

IMMERSIVE REALITY (ARVR)

ARVR 110 Immersive Revolution: Augmented to Virtual Reality (5 Credits)

Augmented, virtual and mixed reality technologies push the boundaries of human perception and revolutionize industries, from gaming and themed entertainment to industrial design, advertising and architecture. In this course, students explore the evolution of immersive technology and the unique challenges and opportunities presented by its integration into the design process.

Prerequisite(s): DIGI 130 or CMPA 110.

Attributes: Studio Elective Requirement

ARVR 300 Game Engine Applications for Immersive Computing (5 Credits)

Virtual reality presents an entirely new digital playground that is changing the interactive and game design landscape. In this course, students use game engine applications to leverage the immersive, interactive opportunities of human movement, gaze and touch. Using industry-standard technology, students develop games and mobile apps with unique interactive content for augmented and virtual reality environments.

Prerequisite(s): ITGM 266; ITGM 452 or GAME 266.

Attributes: Studio Elective Requirement

ARVR 305 Visual Effects for Immersive Environments (5 Credits)

From intergalactic battles to simulated tornados, immersive environments amplify the visual experience and challenge human perception. In this course, students synthesize practical camerawork, real-time camera tracking and digital compositing skills to create realistic 3D virtual sets. Using the tools and techniques of immersive technology, students produce hyper-realistic scenes through the integration of live-action footage and virtual environments.

Prerequisite(s): VSFY 210; VFX 210; ITGM 236; GAME 236; ITGM 240; ANIM 249 or ANIM 250.

Attributes: Studio Elective Requirement

ARVR 310 Integration of Immersive Realities (5 Credits)

Immersive realities transform how audiences experience content and brands interact with consumers. In this course, students explore the complexities and opportunities presented by the integration of human factors into the design and programming of augmented and virtual reality experiences.

Prerequisite(s): ITGM 220; GAME 220 or ITGM 303.

Attributes: Studio Elective Requirement

ARVR 440 Immersive Reality Professional Portfolio (5 Credits)

From media and entertainment design to the way consumers select and try on apparel, augmented and virtual reality technologies are rapidly evolving career opportunities in a wide range of industries. Students prepare for a career in augmented and virtual reality through the development of a strategic framework and professional presentation materials.

Prerequisite(s): VSFY 313; VFX 313; TECH 312; ITGM 347; GAME 347; ITGM 440; VSFY 375 or VFX 375.

Attributes: Business-focused elective; Studio Elective Requirement

ARVR 455 Studio I: Storytelling and Spatial Interaction (5 Credits)

In this course, students explore storytelling principles, user stories, and spatial interaction to evoke emotional connections, foster engagement, and create environments that blur the line between the digital and physical worlds. Students generate optimized digital art and spatial content to effectively convey narrative themes and elevate the overall immersive experience. Culminating in portfolio-quality, proof-of-concept projects using real-time 3D engines, students showcase their mastery of captivating immersive storytelling.

Prerequisite(s): ARVR 300 and (ARVR 310 or SDGM 310).

Attributes: Studio Elective Requirement

ARVR 465 Studio II: Production and Project Management (5 Credits)

To position students for success in the rapidly evolving field of immersive media, students collaborate as a professional team to develop functional, real-time 3D immersive experiences. They devise formal plans and documentation, encompassing goal-setting, workload distribution, and adhering to deadlines throughout all project stages. Students produce high-quality concept art, style guides, and process books adhering to industry standards. Identifying and innovatively resolving design challenges within a simulated professional environment, they foster creativity, efficiency, and career-readiness through content creation for portfolio-quality immersive media projects.

Prerequisite(s): ARVR 455.

Attributes: Studio Elective Requirement

ARVR 475 Immersive Studio Postproduction (5 Credits)

In this course, students master the art of producing an industry-ready project that includes prototyping, programming, scripting, and design. Within this final phase of the senior project, students create a professional portfolio, self-promotional materials, and competition-ready work such as user experience videos, product websites, print-ready promotional assets, and process books.

Prerequisite(s): ARVR 465.

Attributes: Studio Elective Requirement

ARVR 479 Undergraduate Internship (5 Credits)

Internships offer students valuable opportunities to work in a professional environment and gain firsthand experience to help them prepare for careers. In an approved internship setting, a student typically spends one quarter working with an on-site professional supervisor and a faculty internship supervisor to achieve specific goals and objectives related to the program of study.