed to allow a student to enhance his or her accumulated knowledge and skills in interactive Media. This course prepares students to gain employment in the field by creating and producing a professional design portfolio and resume. Students will also gain knowledge about how to set up, prepare for, and conduct themselves during professional interviews.
Pre-Requisite: CIM 101 and CIM 203 and CIM 383 and CIM 443 Requisite: Senior Standing.
Components: LEC.
Grading: GRD.
Typically Offered: Offered by Announcement Only.

CIM 515. Interactive Media Business Essentials. 3 Credit Hours.
This course takes a comprehensive look at managing interactive media projects from inception to implementation and maintenance.
Components: LEC.
Grading: GRD.
Typically Offered: Fall.

CIM 563. Design with AI. 3 Credit Hours.
This course will provide students with the ability to understand the purpose, strengths, and limitations of artificial intelligence (AI) technologies in order to design smart applications for everyday use. It covers topics including state-of-the-art AI technologies and the design principles for developing applications with such technologies. Issues such as ethics, bias, accountability, and privacy in these applications will also be discussed.
Pre-Requisite: CIM 203 or CSC 220 or CSC 315 or ECE 118.
Components: LEC.
Grading: GRD.
Typically Offered: Fall & Spring.

CIM 579. Interactive Media Practicum. 1-3 Credit Hours.
Students will engage in the applied practice of Interactive Media to enhance classroom learning and provide opportunities to gain practical experience.

Components: PRA.
Grading: GRD.
Typically Offered: Fall & Spring.

CIM 582. UX Research Methods. 3 Credit Hours.
The course provides a comprehensive overview of user experience research and how to incorporate it into the product development lifecycle. Students will learn about user-centered design and apply a wide range of research methods including ethnography, questionnaires, online studies, and usability testing. There will be considerable focus on practicing research skills and reporting findings.
Pre-Requisite: CIM 102 and CIM 202 Requisite: Sophomore or Higher.
Components: LEC.
Grading: GRD.
Typically Offered: Spring.

CIM 594. Game Development Studio. 3 Credit Hours.
Game Dev Studio is a project-based course devoted to developing a game. In groups, students will start with a concept and create prototypes that will be refined through multiple iterations and playtests. Your final game will either be a well-polished 2D or 3D digital game.
Prerequisite: CIM 202 and CIM 204 or CIM 423 or CIM 504 or CIM 444.
Components: STU.
Grading: GRD.
Typically Offered: Offered by Announcement Only.

CIM 599. Senior Portfolio Review. 1 Credit Hour.
In the Department of Interactive Media, all MSC students must create a digital portfolio as a fundamental academic requirement. The portfolio is a canvas to showcase innovative and creative abilities representing the students' competence with the Interactive Media program's learning outcomes, an essential tool to kickstart their future careers. The portfolio undergoes mandatory reviews during the sophomore and senior years. The Sophomore Portfolio Review (SPR) aims to assess, evaluate and approve the acquired knowledge and skills required. This process is overseen by faculty advisors who are committed to guide, support and help students to excel and achieve excellence in their portfolios. A grade of B or higher is required to fulfill the requirements in this course.
Pre-Requisite: Senior Standing and CIM 299 with a grade of B or higher.
Components: LEC.
Grading: GRD.
Typically Offered: Spring.

CIM 601. Prototyping. 3 Credit Hours.
This course covers accepted prototyping techniques introducing students to a wide variety of approaches for different kinds of user experience design problems and platforms. Students will learn to develop preliminary iteration of a solution to a design problem in order to communicate the essence of their idea without committing to a costly implementation.
Components: LEC.
Grading: GRD.
Typically Offered: Offered by Announcement Only.

CIM 602. Innovation & Design. 3 Credit Hours.
In this course students will be introduced to the design thinking process and will apply human-centered design techniques to the design of interactive systems. The course provides opportunities to apply these new ways of thinking and techniques through class exercises and a course project, where the students will develop innovative concepts and prototypes for an assigned topic.
Components: LAB.
Grading: GRD.
Typically Offered: Fall.

CIM 603. Intro to Creative Coding. 3 Credit Hours.
This course will introduce students to the building blocks of creative coding and learn to create dynamic content and interfaces that can be deployed across platforms. Students will learn programming fundamentals that can be translated into virtually all programming settings.
Components: LAB.
Grading: GRD.
Typically Offered: Fall.

CIM 604. Designing Playful Experiences. 3 Credit Hours.
Students will analyze and design games to gain vocabulary and tools to design playful interactive systems. Students will be exposed to a range of popular game prototyping technologies and will create several mini-projects as well as one final game project created using the platform of their choice.
Components: STU.
Grading: GRD.
Typically Offered: Fall.

CIM 605. Technology Trends. 3 Credit Hours.
Tech Trends is a foundation course intended to promote a dialogue about the current and future state of business, art, health, culture, and innovation. This real-world analysis of current trends is essential for understanding the future. The course reveals a systemic way of evaluating new ideas bubbling up on the horizon-distinguishing what is a real trend from hype.
Components: LEC.
Grading: GRD.
Typically Offered: Offered by Announcement Only.

CIM 612. Human-Computer Interaction. 3 Credit Hours.
This course will teach students about the importance of human-computer interaction (HCI) in designing, implementing, and evaluating interactive computing systems for human use. The course will provide both practical application and theoretical knowledge of HCI, with practical concerns balanced by discussing relevant theory from the literature of computer science, human factors, and interaction design. This class is delivered in flipped learning modality.
Components: LEC.
Grading: GRD.
Typically Offered: Fall.

CIM 613. Mobile Application Development. 3 Credit Hours.
This course will provide students the ability to conceptualize, design, and develop a mobile application of their choosing. It covers various approaches to the development of mobile software applications using current development environments, frameworks, and programming paradigms. This course focuses on hands-on learning through which students practice with programming assignments and demonstrate the apps through virtual simulators and physical mobile devices.
Prerequisite: CIM 603.
Components: STU.
Grading: GRD.
Typically Offered: Spring & Summer.

CIM 615. Interactive Media Business Essentials. 3 Credit Hours.
This course takes a comprehensive look at managing interactive media projects from inception to implementation and maintenance.
Components: LEC.
Grading: GRD.
Typically Offered: Offered by Announcement Only.

CIM 618. Internet and Media Activism. 3 Credit Hours.
In this course, students will examine the role of media in shaping social reform to document social issues such as poverty, human rights, social inequities, the environment, and powerless groups. We will review the philosophy and history of media as activism ranging from photography, documentary, cinema, the Internet, social media and newer forms of media. Emphasis is placed on developing a critical understanding of current media advocacy practices with a conscious goal; awareness, change minds, to affect policy, and action. At the end of the semester, students will have a fully developed project concept.
Components: LEC.
Grading: GRD.
Typically Offered: Spring.

CIM 622. Human Centered Design. 3 Credit Hours.
This course takes a comprehensive look at human limitations and abilities and how they are key to interaction design and a great user experience. Students will learn about human behavior and how to apply UX gridlines to the design of digital interfaces. Students will also learn how to produce design deliverables for real world practice.
Components: STU.
Grading: GRD.
Typically Offered: Spring.

CIM 623. Building Virtual Worlds. 3 Credit Hours.
The purpose of this course is to explore the construction of virtual environments. Students will learn the principles of constructing interactive 3D environments using a game engine. Students will be responsible for creating a world that can be interacted with on various platforms, including virtual and mixed reality.
Prerequisite: CIM 603 Or CSC 120 Or ECE 118.
Components: LAB.
Grading: GRD.
Typically Offered: Spring.

CIM 631. Collaborative Innovation Laboratory. 3 Credit Hours.
In this collaboration studio course, students will form small teams and undertake real-world projects with a partnering organization. Students will be provided a design brief outlining project objectives identified by the partnering organization. Over the course of the semester, students will research, brainstorm, design, and test innovative interactive solutions for this core objective, including proposing ideas and presenting prototypes to the partnering organization. Projects that satisfy the partner's needs may result in on-going work for full implementation and exposure for students' work.
Pre-Requisite: CIM 602 and CIM 603 and CIM 604.
Components: STU.
Grading: GRD.
Typically Offered: Fall.

CIM 632. Visual Design for Interactive Media. 3 Credit Hours.
Visual Design for Interactive Media explores the visual design of product interactions, the impact of design on human behavior, and the aesthetics and style of visual communication. Students learn about visual perception of information, visualization methods, and industry best practices. Through in-class exercises and design projects, students develop their practical skills and apply visual concepts to bring ideas to life, encourage innovation, and communicate effectively with a specific audience. Students gain comprehensive insights into visual design and the skills to create visually stunning and compelling designs that inform and delight a target audience.
Components: LAB.
Grading: GRD.
Typically Offered: Fall.

CIM 633. Augmented Reality. 3 Credit Hours.
This course will provide students the ability to design and develop augmented reality apps. It covers various approaches to designing and programming augmented reality apps using the latest technologies and devices. Students will be given hands-on programming assignments and learn about the key advantages in each of the approaches via in-class discussions.
Prerequisite: CIM 603.
Components: STU.
Grading: GRD.
Typically Offered: Spring.

CIM 642. The Human Element: Designing Meaningful Digital Experiences. 3 Credit Hours.
The Human Element: Designing Meaningful Digital Experiences is a research-driven course on how various technologies shape and mediate human interactions. From video conferencing to virtual reality, the course investigates how we use technology to communicate, empathize, and engage with others and social issues. By examining both synchronous and asynchronous forms of communication, students will develop a nuanced understanding of how technological mediums influence our relationships and perceptions of others.
Components: LEC.
Grading: GRD.
Typically Offered: Spring.

CIM 643. Front End Fundamentals. 3 Credit Hours.
This course focuses on the job-ready skills and production workflow techniques in highest demand for front end web developers. Students will learn, practice and demonstrate the skills and principles needed to make effective use of these technologies.
Components: LAB.
Grading: GRD.
Typically Offered: Fall & Spring.

CIM 644. Designing Games for Impact. 3 Credit Hours.
In this course students will explore the use of games as a communication tool for social good and will study, play, and also begin designing game-based interventions with the goal of promoting positive social change in areas such as environment, health, or social justice. Students will play existing social impact and other relevant games and will analyze them in order to conceptualize and design their own game concepts, either individually or in small teams. Students should come ready to actively participate in this seminar-size class.
Components: STU.
Grading: GRD.
Typically Offered: Spring.

CIM 653. Dynamic Data. 3 Credit Hours.
This course teaches data analysis through the development of interactive web applications. The course focuses on communicating through computer programming. Students will learn to build and use databases as a primary source and explore data as content. For this course students will be required to build custom software solutions through web programming languages that utilize third party APIs to interpret, analyze and manipulate data.
Prerequisite: CIM 604.
Components: LEC.
Grading: GRD.
Typically Offered: Fall.

CIM 654. Intro to 3D Design. 3 Credit Hours.
Students will gain familiarity with the 3D art production process for game pipelines, understand the entire 3D workflow, including modeling, texturing, lighting, rendering, rigging, and animation, and develop the ability to think and approach tasks like a skilled 3D artist.
Components: LAB.
Grading: GRD.
Typically Offered: Fall.

CIM 658. Immersive Storytelling. 3 Credit Hours.
A hands-on course dedicated to design and produce VR/360° immersive video. Through a wide selection of materials, including videos, 360° films, articles, and presentations, students will develop a strong foundation on storytelling techniques, technologies (cameras, microphones, VR headsets, software), and best practices used across immersive media.
Components: LEC.
Grading: GRD.
Typically Offered: Fall & Spring.

CIM 663. Design with AI. 3 Credit Hours.
This course will provide students with the ability to understand the purpose, strengths and limitations of artificial intelligence (AI) technologies in order to design smart applications for everyday use. It covers topics including state-of-the-art AI technologies and the design principles for developing applications with such technologies. Issues such as ethics, bias, accountability, and privacy in these applications will also be discussed.
Prerequisite: CIM 603.
Components: LAB.
Grading: GRD.
Typically Offered: Fall & Spring.

CIM 664. Video Game Spectatorship and Esports. 3 Credit Hours.
This course covers the historical and contemporary practices of game spectatorship, journalism, and Esports. It teaches the industry and best practices used in sharing video games through traditional media, streaming services, and Esports.
Components: LEC.
Grading: GRD.
Typically Offered: Spring.

CIM 669. Internship in Interactive Media. 1-3 Credit Hours.
The internship is designed to provide valuable career-related work experience in a real - world setting, e.g., institutions, organizations and/or businesses. Students will identify an opportunity, supervisor, and write a proposal as to the relevancy to their goals. The Internship may be paid or unpaid.
Requisite: Sophomore Status, Cumulative GPA 2.5.
Components: IND.
Grading: GRD.
Typically Offered: Fall, Spring, & Summer.

CIM 674. 2D Character Design. 3 Credit Hours.
This is a comprehensive course devoted to the development of skills in creating characters for 2D animation and games. Students will develop an understanding of how shape language relates to the characters personality through the creation of weekly exercises. The course will be delivered in the form of studio projects, individual and class critiques, lectures, discussions, workshops and readings.
Components: STU.
Grading: GRD.
Typically Offered: Offered by Announcement Only.

CIM 679. Practicum in Interactive Media. 1-3 Credit Hours.
Students will engage in the applied practice of Interactive Media to enhance classroom learning and provide opportunities to gain practical experience. The practicum course offers supervised activity in which interactive graduate students advance their skills and acquire professional experience by working on research and creative projects for various organizations.
Components: THI.
Grading: GRD.
Typically Offered: Fall & Spring.

CIM 682. UX Research Methods. 3 Credit Hours.
The course provides a comprehensive overview of user experience research methods and how to incorporate them into the product development lifecycle. Students will learn about user-centered design and conduct a wide range of research methods, including ethnography, questionnaires, online studies, and usability testing. There will be considerable focus on practicing research skills and reporting findings from these activities.
Components: LEC.
Grading: GRD.
Typically Offered: Spring.

CIM 683. Physical Computing. 3 Credit Hours.
This course explores how to build a bridge between the physical and digital world. Students will learn to develop software and hardware to sense and respond to physical interaction. Through various projects, students will learn how to program sensors and other electronic components to convert the human senses into creative inputs and outputs, such as lights, sounds, and movement. Students will learn the ideation and design process through challenges presented in their assignments and personal projects. In this course students will also learn how to design for and use various digital fabrication tools, such as 3D printing, laser and paper cutting, and CNC milling. Students will have access to work hands on with these fabrication tools to enhance and build their prototypes.
Prerequisite: CIM 603.
Components: STU.
Grading: GRD.
Typically Offered: Spring.

CIM 684. Advanced 3D Design. 3 Credit Hours.
Students will develop and understand advanced 3D art skills using multiple software applications that are heavily used in the industry. This course emphasizes both technical and artistic skills, applying hands-on skills to produce engaging and immersive environments. Students will gain experience thinking and approaching tasks like a skilled 3D artist/technical artist.
Pre-Requisite: CIM 654.
Components: LAB.
Grading: GRD.
Typically Offered: Spring.

CIM 689. Special Topics in Interactive Media. 3 Credit Hours.
This course is designed to keep up with the fast-changing world of interactive media allowing for contemporary classes to be periodically added to the curriculum. Special topics classes will be added to the Interactive Media curriculum as electives.
Components: LEC.
Grading: GRD.
Typically Offered: Offered by Announcement Only.

CIM 693. Wearable Technologies. 3 Credit Hours.
This studio course focuses on wearable technology, electronic textiles, soft computing and will give students hands-on experience in building wearable computing platforms. Students will design and develop concepts into functional wearables through learning to integrate electronics and fiber art techniques using sensors, microcontrollers, and basic programming. Additionally, they will better understand and be able to analyze the relationship of technology to the body, social interaction, and environment.
Components: LEC.
Grading: GRD.
Typically Offered: Spring.

CIM 694. Game Development Studio. 3 Credit Hours.
Game Dev Studio is a project-based course devoted to developing a game. In groups, students will start with a concept and create prototypes that will be refined through multiple iterations and playtests. Your final game will either be a well-polished 2D or 3D digital game.
Components: STU.
Grading: GRD.
Typically Offered: Offered by Announcement Only.

CIM 699. Advanced Projects and Directed Research. 1-6 Credit Hours.
Individual study, involving a project, paper or a program of research designed in consultation with a supervising faculty member. No more than six credits may be counted toward the degree.
Components: THI.
Grading: GRD.
Typically Offered: Offered by Announcement Only.

CIM 701. Capstone 1 - Concept Incubation Studio. 3 Credit Hours.
This studio is dedicated to developing a novel capstone project concept with a feasible production timeline during the Spring semester. Throughout the course you will iterate upon your ideas, incorporating feedback from faculty and your peers. By the end of the semester you should have a solid concept and a rough prototype of your project.
Pre-Requisite: CIM 602 and CIM 603 and CIM 604 and CIM 615 and CIM 631.
Components: STU.
Grading: GRD.
Typically Offered: Fall.

CIM 702. Capstone 2 - Production Studio. 3 Credit Hours.
The capstone studio is designed to demonstrate a student's accumulated training in Interactive Media in a single original project of their choice, subject to the instructor's approval and under the additional supervision of a faculty mentor. This studio continues the work developed in the Concept Incubation Studio into the production process. A final presentation on your capstone project needs to include a comprehensive overview of your process, research, and findings. Students are expected to keep an online journal that is updated at least once a week documenting the design process.

Components: STU.
Grading: GRD.
Typically Offered: Spring.